A CASE FOR CREATIVITY

IN

ELEMENTARY MUSIC EDUCATION

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fulfilment of the requirements for
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"THE RECORDER PLAYER"
by Kyra, age 5.
Drawn in the Creative
Music Classes for Children.

CONTENTS

ACKNOWLEDGEMENTS

My thanks go to

DEDICATION

To Alan in memory of the most creative
person I have known.

Imagination is more important than knowledge.

Albert Einstein

INTRODUCTION

Upon arriving at the University of Natal as lecturer in music education in 1975, one of my first intentions was to establish "Creative Music Classes" for children between the ages of 4 and 10. The motivational purpose of these classes was two-fold. Firstly, they were intended to give students of music education at the university the opportunity of attempting to practice methods of music education which they might not be able to initiate in the conventional classroom. Secondly, they were intended to give the children of Durban an opportunity to experience creative music education.

What was meant by music education was fairly clear in my mind. Its purpose was to allow for the release of, and to encourage the realization of, the musical potential which all children possess, in a way that enhances the development of their intellect and sensitivity - in a word, their humaneness. It is possible to admit, now that the classes have grown and become well established, that although the term "creative" was incorporated into the title of these classes, it was not clear to me what it really meant, or how it was to be nurtured in music education. I only knew that it would be better to begin with a broad concept of music education rather than with the teaching of notation. I felt then, that a broad concept somehow included creativity. I know now that this is true. It transpired that what evolved as a creative approach to music education did not exclude music literacy. On the contrary, music literacy is a part of the overall concept of music education. Children arrived at the point that they asked to be taught about notation because they were ready to use it.

Because I was uncertain about the meaning of creativity when the classes began, it was necessary to turn for assistance to works which I thought supported the importance of creativity in elementary music education. The result was, however, that both children and teachers often experienced confusion, frustration and disappointment, not creativity. Only then did I begin to realize that a work which appears to support creativity may not, in fact, do so either in its philosophy or its process. Finally, it became imperative to ask: What is creativity? The need to answer this question, was the beginning of the study which culminated in the writing of this thesis.

After researching into the nature and nurture of creativity, it was possible to derive some criteria for deciding to what extent various elementary music education works did or did not support the importance of creativity in music education. Only then was I able to knowingly select and introduce into the children's classes ideas. that would encourage creative behaviour.

As I began to understand the philosophy behind creative music education, it became possible to put into practice some of the processes that creative music education proposes. The results were both surprising and exciting. The meaning and value of creativity became increasingly apparent, and I then wanted to know: What support, if any, is given to creativity by educators outside the field of music education? On examining the ideas of people like John Dewey and Jerome S. Brunner, I found that they strongly supported the importance of creativity in education.

On the strength of these discoveries and of further research,

as well as the belief that studies concerning the vital relationship between creativity and music education have been neglected, the decision was made to present a case for creativity in elementary music education. Music educators are not making use of creativity to any great extent in music education. This is shown by the fact that at the 1982 International Society of Music Educators conference in Bristol, England, well-known music publishers mounted a five-day exhibition of new materials. Not a single new work concerned primarily with creativity in elementary music education was displayed. The only new work concerned with creativity in secondary music education was Music in the Secondary School Curriculum: Trends and Developments in Class Music Teaching by John Paynter. One reason given by the publishers for this state of affairs, was that music teachers are no longer interested in creativity.

The research which follows postulates that creativity is an essential quality of life. It is a quality that lies dormant and is awakened by the circumstances of life - one such circumstance being education. Creativity is one of the most important aspects of education in general and of elementary music education in particular, the assumption being that creativity is basic to all human mental activity. Support for this assumption will be found in the chapter dealing with creativity.

The creative aspect of education is important because it endeavours to arouse in children "their desire to know, to ask questions and to question themselves, while developing the facilities of observation, judgment and critical spirit."[1] By encouraging

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[1]Edgar Faure et al., Learning to Be (Paris: United Nations Educational, Social and Cultural Organization, 1972), p. 184.

these abilities in students, the music teacher can "reaffirm the student's uniqueness of perception and innate ability to build his own relationship and meanings from music perception into a product which is both unique and satisfying."[1] By supporting the importance of creativity in music education, we might conceivably develop individuals who are able to create a better world in which the courage to be human is the creative motivation.

The purpose of this thesis is, therefore, to argue that creativity is one of the most important aspects of elementary music education. As the field of music education is so vast, this study will be confined geographically to England and the United States, and as I am concerned with young children, the material presented will relate mainly, though not exclusively, to elementary music education.

The case is presented from a broad perspective. It will encompass historical, philosophical, psychological, and to a lesser extent, socio-economic views. This thesis will be divided into five chapters.

Chapter I is a brief presentation of the historical development of school music education in England and the United States with special reference to creativity. From the information presented, the question will arise: To what extent do works available for use by music educators in England and the United States suggest that creativity is an important aspect of contemporary elementary music education? Before this question is answered, however, another takes precedence: What is creativity?

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[1]Carol P. Richardson, "Creativity Research in Music Education: A Review," Council for Research in Music Education 74 (Spring 1983): 1.

Chapter II is an extensive exploratory study of the nature of creativity: the background to the study of creativity, the creative mode of thinking, the problems of defining creativity, and studies dealing with the creative process, person and product. This chapter also concerns the nurture of creativity: studies relating mainly to teachers' attitudes towards creative children, to classroom processes and to school environments. From this, questions are derived concerning creativity and education which will comprise an evaluation form that will be used in the following chapter.

Chapter III is an evaluative study, based upon those questions arising out of the study of creativity. The extent to which twelve representative works, relating to elementary music education, from England and the United States, support the importance of creativity in their philosophy and process of music education will be determined.

Chapter IV is a presentation of ideas which support the importance of creativity in education, as put forward by two widely respected philosophers of education, Alfred North Whitehead and John Dewey, and two equally respected psychologists of education, Jerome S. Bruner and Jean Piaget.

Chapter V concludes with thoughts concerning creativity and education from the historical perspective as well as from a socio-economic viewpoint. The intention is to suggest some underlying reasons why education seems not to support creativity, even openly discourages it, and why it is necessary to alter this situation; why it is necessary to make a case for creativity in elementary music education.

CHAPTER I

THE HISTORICAL DEVELOPMENT OF SCHOOL MUSIC EDUCATION

IN ENGLAND AND THE UNITED STATES WITH

SPECIAL REFERENCE TO CREATIVITY

England

Music training in England before the Reformation was primarily the concern of the church. Following the Reformation, a few experimental schools were established which encouraged singing, dancing and the teaching of notation as part of the music education of children.[1] Then in 1833, the first of three text books specifically designed for teaching music materialised, John Turner's Manual of Vocal Instruction. It was described as being:

> . . . an orthodox treatise upon musical rudiments issued under the authority of the Society for Promoting Christian Knowledge. Subtitled "Chiefly with a view to Psalmody", it linked this aim with that of providing in music an alternative attraction to the beer-house.[2]

The second was W. E. Hickman's Singing Master (1835), and the third, Sarah Anna Glover's The Scheme to Render Psalmody Congregational (1836). This work provided the basis of the Tonic Sol-fa system that was devised by Curwen in 1841.

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[1]The New Grove Dictionary of Music and Musicians, s.v.. "Education in Music VI A 1 (i): From 1800, Great Britain," by Bernarr Rainbow, p. 22.

[2]Bernarr Rainbow, ed., Handbook for Music Teachers (London: Novello, 1965), p. 29.

In this same year, 1841, government support was given to John Hullah's Manual, which was introduced into schools. This resulted in the Curwen-Hullah controversy. Their disagreement was not about what music educators should teach, for basically the subject matter was singing and the teaching of notation, but about how notation should be taught. Curwen won the day with his own Tonic Sol-fa system, and until the end of the 1800's "the principal aim of the school music lesson was to teach pupils to sing from notation."[1]

Moving to the 1900's, Cecil Sharp's English Folksong (1907) was published "to see folksong kept alive by teaching it to children as part of their national heritage," and Stuart Macpherson's A Plea for the Teaching of Music as a Language and Literature (1908) initiated the beginnings of "the so-called 'musical appreciation movement'."[2] Yorke Trotter, one of the first English music educators to take a serious and active interest in "developing a child's latent musical powers,"[3] was also active at this time. Gladys Puttick wrote of Trotter's ideas:

> Yorke Trotter believed that the creative instinct is a tremendous activity of mind. And it was the development of this creative instinct, which he believed wholeheartedly existed in all children (whether labelled 'talented' or not) which provided this unifying philosophy.[4]

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[1]The New Grove Dictionary of Music and Musicians, loc. cit., p. 22.

[2]Ibid.   [3]Ibid., p. 23

[4]Gladys Puttick, "Yorke Trotter," in Some Great Music Educators, ed., Kenneth Simpson (Borough Green: Novello and Co., 1976), p. 48.

Following the Education Act of 1918, which made education compulsory for children between the ages of five and fourteen, the government issued a report emphasising "the importance of securing a place for the fine arts in the education of older boys and girls."[1] Other events were also taking place that strongly influenced the standard of musical awareness in England:

> In 1919 an education department was set up in London by the Gramophone Company (afterwards His Master's Voice) and they published a text by Percy Scholes, i.e., Learning to Listen (1921). This marked the beginning of the mature period of the musical appreciation movement in Britain.[2]

The series of "Young People's Concerts" in London and weekly broadcasts of music lessons for schools, which were organised by the BBC Education Department, also sharpened the musical awareness of the young.

With the growing emphasis on music appreciation, ways of developing the aural capacities of children received more attention. "Macpherson and Scholes both acknowledged that the teaching of appreciation was only an extension of ear training."[3] This led Macpherson and several others to "devise ways of helping teachers to develop the aural capacity of their pupils."[4]

One innovative music educator of the 1920's and 1930's advocated music for all children:

> A programme of work devised in the 1920's by Margaret Donington, music mistress at the Mary Datchelor School, Camberwell, was specifically designed

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[1] The New Grove Dictionary of Music and Musicians, loc. cit., p. 23.

[2] Ibid. [3] Ibid. [4] Ibid.

to expand music in the school. The scheme, which was
worked out in great detail for an age-range of 4-18
and covered basic musical concepts, notation, music
history, vocal and instrumental performance and
creative work, received widespread recognition for its
attention to the needs of the majority.[1]

In the introduction to Donington's book, Music Throughout the
Secondary School/Practical Scheme (1932), the idea was emphasised
that music is not only for a select few, but it is a subject for
every child in the classroom.

In 1931, the Hadow Report of the Board of Education was inno-
vative in giving precedence to the place of the arts in education. This
will be explained. Various movements and developments in music
education required more of and from the music teachers. Thus,
the McNair Report of 1944 declared that there was a "need to make
adequate provision for the musical training of teachers."[2]

A more positive attitude towards music, and a wider
conception of what music education might be was stimulated by the
activities of the Council for the Encouragement of Music and the
Arts. Among the ideas which came to light in the 1940's were
school broadcasts by Anne Driver which "showed how the principles
of Jacques-Dalcroze could be made the basis of an imaginative
combination of music and movement."[3] Then in the 1950's,
instrumental tuition, concerts and festivals flourished in the
schools.

The names of music educators who affirmed the

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[1]John Paynter, Music in the Secondary School Curriculum:
Trends and Developments in Class Music Teaching (London:
Cambridge University Press, 1982), p. 8.

[2]The New Grove Dictionary of Music and Musicians,
loc. cit., p. 24.

[3]Ibid.

importance of creativity in music education came to the fore in
the 1960's. Among them were George Self, Brian Dennis and John
Paynter who was, and is, the driving force behind the move to
espouse the importance of creativity in music education in England.
Paynter, Professor of Music at York University and Director of the
Schools Council Project: Music in the Secondary School Curriculum
since 1973, has recently published Music in the Secondary School
Curriculum: Trends and Developments in Class Music Teaching.
Though this work deals primarily with secondary school music, it
also touches upon and relates to primary or elementary school music.

Paynter reports that in 1967 the Plowden Report declared
that "the planning of music as a creative subject lags behind
work in language and the visual arts and crafts."[1] He asks, "What
has gone wrong?"[2] in the light of the fact that:

> . . . 'creative work' was a crucial part of class
> music training for Donington and others forty or
> fifty years before Plowden, and rhythmic and
> melodic improvisation were central in the schemes
> of Dalcroze, Yorke Trotter, and Orff.[3]

One answer that Paynter gives is "the need for teachers to have
a clear view of music's overall function within a programme of
education before they started to work out specific methods and
strategies."[4] He continues:

> Understandably, the tendency has always been for us to
> skip the philosophy and go straight to the 'meat'; the
> 'things to do'. With hindsight, and fifty years on,
> we may now see that the Hadow Report provided
> all the stimulus needed for us to interpret and

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[1]John Paynter, op. cit., p. 13.

[2]Ibid., p. 14.   [3]Ibid., pp. 13-14.   [4]Ibid. p. 14.

re-interpret its observations. The essential
recommendation lay . . . in the underlying principles
of its visionary general chapters.[1]

Paynter maintains that the Hadow Report was visionary in
that "The Hadow Committee drew much of its own inspiration from
the writings of educationists such as John Dewey."
Furthermore, Paynter adds that "running through the entire
Report is the recognition of our obligation to average children;
the majority of children."[2]

In 1982, Paynter commended the wide range of activities
that emerged in primary school music, but he elucidated that
what was needed was "an Urlinie[3] of educational principle
which is understood by everyone and which will be capable of
re-interpretation and re-development as the years go by."[4]

The United States

As in England, music education on the east coast of the
United States was organised and carried out by the church in the
18th century. The Protestant ministers were particularly
concerned with the need to improve the standard of singing at
public worship services. Consider these words of the Reverend
Thomas Walter of New England:

> The tunes are now miserably tortured and twisted and
> quavered in our churches, into a horrid medley of
> confused and disorderly voices. Our tunes are left to

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[1]Ibid.   [2]Ibid. p. 10.

[3]John Paynter (personal letter) Urlinie - This word is
derived from two German words, i.e., Ur meaning 'original,
primitive, prime' and linie meaning line; thus it refers to a
fundamental and universally agreed line of thought.

[4]John Paynter, op. cit., p. 14.

the mercy of every unskilled throat to chop and alter,
to twist and change, according to their infinitely
diverse and no less odd humours and fancies. I have
myself paused twice in one note to take a breath. No
two men in the congregation quaver alike or together.
It sounds in the ears of a good judge like five
hundred tunes roared out at the same time, with
perpetual interferings with one another.[1]

To meet this need, singing schools came into existence in the

18th century in New England, and they emphasised the reading of

music and choral singing. Apart from these schools, however,

only limited music instruction took place either at private

schools or under personal tuition.

Lowell Mason introduced music education in the 1830's in

a Boston church, where he was the director of music. In 1833,

with the establishment of the Boston Academy of Music, children

were able to obtain music tuition at no cost, and as Samuel

Eliot was simultaneously the President of the Academy and the

Mayor of Boston, the teaching of music in public schools was

contemplated. "The Boston School Committee voted in 1837 that

music should be taught on an experimental basis in four grammar

schools."[2] Money was not obtainable however, so Mason taught

for one year with no salary before becoming the first supervisor

of music in Boston until 1845.[3] During this time, music

instruction was made available in all Boston grammar schools.

Mason then travelled to Cleveland, Rochester, New York and

Harrisburg to introduce his method, and his "reputation as a

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[1]Michael L. Mark, Contemporary Music Education (New York;
Schirmer, 1978), p. 5, quoting Birge, History of Public School
Music, p. 5, quoting William Ars Fisher, "Notes on Music in Old
Boston" (Oliver Ditson, 1918).

[2]The New Grove Dictionary of Music and Musicians, s.v.
"Education in Music VI A 2 (i): From 1800, United States
of America" by Richard Colwell, p. 28.

[3]Ibid.

musician and teacher, as well as his publications, were formative in establishing the standards for music education in the United States."[1]

Elementary school music was begun in Cincinatti by Luther Whiting Mason in 1857. From there he went to Boston in 1864. He published his own graded music series, The National Music Course (1870), which was distributed throughout the country and which incorporated his ideas, i.e.:

> . . . young children were to be taught almost entirely by rote and after learning to sing by imitation, music reading was introduced by the use of movable doh through patterns already familiar.[2]

Mason's course "served as prototype of the many methods that followed."[3]

One of the first disputes regarding method arose between those teachers who believed that singing was of primary importance and those teachers who believed that music reading was of primary importance. At the same time, concern about the instruction of teachers was met by introducing master teachers who were sent around to train classroom teachers and students at teacher-training colleges. It became apparent, as examinations were introduced to evaluate such teacher-training, and as complaints arose from private teachers that their pupils were not able to read music, that the focus of music education would have to be on the reading of music, not on singing. Those who advocated "singing for its own sake" reacted by establishing summer training schools run by large publishing companies in the 1800's. However, by the end of the nineteenth century, the

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[1]Ibid. [2]Ibid. [3]Ibid.

principle objective of elementary school music was to be the teaching of music reading, and methods to implement this were formally established.

Early in the 1900's, music appreciation classes received more attention following the invention of the phonograph. Then in 1922, Joseph E. Maddy received recognition as the conductor of an outstanding high school orchestra in Richmond, Indiana. Following this, he was asked to organize the first national high-school orchestra which was highly successful. His influence in music education in the 1900's was to equal that of Lowell Mason in the 1800's.[1] The result of Maddy's efforts and influence over those responsible for educational policy was that music came "to be considered equal to other 'basis' subjects, and for the start of instrumental programmes throughout the country."[2] Music contests flourished as did the standard of performance, and emphasis was given to performance in music education; thus,

> . . . the public increasingly tended to judge the adequacy of school music by the quality of its performing groups rather than by some other educational standard.[3]

The 1930's brought the development of music tests which were devised to determine one's aural faculty, one's ability to recognize the symbols of music, and one's factual knowledge. Later on, James Mursell, one of the most influential music educators from Columbia Univesity in the 1940's and 1950's, "discouraged all testing as detrimental to the goals of

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[1]Ibid., p. 29. [2]Ibid., [3]Ibid.,

music."[1] The 1930's also brought to the fore the name of

Satis Coleman.

> . . . Satis Coleman's work concentrated on creative
> activities in which the child made and played his own
> instruments in an attempt to experience music as his
> own rather that something artificial and composed from
> outside. Coleman's influence, though great, was
> limited to the elementary school.[2]

Such creative activities, even though they were few in

number, led to the argument by many music educators "that

musical skills had been sacrificed to the 'creative'

approach."[3] This controversy and others created a need for

direction in music education; thus "the 1940's and 1950's

brought a marked change of philosophy, mostly in elementary

schools."[4] James Mursell led the way.

> His writings over a 20-year period espoused the
> developmental approach, insisting that the development
> of musicality was to be placed above musical skills,
> that music education was not a storehouse of fact, and
> that skill and technique must never obscure genuine
> musical values.[5]

At the same time in secondary school music, we find that

> . . . performance justified itself as a public
> relations activity and a source of community pride;
> its exclusive and limited character was overlooked and
> no rationale for its existence was felt necessary.[6]

By the 1950's the concern for philosophical and psychological

rationale of music education became more evident and

> . . . in the 1960's and 1970's, music education
> underwent the same criticisms that characterized
> American public education generally; the search for
> solutions resulted in experimentation and eclecticism.[7]

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[1]Ibid., p. 30. [2]Ibid. [3]Ibid.

[4]Ibid. [5]Ibid. [6]Ibid. [7]Ibid.

In 1963 the Yale Seminar on music education was held at Yale University with the express purpose of considering solutions to the problems facing music education at that time. This seminar was the result of the recommendation of President Kennedy's newly appointed Panel on Educational Research and Development that issued a directive to the effect that the serious study of arts and humanities would enhance the sciences. This panel, therefore, recommended that the entire music curriculum "be examined to discover why public school music programmes had not produced a musically literate and active public."[1] As a result of this recommendation, a grant was awarded to Yale University by the United States Office of Education Cooperative Research Programme. Claude V. Palisca became the director of the seminar in which thirty-one musicians, teachers and scholars took part. They proposed an innovative and idealistic music curriculum as they found that music programmes had not kept pace with twentieth-century musical development.

> The value of the Yale Seminar was in its contribution
> to the development of a climate that was conducive to
> change, in which the music education profession could
> be free of the restraints of the traditional
> curriculum so that serious consideration could be
> given to other modes of teaching.[2]

Then in 1967 the Tanglewood Symposium, which was convened by the Music Educators National Conference in cooperation with the Berkshire Music Center, the Theodore Presser Foundation, and the School of Fine and Applied Arts of

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[1]Michael L. Mark, op.cit., p. 30.

[2]Ibid., p. 35.

Boston University, was held at Tanglewood, Massachusetts. Well-known philosophers, scientists, labour leaders, educators, social scientists, representatives of foundations and government, theologians, industrialists, music educators and other musicians were in attendance.[1]

During the first week of this Symposium, one of the five subject-areas that participants were requested to consider was "The Nature and Nurture of Creativity."[2] The report of this committee begins with these words:

> In its most fundamental sense, "to live" means
> that life is continually creating and re-creating
> itself. A hypothetical status quo would be static and
> dead, a negation of creativity. "To be alive" means
> that man continually reconstitutes his environment
> into new and more satisfactory formulations. To place
> value on creativity is to embrace change as an
> inevitable and ubiquitous fact of twentieth-century
> American civilization.[3]

The report continues:

> Creative thinking is needed in every area of American
> life, from the making of new laws to the tasteful
> decoration of the home. Man's full use of his
> creative potential will inject vitality and meaning
> into every facet of American society, bringing a
> degree of cultural richness never before achieved. An
> education in music that emphasizes creative
> development will make a major contribution to the
> realization of these potentials in American society.[4]

The report looks at three aspects of creativity, and the first is the "Nature of Creativity." The participants express the belief that creativity is "a human characteristic existing

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[1]Robert A. Choate, ed., Documentary Report of the Tanglewood Symposium (Washington, D.C.: Music Educators National Conference, 1968), p. 139.

[2]The complete report appears in Appendix A.

[3]Ibid., p. 128   [4]Ibid., pp. 128-129.

in all, but varying only in degree." They maintain that:

> Creativity is a valued ingredient of life. . . .
> Hence, we will do all we can to promote the
> development of every child's creative activities.
> . . . Because of the necessity of creativity to man's
> life, we will do all that is possible to encourage its
> expression in the home and in the school. Therefore,
> it is appropriate for teachers to identify and to
> stimulate creative musical behavior.[1]

The second aspect of creativity discussed in this report

is "Providing an Environment for Creative Expression in Music."

About this, the report states:

> The point of view that children are born with the
> capacity for creative response and that such response
> can be elicited emphasizes anew the responsibility of
> the school in establishing a classroom environment and
> planning instructional experiences which are
> consecutive, continuous and conducive to the many facts
> of creative expression.[2]

The report also underlines the strategic place the teacher holds

in "this creative development" and proceeds to list fifteen

desirable characteristics of the creative teacher. Three of

these are:

- The acumen to lead children to experience the
  wonder of music through personal discovery.
- An interest in helping children discover the
  social relevance of music.
- The ability to recognize some of the earmarks of
  creativity in children.[3]

The final aspect of creativity dicsussed in their report

is "Pre-service and In-service Preparation for Creative

Teaching", and the report contends that "creative teaching in

the elementary and secondary schools will not be realized to any

great degree until it is experienced more frequently at the

tertiary level."[4]

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[1]Ibid., p 129.   [2]Ibid.   [3]Ibid.   [4]Ibid., p.130

We turn next to the Contemporary Music Project (CMP) which was an outgrowth of a young composers-in-residence programme that began in 1958 and continued over the next fourteen years, from 1959-1973. Funded by the Ford Foundation, it was one of the most extensive undertakings ever directed toward the reformation of music education in the United States. Though there were numerous events spread over the years, we shall look only at those which were concerned with creativity.

The first of the five purposes of the Contemporary Music Project, was "to increase the emphasis on the creative aspect of music education in the public schools."[1] To achieve this, and other CMP objectives, sixteen workshops and seminars were set up at various colleges and universities, and six pilot projects were sponsored. We shall briefly look at three of the pilot projects.[2]

The first was held in Baltimore, Maryland, and included three seminars on creativity which were designed for classroom teachers.

> The topics were "Sounds Around Us", "Creative
> Interpretation of Contemporary Music", and
> "Improvisation and Composition." The purpose of the
> seminars was to provide teachers with the tools to
> encourage and guide children to compose in a free
> style and to rearrange, or change, a given element
> of music to compose a piece.[3]

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[1]CMP-MENC, Comprehensive Musicianship: An Anthology of Evolving Thought (CMP5) (Washington, D.C.: Music Educators National Conference, 1971), p. 32.

[2]These are published in Experiments in Musical Creativity (1966) (CMP3), a publication of the Contemporary Music Project.

[3]Michael L. Mark, op. cit., p. 26.

The second was held in San Diego, California, where the "highest priority was given to the development of creative approaches to the presentation of recorded contemporary music."[1]

The third was held in Farmingdale, New York, where a group of thirty-one musically talented children were divided into two groups.

> One group explored musical creativity using twentieth-century techniques. This group wrote more than three hundred pieces of music during the six-week period. The other group explored musicianship through rhythm studies and movement, based on the ideas of Jacques-Dalcroze. This group learned from intrinsic, rather than extrinsic, sources. The approaches used in the two groups were not compared; no assumption was made concerning the superiority of one or the other approach. Rather, attention was focused on the interrelationship of the two approaches; it was concluded that the best method would be a combination of the two.[2]

Projects such as these revealed that, without a teacher on the scene who is competent to assume the demanding responsibility of creativity in music education, no method or device could possible work; thus, in 1965, the Seminar on Comprehensive Musicianship (CMP2) was convened at Northwestern University in Evanston, Illinois. It dealt with the broad aspects of required theory courses in schools of music and their degree of adequacy in preparing prospective music teachers to deal with contemporary music and creativity. The point was made that existing courses in theory should, but seldom do, provide the prospective teacher with the means for developing his or her own creative potential on his or her own terms. In addition:

The term "creativity" denotes direct involvement in a

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[1]Ibid. [2]Ibid., p. 27.

musical process: understanding and doing. Teaching of
music is most successful when based on this underlying
premise. The creative approach is possible only when
the teacher himself has direct experience in the
creative process. It can be properly developed only
when there exists a solid and broad foundation of
musicianship.[1]

In 1966 the Contemporary Music Project organized

experimental programmes called the Institutes for Music in

Contemporary Education (IMCE). These six regional Institutes

were established to implement the working premises recommended

at the Northwestern Seminar and to develop a variety of

approaches to comprehensive musicianship education. One of

the results of these Institute programmes was that creativity

was emphasised.[2]

In 1967 further projects were conducted by Warren

Benson. The pilot project at Ithaca College, entitled "Music

Education Seminar in Contemporary Music", was instituted

. . . to supply technical information on current
practices of music to students in music education to
provide them with the confidence necessary to present
modern music to their students in the future.[3]

He tells us that:

The projects were conducted by a composer, emphasizing
free composition for each student and using the
materials and techniques of the contemporary composer as
they were observed through study and analysis of

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[1]Comprehensive Musicianship: An Anthology of Evolving Thought
(CMP5), p.35, quoting "CMP Seminar on Comprehensive
Musicianship," Music Educators Journal, Lll (September-October
1965):56.

[2]David Urquhart-Jones, "The Contemporary Music Project: A
Movement for Reform in Music Education," Australian Journal of
Music Education, 22 (April 1978):22.

[3]Warren Benson, Creative Projects in Musicianship, (CMP4)
(Washington, D.C.: Contemporary Music Project/Music Educators
National Conference, 1967), p. 3.

traditional and, especially, contemporary music.[1]

The second project at the Interlochen Arts Academy,

"Learning through Creativity", endeavoured

> . . . to discover the problems, and some solutions to
> them, that might arise when junior and senior high
> school students are exposed to a teaching procedure
> similar to that used in the Ithaca College projects.[2]

Benson explained that the object of this second project was "to

teach the fundamentals of music through the approach of the

20th-century composer."[3]

In his report of events at both seminars, Creative

Projects in Musicianship, (CMP4), he wrote that several

observations were made by the participants, e.g:

> . They were excited by the discovery of their own
> possibilities as creative individuals.
> . Their discovery of creativity as a form of self-
> discovery demonstrated the value of creative activity
> for their own students and associates in the future.
> . They also discovered previously unobserved talents and
> feelings in their colleagues, bringing them face to
> face with the transcendent values inherent in art.[4]

Benson's own observation was that as the participants

assimilated more understanding of the theoretical principles,

they became more daring in their original composition

assignments, but

> . . . did not necessarily show much daring as they
> assimilated more basic technical materials. Thus, it
> might be said that out of direct involvement with the
> creative process they were able to express themselves
> better, and in doing so, to find more and easier room
> for the acquisition of additional technical
> material.[5]

From his three years of experience, Benson gleaned "some

learnings and opinions." He maintained that the teacher can be,

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[1]Ibid.,   [2]Ibid., p. 17.   [3]Ibid.

[4]Ibid., p. 29.   [5]Ibid., p. 30.

and must be, creative if a creative environment is to occur.

Teaching, he wrote, involves making progress in relating "the

student and the material in a creative way."[1]   Furthermore,

he held that part of the creative process in which the students

are involved is developing, exploring and challenging their own

imagination when completing assigned work, and that this

creative learning process is a means of initiating self

discovery. Benson affirmed that this process created a desire

for

> . . . more information, more technique and more
> experience, in order that all might further their
> engagement in the process of learning about music, and
> in the creative process of learning, discover
> themselves and their fellow man. Inherent in the
> creative act - in the act of self-expression - is the
> revelation of self-discovery. This may be the prime
> objective of one's teaching. It reflects this
> writer's concern as a composer, as a teacher and as a
> human being. It is on this last point that one meets
> one's students as equals. This ethical principle is
> the subject matter for which we come together. It is
> this subject matter that reminds us of the dignity of
> the individual and of our unique relationship to one
> another. Music is the vehicle for our common
> understanding. The philosophy is the philosophy of
> art. The objective is the aesthetic experience. The
> materials are the works of art that bring one closest
> to that experience. The method is that which is found
> in those works of art, the creative process in
> action.[2]

The creative teacher must be willing to take risks,

Benson declared. He or she must approach the process of

education with great sympathy for the intent of the

individual and a profound respect for the individual. He or she

must not superimpose outside limitations on the free expressions

of the creative child. He or she must allow the child to make

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[1]Ibid., p. 37.   [2]Ibid., p. 38.

mistakes, yet must continually offer criticism of the work.

Furthermore, Benson stated that creative teaching means that

the teacher:

> . . . might find it possible to teach all students
> from the broadest possible basis, within the reference
> of our subject area, in an effort to release the
> particular creative potential of any individual and
> the creative ability of the student body as a whole.[1]

Realizing that it was not possible to determine any particular

material which might stimulate a creative response from the

students, Benson suggested that

> . . . every conceivable avenue of approach be used
> to engage him in a discovery of relationships that
> supposedly peripheral information might have. Real
> creativity occurs in a search for relationships
> between supposedly separate areas and the establish-
> ment of new areas.[2]

In conclusion, he acknowledges that there are other

successful approaches to the teaching of music. He hopes that:

> The views expressed in this report, however, may prove
> to be useful as a source of information and a point of
> departure for further exploration and development of
> the hypothesis that a creative approach to music
> teaching and learning can be effective, interesting,
> and exciting.[3]

The Contemporary Music Project ended in 1973. The

project had "given direction, provided challenges, developed

methodology and materials and had made the music education

profession open-minded toward change and innovation";[4] moreover,

the subject of creativity had featured significantly.

Two years later, however, in the words of the Executive

Secretary of the Music Educators National Conference, Charles

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[1]Ibid., p. 43.   [2]Ibid.   [3]Ibid., p. 46.

[4]Michael L. Mark, op. cit., p. 29.

L. Gary, we read that neither change nor innovation had taken

place. In his article, which was published in the National

Association of Secondary School Principals Bulletin, he wrote:

> For fifty years, music educators have proclaimed
> "Music for Every Child, Every Child for Music" through
> their professional organization, the Music Educators
> National Conference. However, many teachers, as well
> as principals, have focused on a narrower purpose: the
> highest possible performance skill to be developed in
> a few selected students.[1]

Gary continued:

> Today, this limited purpose - appropriate for
> professionals - has little relevance to the
> needs of high school boys and girls in a
> changing society.[2]

The reference which Gary made to the changing society

in which children live is relevant to the historical perspective

of music education with respect to creativity; thus, it is

important to consider briefly what is happening with respect

to change and society.

Alfred North Whitehead, educational philosopher and

mathematician, illuminated the force of change in the 20th

century when he wrote:

> . . . our sociological theories, our political
> philosophy, our practical maxims of business, our
> political economy, and our doctrines of education are
> derived from an unbroken tradition of great thinkers
> and practical examples from the age of Plato . . . to
> the end of the last century. The whole of this
> tradition is warped by the vicious assumption that
> each tradition will substantially live amid the
> conditions governing the lives of its fathers, and
> will transmit these conditions to mould with equal
> force the lives of its children. We are living in the

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[1]Charles L. Gary, "Why Music Education?", National
Association of Secondary School Principals Bulletin (Reston,
Virginia: National Association of Secondary School Principals,
1975), p. iii.

[2]Ibid.

first period of human history for which this assumption is false.[1]

Two examples that illustrate our changing world are these.

First consider the metaphor of a clock face. Imagine a clock face with 60 minutes on it. Let the clock stand for the time men have had access to writing systems. Our clock would thus represent something like 3000 years and each minute on our clock 50 years. On this scale, there were no significant media changes until about nine minutes ago. At that time, the printing press came into use in Western culture. About three minutes ago, the telegraph, photograph, and locomotive arrived. Two minutes ago: the telephone, rotary press, pictures, automobile, airplane, and radio. One minute ago the talking picture. Television has appeared in the last ten seconds, the computer in the last five, and the communications satellites in the last second. The laser beam – perhaps the most potent medium of communication of all – appeared only a fraction of a second ago.[2]

Next you have only to experience a day in the Space Museum of the Smithsonian Institute in Washington, D. C., to encounter the impact of being in the midst of the explosion of knowledge and technology. Inside this vast expansive building, you can see and experience man's development of air and space travel from Orville Wright's first powered aeroplane flight in December, 1903, to the space capsules which have landed on the moon and even travelled to planets beyond. One of the most astounding facts is that these developments of air and space travel have occurred within the span of one person's

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[1]Alfred North Whitehead, The Adventure of Ideas (London: Cambridge University Press, 1945), p. 117.

[2]Neil Postman and Charles Weingartner, Teaching as a Subversive Activity (New York: Delta Publishing Co., Inc., 1969), p. 10.

life-time. This is the world of "our time" about which

Charles L. Gary wrote.

Bertrand Russell evinced concern about the effects upon

human beings of the accelerated rate of change in our society

today when he wrote:

> To teach how to live without certainty, and yet
> without being paralized by hesitation, is perhaps
> the chief thing philosophy, in our age, can still
> do for those who study it.[1]

In the chapters which follow, there is the suggestion that a

way of dealing with accelerating social change is to support

the importance of creativity in music education.

One last reference brings us up to the present with

respect to creativity and music education. In August, 1982, at

Ann Arbor, Michigan, music educators and psychologists met with

the purpose of discussing creativity and motivation at

the Ann Arbor Symposium Session III. Sponsored by the Music

Educators National Conference, the University of Michigan, and

the Theodore Presser Foundation, the intention was "to provide

further structured contacts with psychologists . . . and . . .

in depth analysis of motivation and creativity."[2] Five papers

were read on creativity and are to be published in 1983.

This brief look into the history of music education

in England and the United States with special reference to

creativity, reveals that the debate as to whether preference

should be given to the teaching of music literacy and

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[1]Bertrand Russell, A History of Western Philosophy (New York: Simon and Schuster, 1954), p. xiv.

[2]"Ann Arbor Session III: Symposium Centers on Motivation and Creativity," Music Educators Journal (February, 1982), p. 55.

skill or to creative activities is not new. With respect to
the teaching of singing and music literacy, it was discovered
that the need to improve both actually gave birth to school
music education in England and the United States. This is
possibly one reason why instruction in these two particular
aspects of music education has been of primary importance in
music education from its inception through to the present
day. With respect to creativity and music education, it was
discovered that from the beginning of school music education
in the 1800's to the 1960's, only a few music educators are
on record as being supporters of creativity in music education,
e.g., Yorke Trotter in England and Satis Colemen in the United
States. However, since the 1960's, creativity in music
education has received significant attention through the
efforts of individual music educators like John Paynter in
England and through the Contemporary Music Project in the
United States. The Tanglewood Symposium, perhaps the largest
and most prestigious gathering of leaders from various fields
ever convened to discuss the role of music education, and to
make recommendations to improve its effectiveness in the United
States, endorsed the nurture of creativity as one of the three
major roles of education. Their "Declaration" reads: "We
believe that education must have as major goals the art of
living, the building of personal identity, and nurturing
creativity."[1]

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[1]Robert A. Choate, ed., op. cit., p. 139. The
"Tanglewood Declaration" appears in Appendix B.

Diverse and conflicting opinions, nevertheless, abound amongst music educators about this issue of creativity in music education. Creativity has not only been affirmed, it has also been maligned and most vigorously attacked by music educators. The maligning of the term creativity is partially a result of the mystique that surrounds this concept. All too often, creativity has been used as a "catch-all" word to command the attention of those interested in the creative arts. It seems that writers and publishers, during the late 1960's and 1970's, minimized the depth of meaning and maximized the marketability of materials bearing the term on their bookcovers. As a result, music teachers in England and the United States during those years were presented with attractive text books that made use of this exciting word, creativity, in their titles. Yet, often these books contained little more than the traditional process of music education, the teaching of music literacy. An example of this type of work will be presented in Chapter III.

The attacks on creativity in music education range from a strong demand for further clarification of what is meant by creativity,[1] to an outright condemnation of the term, by stating that the creative "boom/syndrome has been increasing for decades and ought to be diminished."[2]

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[1] Charles Plummeridge, "Creativity and Music Education: The Need for Further Clarification," The Psychology of Music Education 25 (October 1979): 34-39.

[2] R. G. A. Sherratt, "Who's for Creativity," in Black Papers 1977, eds., C.B. Cox and Rhodes Boyson (London: Temple Smith, 1977) p. 34.

In seeking for further clarification of what is meant by creativity, Plummeridge, in his article "Creativity and Music Education: The Need for Further Clarification", contends that there are "three causes of the present debate"[1] about creativity. These are:

> First, there are many ambiguities surrounding the meaning of creativity. . . .
> Secondly, proposals for creative activities almost always arise out of more extensive views or "theories" of music education. In some cases such "theories" are only partially formulated and in need of much further examination. . . .
> Thirdly, many teachers who have introduced creative work into their classrooms have pointed to the practical problems involved in this style of technique.[2]

An explicit condemnation of creativity appears in "Who's for Creativity?" by R. G .A. Sherratt, a music teacher at Thomas Alleyne's High School in England. He writes:

> What possible virtue can there be in pretending that creativity, an attribute not possessed by towering geniuses until childhood is past, can and should be generated in the pupils of the primary school? What virtue, except that of demagogically appeasing the 'jealous society' (Reginald Maulding's mordant term, quoted in the first Black Paper), where 'enterprise and success are regarded with envy rather than with admiration'; making it virtuous to concoct a fiction that all are, not indeed as good as your William Byrd, your Tintoretto, or your Thomas Mann, but better, being creative from the age of five![3]

Sherratt admits to being, in his words, a "shameful racialist"[4] when he lauds the fact that western music is able "to re-create,

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[1]Charles Plummeridge, op.cit., p. 34.

[2]Ibid., p. 35.

[3]R. G. A. Sherratt, op. cit., p. 34.   [4]Ibid., p. 36.

thanks to staff notation, the notions of great composers

captured for all time by that notation,"[1] but, he continues,

a Persian folk singer, an Indian sitar player, or a Japanese

bamboo flute player do not have that privilege.

Sherratt's final accusation against creativity concerns

the last of five proposed guide-lines which appear in the

Music in Education Section of the Incorporated Society of

Musicians. They write that children should:

1. have the ability to pitch notes accurately,
   sing in tune and show a keen sense of rhythm;
2. be able to recognise the appearance and sound of
   the principal orchestral instruments as well as
   the sound of various kinds of voice;
3. have developed an awareness of the character
   and moods of music;
4. be able to reproduce simple rhythmic patterns
   and sing simple melodies from notation and have
   a good repertoire of folk and traditional songs;
5. be able to notate their own creative work.[2]

Sherratt concludes with these remarks about the above:

> All very admirably and professionally ambitious –
> until we come to the sting in the tail. So
> endemic has the 'creative syndrome' become that,
> at the moment of calling for standards which would
> constitute an inspiring and overdue revolution in
> the teaching of music, in slips that reference
> to creative work. True enough, the four words
> 'be able to notate' are transparently – and very
> worthily – meant as a knock-out blow for the
> nonsense implied by that instruction for
> organized chaos, 'find some sounds and try
> making music'. But was it necessary to mention
> creative work at all? The insidious influence
> of this fashion will be difficult to eradicate.[3]

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[1] Ibid.

[2] Ibid., pp. 36-37.

[3] Ibid., p. 37.

The great diversity of opinions and ideas concerning creativity in relation to music education perforce calls for an examination of this potent word with respect to music education. As was pointed out, the Tanglewood Symposium Committee, which investigated the nature and nurture of creativity, expressed agreement about the following: (1) that all children are born with a capacity for creative response; (2) that creative behaviour should be stimulated; (3) that educational environments should be provided which induce creative experiences; (4) that creative teachers are essential; and (5) that creative development should be emphasised in education. In the light of this committee's investigation, as well as the findings concerning creativity of the Contemporary Music Project in the United States and the Schools Council Project in England, a question that arises is: To what extent do works available for use by music educators in England and the United States suggest that creativity is an important aspect of contemporary elementary music education? Before it is possible, however, to begin to investigate such a question, another more pressing one needs to be answered: What is creativity? Thus, the next chapter presents some answers to this second question by exploring the nature and nurture of creativity.

CHAPTER II

AN EXPLORATION OF THE NATURE AND NURTURE OF CREATIVITY

1. The Nature of Creativity

1.1 Complexity of the Term Creativity

Our starting point is to recognize the complexity of the term creativity, which is made manifest when one considers its magnitude and the many disciplines that are concerned with one or more aspects of creativity, e.g., the disciplines of philosophy, psychology, education, the arts and science, to mention but a few.

> The search for knowledge about creativity is linked with magic, the demonic, and the divine, yet such knowledge is at the forefront of rational inquiry. Creativity is paradoxical and complex, and the most steadfast investigator is constantly beset with feelings of awe and a sense of mystery as he pursues his inquiry. Creativity encompasses the magical incantations and drawings of primitive man, the appearance of new forms in nature, and the evil genius of Faust. It is a human capacity but it seems to transcend human capacities. On the one hand, the investigator is lured and excited by a tantalizing paradox, and on the other, he is deterred by nagging doubts about whether he is naively trying to explore and rationalize an impenetrable aspect of human experience. To make matters more complicated, investigation is fraught with a host of concrete and theoretical problems. The empirical investigator constantly turns to creative persons for his data and he interrupts their work from lengthy interviews of myriad types of tests and experiments. The philosophical investigation of creativity raises issues about the creation of the world, free will versus determinism, and the basic nature of experience - issues that some consider fruitless and unanswerable. Yet there is a need for rational understanding of creativity that supercedes these doubts, irritations and

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criticisms: creativity has direct enhancement of
humanistic goals in our technological and atomic
age.[1]

Greater appreciation of the complexity of creativity is

elicited when-one considers the breadth of scope covered in

the multifarious definitions and approaches to creativity: e.g.,

the philosopher, Jacques Maritain, declares that human

creativity may be traced to God,[2] while a leading behavioural

psychologist, B. F. Skinner, declares that "a scientific

analysis of behavior must assume that a person's [creative]

behavior is controlled by his genetic and environmental

histories. . .";[3] the management consultant and founder of the

principle and technique of synetics, William J. J. Gordon,

believes that all persons are capable of being creative,[4] while

the music educator, R. G. A. Sherratt, in the article to which

we have referred, states that creativity is "an attribute

not possessed by towering geniuses until childhood is past";[5]

finally, the psychologist, Sarnoff A. Mednick, whose creative

research starts with a definite theory of the creative process

and includes empirical research, claims that creativity can

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[1]Albert Rothenberg and Carl R. Hausman, The Creativity
Question (Durham, North Carolina: Duke University Press, 1976),
p. 3.

[2]Jacques Maritain, Creative Intuition in Art and Poetry, The
A. W. Mellon Lectures in the Fine Arts National Gallery of Arts
Washington (London: The Harvill Press, 1954), pp. 90-100.

[3]B. F. Skinner, About Behaviorism (London: Jonathan Cape,
1974), p. 189.

[4]W. J. J. Gordon, "On Being Explicit About the Creative
Process," The Journal of Creative Behavior 6 (1972): 295-300.

[5]R. G. A. Sherratt, op cit., p. 34.

be fully subjected to deterministic explanation,[1] while the
noted clinical and research psychologist, Carl Rogers, claims
that creativity eludes regularity.[2] Such complexities have
caused Donald W. Mackinnon, director of the Institute for
Personality Assessment and Research at the University of
California at Berkeley, to refer to creativity as the
multifaceted phenomenon.[3]

Some of the frustrations and negative attitudes that are
frequently expressed by music educators about creativity may be
alleviated if the study of this concept is looked at in
perspective. What is necessary is the realization that the
study of creativity, particularly as it relates to music
education, is only beginning. Just as the complexities of a new
musical instrument may confound a beginner until he or she has
understood and learnt the techniques of playing and the
qualities necessary for good musicianship, music educators may
also experience frustration and disappointment as they attempt
to put their incomplete understanding of creative music
education into play. Unfortunately, this has made many reject
the concept, rather than explore it and study it further in
order to realize the full potential of creativity in music
education.

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[1]S. A. Mednick, "The Associative Basis of the Creative
Process," Psychological Review 69 (1962):220-232.

[2]Carl Rogers, "Towards a Theory of Creativity," in
Creativity, ed. P. E. Vernon (Baltimore, Maryland: Penguin
Books, 1973), pp. 137-151.

[3]Donald W. Mackinnon, In Search of Human Effectiveness:
Identifying and Developing Creativity (Buffalo, New York:
Creative Educational Foundation, 1978), p. 46.

It is necessary, therefore, to begin to unravel some of the complexities that surround creativity, and one way is to consider the background to the study of this concept.

1.2 Background to the Study of Creativity

Although people have been interested and intrigued by creativity for centuries, most of the research is as recent as 1950. Prior to 1950, there were a few individuals who "paved the way for the possibility of empirical research and subsequent program development in the field of creativity."[1] Among them

> F. Galton studied hereditary genius; G. Wallas designed a model for describing steps that were regarded as creative processes; in the late 1930's Catherine Patrick subjected Wallas's model to some experimental examination; J. Rosman provided a similar model after studying the reported performance of a large number of American inventors; and Harvey Lehman studied the biographies of productive people in many fields of activity in order to determine the relations of both quality and quantity of creative output to age during adult years.[2]

Industry initiated and introduced the earliest contribution to training programmes in the field of creativity. In 1931 Robert B. Crawford, Professor of Journalism at the University of Nebraska, introduced the first creative-thinking course. In 1937 General Electric's A. R. Stevenson launched its creativity-training programme, and in 1938 Alex F. Osborn of the New York advertising agency, Batten, Barton, Dursten and Osborn, began conducting his famed brain-storming sessions.[3]

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[1]Doris J. Shallcross, Teaching Creative Behavior (Englewood Cliffs, New Jersey: Prentice-Hall, 1981), p. 4.

[2]Ibid., p. 4.

[3]William E. Roweton, Creativity: A Review of Theory and Research (Buffalo, New York: The Creative Eductional Foundation, 1973), p. 1.

At these sessions, techniques were introduced to aid

problem-solving and idea-finding. These will be discussed

further on.

The beginning of modern interest in creativity by

general psychologists is attributed to the 1950 presidential

address delivered to the American Psychological Association by

J. P. Guilford, Professor Emeritus, Department of Psychology at

the University of Southern California at Los Angeles, in which

he eloquently emphasized the need for research in this area. In

this famous address, Guilford stated his belief that the

creative mode is common to all human behaviour.

> It is probably only a layman's idea that the
> creative person is peculiarly gifted with a certain
> quality that ordinary people do not have. These
> conceptions can be dismissed by psychologists, very
> likely by common consent. The general conviction
> seems to be that all individuals possess to some
> degree all abilities, except for the occurrence of
> pathologies. Creative acts can therefore be
> expected, no matter how feeble or infrequent, of
> almost all individuals.[1]

At the same time, research centres evolved and devoted

much of their effort to "the developmental use of new knowledge

about creative people and creative processes."[2] One was the

University of Southern California's Aptitudes Research Project

which, under Guilford, attempted

> . . . to understand the thinking processes of
> individuals when they are in the act of creative
> production. Guilford and his associates were

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[1]J. P. Guilford, "Creativity," _American Psychologist_ 5
(1950):446.

[2]Doris J. Shallcross, op.cit., p. 4.

determined to substantiate their hypothesis that one
of the most important aspects of intelligence is
creative thinking ability.[1]

This project identified certain creative abilities such as
sensitivity, fluency (word, ideational, associational, and
expressional) and two kinds of flexibility (spontaneous and
adaptive) which we shall later discuss. At the University of
California at Berkeley was another centre, The Institute for
Personality Research and Assessment headed by Donald W.
MacKinnon and Frank Barron. They studied leaders who were
recognized to be creatively productive in writing, architecture,
administration and mathematics, in order to uncover what
qualities made these people more creative than the general
educated human being. Then at the University of Minnesota,
E. Paul Torrence, now Chairman of the Department of Educational
Psychology at the University of Georgia, studied both teachers
who were teaching creative thinking and the creative
performances of children, while at the University of Utah,
Calvin W. Taylor, Professor of Psychology, and associates were
concerned with the sciences and creativity. In 1954 Alex
Osborn, author of Applied Imagination, started the Creative
Educational Foundation and the first Creative Problem Solving
Institute, located in Buffalo, New York. Sidney J. Parnes,
Professor of Creative Studies at State University College at
Buffalo and leader in the field of creative education today, is
the President of the Institute which publishes a periodical
devoted exclusively to creativity, The Journal of Creative
Behavior.

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[1] Ibid.

About research development, Parnes writes:

> Research on the development of creative
> behavior has been conducted on an increasing scale
> ever since the presidential address of J. P.
> Guilford (1950) to the American Psychological
> Association. He emphasized the 'appalling neglect'
> of the study of creativity, indicating that of some
> 121,000 titles indexed in Psychological Abstracts
> from its beginning until 1950, only 186 were
> definitely related to the subject of creativity.[1]

Furthermore, of the 4176 publications on creativity in Taher A.

Razik's Bibliography of Creative Studies and Related Areas

(1965), more than half the titles date from 1950 and over 1000

appeared between 1960-1964. According to Donald W. MacKinnon,

implications of the research on creativity have begun to appear

in print. One such implication, which we shall consider

subsequently, is:

> Almost without exception, the conclusions seemed to
> be that those with creative potential are neglected,
> if not discriminated against, at all levels in
> American education.[1]

1.3 The Creative Mode of Thinking

Another way of unravelling some of the complexities

which surround the notion of creativity is to consider some

ideas of well-known psychologists and psychiatrists that

describe the creative mode of thinking and/or creative

behaviour. For assistance particularly with respect to the

ideas of Jung, Kris and Kubie, we shall rely upon an article by

Richard W. Woodman, "Creativity as a Construct in Personality

Theory" from The Journal of Creative Behavior. The information

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[1]S. J. Parnes, "Education and Creativity," in Creativity,
ed. P. E. Vernon (Baltimore, Maryland: Penguin Books, 1973).
p. 342.

[2]Donald W. MacKinnon, op.cit., p. 169.

presented will support a fundamental assumption that is central

to our case for creativity in elementary music education, i.e.,

the creative mode of thinking is basic to all human mental

activity, or as Professor P. Sharratt said in her inaugural

lecture at the University of Natal in April 1982, "[creativity]

is basic to all human mental processing."[1] We begin with Carl

Jung.

Carl Jung (1875-1961) was a Swiss psycholanalytic

scholar, who related creativity to the unconscious.

> The creative process, so far as we are able to
> follow it at all, consists in the unconscious
> activation of an archetypal image, and in
> elaborating and shaping this image into the finished
> work. . . . The unsatisfied yearning of the artist
> reaches back to the primordial image in the
> unconscious which is best fitted to compensate the
> inadequacy and one-sidedness of the present. The
> artist seizes on this image, and in raising it from
> the deepest unconsciousness, he brings it into
> relation with conscious values, thereby transforming
> it until it can be accepted by the minds of his
> contemporaries according to their powers.[2]

Woodman writes that Jung distinguishes between two types

of the creative process - a "psychological" and a "visionary."

> . . . a "psychological" type which deals with
> materials drawn from the realm of human
> consciousness and experience. . . . A "visionary"
> type . . . which stems from the unconscious.

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[1] Pamela Sharratt, "Cognitions and the Creativity of
Everyday Life." (Inaugural Lecture delivered as Professor and
Head of Department of Psychology, University of Natal, Durban,
April, 1982), unpublished.

[2] Carl Jung, "On the Relation of Analytical Psychology to
Poetry," in The Spirit in Man, Art and Literature, trans. by
R. F. C. Hull (London: Routledge and Kegan Paul, 1966),
pp. 82-83.

Describing artistic creation, Jung further divided
creativity influenced by the unconscious into
"symptomatic art" which stems from the personal
unconscious of the individual and "symbolic art"
which stems from the collective unconscious of
mankind. The process resulting in "symptomatic art"
is to some extent subject to individual intent and
purpose, and is similar to Freudian theory
concerning the relationship between creativity and
the unconscious, although Jung seemed to consider
the personal unconscious to be closer to
consciousness than did Freud.[1]

Furthermore Jung distinguishes between the personal
unconscious and the collective unconscious.

In contrast to the personal unconscious, which
is a relatively thin layer immediately below the
threshold of consciousness, the collective
unconscious shows no tendency to become conscious
under normal conditions. . . . The collective
unconscious is not to be thought of as a
self-subsistent entity; it is no more than a [sic]
potentiality handed down to us from primordial times
in the specific form of mnemonic images or inherited
in the anatomical structure of the brain. There are
no inborn ideas, but there are inborn possibilities
of ideas that set bounds to even the boldest fantasy
and keep our fantasy activity within certain
categories.[2]

Woodman says that Jung believed that no one personality
type had a monopoly upon creativity although some types "are
more prone to creating than others." Woodman writes:

Jung theorized that creative products and ideas do
not depend solely upon the unconscious, but rather
stem from the interaction between the conscious and
the unconscious mind.[3]

Finally, Woodman quoting Jung writes:

Any reaction to stimulus may be causally explained;

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[1]Richard W. Woodman, "Creativity as a Construct in
Personality Theory" in The Journal of Creative Behavior 15,
no. 1 (1968): 46.

[2]C. Jung, op.cit., p. 80.

[3]R. W. Woodman, op.cit., p. 47.

but the creative act, which is the absolute
antithesis of mere reaction, will forever elude the
human understanding (Jung, 1933).[1]

Ernst Kris (1900-1957), formerly of the New York
Psychoanalytic Institute, was a prominent psycholanalytic-ego-
psychology theorist. Woodman notes in his article that as a
partial explanation of the creative process, Kris's conception
of creativity as "regression in the service of the ego" appears
to be widely accepted among psychoanalyists today.[2] He
continues with this quote from Kris:

> . . . ego regression (primitivization of ego
> functions) occurs not only when the ego is weak - in
> sleep, in falling asleep, in fantasy, in
> intoxication, and in the psychoses - but also during
> many types of creative processes (Kris, 1951).[3]

In Woodman's words:

For Kris, creativity stems from the "preconscious"
rather than the unconscious. This preconscious is
on the borderline between consciousness and
unconsciousness and contains material "capable of
becoming conscious" under the proper conditions.[4]

To explain, Woodman again quotes from Kris:

In the state of inspiration, the psychic apparatus
is in an exceptional condition. The barrier between
the id and the ego has temporarily become
permeable. Impulses reach preconsciousness more
easily then under other conditions, and their
translation into formed expression can proceed
painlessly. Forces previously used for repression
are being used by the ego for another purpose. All
energy seems to be vested in the process of coming
to consciousness. The coming to consciousness in
the case of creative effort presupposes a long
unnoticed process of shaping: it is this process
which, entrusted to preconsciousness, is geared to
integration and communication (Kris, 1975).[5]

Woodman concludes with an explanation of Kris's concept

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[1]Ibid., pp. 47-48. [2]Ibid., p. 49.

[3]Ibid. [4]Ibid. [5]Ibid.

of creativity as "regression in the service of the ego."

> Regression in the service of the ego refers to
> utilization of a defensive mechanism - regression -
> in a more or less conscious retreat to an earlier
> level of development. Rather than this regression
> being an unconscious attempt to avoid anxiety, as is
> commonly the case, it is a purposeful attempt to
> find inspiration or insight by relinquishing some of
> the layers of development or socialization of the
> more mature mind. "So while regression in the
> service of the ego retains the element of
> defensiveness comprising distortion of reality, it
> is not defensive in that it operates consciously and
> is under the control of the person" (Maddi, 1976).[1]

Lawrence Kubie (1896-1973) was Clinical Professor

of Psychology at the University of Maryland and author of the

book, Neurotic Distortion of the Creative Process, which

concerns education and creativity. Relying still upon Woodman's

article, we read that: "Kubie expanded Kris's position on the

role of preconscious functioning in creativity. For Kubie the

preconscious is the source of true creativity."[2] Woodman quotes

from Kubie:

> It has been my thesis that a type of mental function
> which we call technically, "The preconscious
> system", is the essential implement of all creative
> activity; and that unless preconscious processes can
> flow freely there can be no true creativity (Kubie,
> 1958).[3]

Kubie differs from Kris, in that Kubie "sees the

preconscious processes important for creativity as being related

to healthy and adaptive functioning rather than regression or

sublimation."[4] Woodman quotes further from Kubie:

> Together all of this carries the implication that
> the ad hoc postulate that there is a separate and

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[1]Ibid., p. 50.   [2]Ibid.

[3]Ibid.   [4]Ibid.

special mechanism known as the sublimation of unconscious processes may not be needed to explain creativity, and may actually be misleading (Kubie, 1958).[1]

Still from Kubie, Woodman continues:

Actually both conscious and unconscious processes may block creative functioning in the sense that they are fixed and rigid. Consciousness is anchored to reality; the unconscious is anchored to unreality. Creativity depends upon the free flow of symbolic imagery available only in preconscious functioning (Kubie, 1967).[2]

And finally, Kubie, speaking of "our 'primitive' educational practices," writes:

. . . the free creative velocity of our thinking apparatus is continually being braked and driven off course by . . . conventional educational practices. So long as conscious sampling is mistaken for thinking, education will continue to neglect the great preconscious instrument of creative learning.[3]

Otto Rank (1884-1939), a psychoanalyst who "devoted a good deal more time to attempt to understand the creative personality than did most of the early analysts,"[4] published his first book, Der Kunstler (The Artist), in 1907. This brought him to the attention of Freud. During the ensuing years, Rank deviated from the mainstream of the psychoanalytic movement by relating the creator-impulse, not as Freud saw it, i.e., as the impulse diverted from its biological function, but as "a construct central to the understanding of healthy human

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[1]Ibid.　[2]Ibid.

[3]L. Kubie, "Blocks in Creativity," in Explorations in Creativity, eds. R. Mooney and T. Razik, (New York: Harper and Row, 1967), pp. 40-41.

[4]R. W. Woodman, op.cit., p. 48.

behavior."[1]

Rank poses two basic and opposed fears for individuals: the fear of life and the fear of death. These fears, he writes, shape the character of a person's journey through life from the trauma of birth to the trauma of death, and the measure of one's development is the way in which he or she constructively integrates these fears. The fear of life, which is basically the fear of separation and independence, drives one to a union with others while the fear of death, which is basically the fear of union and dependence, drives one to assert oneself, to independence and uniqueness.

The concept of will and guilt are central to Rank's theory of development. Will is the integrative power of the personality as a whole, "a positive guiding organization and integration of the self which utilizes creativity, as well as inhibits and controls the instinctual drives."[2] Guilt arises first when the child experiences the restraints and demands of the parents and begins to assert his or her counterwill in order to separate self from parent. According to Rank, in a healthy parent-child relationship, the parents will allow for the separation, and the child experiences a growing ego-strength. In an unhealthy parent-child relationship, the child experiences his or her will as a source of continuing guilt.

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[1]Ibid.

[2]O. Rank, Will Therapy and Truth and Reality, trans. J. Taft (New York: Knopf, 1945), p. 112.

Both guilt and will are operative in Rank's formation of
a personality typology. The first he terms the adaptive type.
The adaptive type's form of adjustment

> . . . permits fewer possibilities of conflict but
> also fewer creative possibilities of any kind. . . .
> He has consciousness of individuality but at the
> same time the feeling of likeness, or unity, which
> makes the relation to the outer world pleasant.[1]

The second he terms the neurotic type, and he explains
it

> . . . by the feeling of division in the personality,
> through the disunity of will and counterwill, which
> means a struggle (moral) against the compulsion of
> the outer world as well as an inner conflict between
> the two wills.[2]

At this stage, new attitudes begin to appear and attempts are
made to form goals and standards other than those presented by
society. If new attitudes and ideals prevail, then the person
moves to the third stage of development. If they fail, they
remain trapped in this second stage plagued by self-criticism
and feelings of guilt, a conflicted or neurotic person.

The third type Rank terms the artist. This highest
level of development he describes as being

> . . . characterized by a unified working together of
> the three fully developed powers, the will, the
> counter-will, and the ideal formation born from the
> conflict between them which itself has become a
> goal-setting, goal-seeking force. Here the human
> being . . . is again at one with himself; what he
> does, he does fully and completely in harmony with
> all powers and his ideals.[3]

Ernest Schachtel (1903-1975) affords us a brief look at
the perceptual theory as an example of a developmental cognitive
approach to creativity. His view is also a critique of Kris's

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[1]Ibid., p. 112.   [2]Ibid., p 264.   [3]Ibid.

concept of "regression in the service of the ego." Schachtel maintains that the openness of people to the world around underlies creative production. He approaches the riddle of creativity through the framework of perceptual theory, not through the framework of the psychoanalytical theory.

Two modes of perceptual relatedness are identified by Schachtel: the autocentric or subject-centred and the allocentric or object-centred. In the autocentric, there is little or no objectification. What is important is how and what one feels. In the allocentric, there is objectification. The perceiver attempts to take hold of, or grasp, the object, and feelings are either absent or less pronounced or of a different quality. The extent to which a person realizes his or her potentiality of allocentric perception depends upon his or her perceptual development. Important at this time, according to Schachtel, are playful encounters and an expanding environment, as it is one's receptivity to the world that affords an infinite and inexhaustible number and variety of objects. He writes that learning takes place through spontaneous exploration and through increasing acquaintance with the cultural meaning of objects. The latter Schachtel terms secondary autocentricity because now the child's original approach to the object is sublimated, and he warns against too great an emphasis being placed on the perspective of secondary autocentricity. The danger is that "man's dulled senses may no longer encounter the objects themselves but only what he expects and already knows about them."[1]

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[1]Ernest G. Schachtel, Metamorphosis (New York: Basic Books, 1959), p. 238.

Schachtel wants the individual to strive for the creative experience. In other words, he desires that each person should encounter an object fully or totally, and this requires that one be fully open and optimistic towards the object. The motivation behind this creative encounter is "man's need to relate to the world around him."[1] The quality of the encounter is that it should be playful, which means that the person must not be "bound by rigorous rules or by conventional schemata of memory, thought or perception,"[2] and that it should also provide for "openness, intensity of interest, and repeated and varied approaches which range from the grave and serious . . . to the playful and fleeting."[3]

He defines creativity as the "art of seeing the familiar fully in its inexhaustible being, without using it autocentrically for purposes of remaining embedded in it and reassured by it."[4] Writing about the influence of parents, teachers and peers in this regard, he says:

> The explicit and implicit influence of parents, teachers and peers toward the inculcation of a certain perspective on the world . . . determines to a large extent the individual solution of the existential struggle between two tendencies in man: to remain open toward the world, capable of allocentric perception, or to seek the security of secondary embeddedness in a closed world and in the shared autocentricity of a familiar perspective.[5]

Finally, Schachtel believes that creative experiences are due to the openness of the encounter with the object of the

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[1]Ibid., p. 241.   [2]Ibid., p. 242.   [3]Ibid.

[4]Ibid. p. 184.   [5]Ibid., p. 188.

creative labour and not, as Kris believes, that a creative experience is the result of "regression in the service of the ego."

Carl Rogers (1902-   ), noted clinical and research psychologist renowned for his client-centred therapy, related his theory of creativity directly to his work by emphasising the uniqueness of the individual.

> My definition, then, of the creative process is that it is the emergence in action of a novel relational product, growing out of the uniqueness of the individual on the one hand, and the materials, events, people, or circumstances of his life on the other.[1]

Rogers states that the motivation for creativity stems from one's tendency to actualize himself or herself.

> The mainspring of creativity appears to be the same tendency which we discover so deeply as the curative force in psychotherapy - man's tendency to actualize himself, to become his potentialities. By this I mean the directional trend which is evident in all organic and human life - the urge to expand, extend, develop, mature - the tendency to express and activate all the capacities of the organism, to the extent that such activation enhances the organism or the self. This tendency may become deeply buried under layer after layer of encrusted psychological defenses; it may be hidden behind elaborate facades which deny its existence; it is my belief however, based on my experience, that it exists in every individual, and awaits only the proper conditions to be released and expressed. It is this tendency which is the primary motivation for creativity as the organism forms new relationships to the environment in its endeavor most fully to be itself.[2]

Although he asserts that the nature of the creative product is its novelty, Rogers refrains from judging the

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[1] Carl Rogers, "Towards a Theory of Creativity," in Creativity, ed. P. E. Vernon, p. 139.

[2] Ibid., p. 140.

creative product because, he says, its value fluctuates and judgment is often subjective. He concedes that the novel product has more chance of being constructive rather than destructive if

> . . . the individual is open to all aspects of his experience and has available to his awareness all the varied sensings and perceivings which are going on within his organisms.[1]

The conditions within an individual that Rogers associates with a potentially constructive act are threefold. Firstly, one must be open to experience or possess "extensional orientation",[2] which means that one must have the ability to receive conflicting information or to accept ambiguity. Secondly, the source of evaluative judgment is internal, not external. Thirdly, one must have the ability to toy with or to explore objects.

Rogers concludes that creativity can never be forced, and he holds that it is possible to establish the external conditions which will foster and nourish the internal conditions described.

Abraham Maslow (1908-1970) was one of the first humanist psychologists and was primarily interested in the study of healthy persons. Such people he termed "self-actualized" individuals.

> My feeling is that the concept of creativeness and the concept of the healthy, self-actualizing, fully human person seem to be coming clearer and closer together, and may perhaps turn out to be the same thing.[3]

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[1]Ibid., p. 142.   [2]Ibid., p. 143.

[3]Abraham Maslow, Further Reaches of Human Nature (New York: Viking Press), 1972, p. 59.

This self-actualization means, for Maslow, the drive to arrive at one's full potential.

He believes that all people are born with the capacity for creativeness; thus, he considers creative motivation to be universal.

> Is creativeness part of the general human heritage? It does very frequently get lost or covered up and then the job is of uncovering what all babies are, in principle, born with.[1]

He goes further to add that "primary creativeness", the inspirational phase of creativity which comes out of the unconscious, is probably a common and universal kind of thing and is found in all children.[2] The "secondary creativeness", of which he speaks, refers to the production of products. He advocates that more attention be paid to "primary creativeness", and that we must become more interested in the creative process, the creative attitude, and the creative person rather than the creative product alone.[3]

Maslow maintains that education can help to foster the concept of self-actualization of people or of creativeness. He recognizes that art education has gone in the direction of using techniques that allow for growth. He says that "right and wrong are much less involved, correctness and incorrectness are pushed aside and the child is confronted with himself."[4] He proposes that effective education in music, as well as art, is closer to the intrinsic kind of education he is talking about - that of

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[1]Ibid., p. 79.   [2]Ibid., p. 83.

[3]Ibid., pp. 99-100.   [4]Ibid., p. 101.

self-actualizing creativity - more than other core subjects;
thus, he declares, "they must become basic experiences in
education", not just luxuries.[1]

Eric Fromm (1900-   ), psychoanalyist, believes that
out of the urge to rise above one's basic animal nature or to
transcend this nature, human beings create.

> In the act of creation man transcends himself as a
> creature, raises himself beyond the passivity and
> accidentalness of his existence into the realm of
> purposefulness and freedom. In man's need for
> transcendence lies one of the roots for love, as
> well as for art, religion, and material
> production.[2]

Fromm differentiates between two meanings of creativity. The
first refers to creating something new. The second refers to an
attitude towards creativity that exists even though nothing new
is created in the world of things. Concerning the creative
attitude, Fromm writes:

> The condition of the creative attitude is the
> capacity to be puzzled, to concentrate, to
> experience one's self as the true center of the
> world and as an agent of creativeness who can, at
> the same time, transcend the boundaries of his
> person in his relatedness to others and unity with
> the world. A further condition is to accept
> conflict rather than to avoid it.[3]

He believes that the ability to achieve this creative attitude
is within the reach of every human being and not only the gifted

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[1]A. Maslow, "Music, Education and Peak Experience," in
Documentary Report of the Tanglewood Symposium, ed. Robert
Choate, p. 73.

[2]Eric Fromm, The Sane Society (New York: Holt, Rinehart and
Winston, 1955), p. 37.

[3]Eric Fromm, "Creativity," in Creativity and its
Cultivation, ed. H. H. Anderson (New York: Harper, 1959),
pp. 243-244.

or artistic, and he proposes that the broad purpose of education
is to assist people to realize their creative attitude - "to
realize that which one's potential is."[1]

B. F. Skinner (1904-   ), an eminent behavioural
psychologist, denies the creator's direct responsibility for
creation although he recognizes the results of creation.

> A scientific analysis of behavior must, I
> believe, assume that a person's behavior is
> controlled by his genetic and environmental history
> rather than by the person himself as an initiating,
> creative agent.[2]

Skinner argues that a person is not an originating agent, but
that he or she is a locus: "a point at which many genetic and
environmental conditions come together in a joint effect."[3]   He
sees a person's unquestionable uniqueness as being "inherent in
the sources"; thus, he writes that each member of the human race
has identity "in the sense that he is one member and no
other."[4]

The problem that arises when one considers creative
behaviour along with stimulus-response psychology is
acknowledged by Skinner: "if behavior were nothing but response
to stimuli, the stimuli might be novel but not the behavior."[5]
He proposes, however, that:

> Operant conditioning solves the problem more or less
> as natural selection solved a similar problem in
> evolutionary theory. As accidental traits, arising

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[1]Eric Fromm, Man's Search for Himself (New York: Rinehart
and Co., 1947), p. 247.

[2]B. F. Skinner, About Behaviorism (London: Jonathan Cape,
1974), p. 189.

[3]Ibid., p. 168.   [4]Ibid., p. 225.   [5]Ibid., p. 114.

from mutations, are selected by their contribution
to survival, so accidental variations in behavior
are selected by their reinforcing consequences.[1]

He suggests that chance plays a part in the production

of original behaviour, as it does in all behaviour.

The concept of selection is again the key. The
mutations in genetic and evolutionary theory are
random, and the topographies of response selected by
reinforcement are, if not random, at least not
necessarily related to the contingencies under which
they will be selected. And creative thinking is
largely concerned with the production of
"mutations". Explicit ways of making it more likely
that original behavior will occur by introducing
"mutations" are familiar to writers, artists,
composers, mathematicians, scientists and
inventors. Either the setting or the topography of
behavior may be deliberately varied.[2]

Operant conditioning is a "process through which a

person comes to deal effectively with a new environment."[3] An

operant is the consequence, the reinforcer, which shapes and

maintains the behaviour, and the basic value behind the

behaviour is that of survival. "A person changed by operant

reinforcement has not 'learned a probability'; he has learned to

respond at a given rate because of a given frequency of

reinforcement."[4] Conditions which determine the force of

probability are enmeshed in a person's history, Skinner

declares; thus, they are easily overlooked or hard to pinpoint.

He explains that interrelated in contingencies of

reinforcement are stimuli that elicit responses or behaviour and

also consequences or reinforcers. A stimulus does not elicit

response as does a reflex, but it modifies the probability that

responses will be emitted.

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[1]Ibid.   [2]Ibid.

[3]Ibid., p. 39.   [4]Ibid., p. 127.

> As the result of its place in these contingencies, a stimulus present when a response is reinforced, acquires some control over the responses. It does not then elicit the response as in a reflex; it simply makes it more probable that it will occur again, . . .[1]

Our response to the world, Skinner claims, is a result of what happens to us in the world. Our perception is determined by the contingencies to which we are exposed plus our genetic endowment and our environmental history. He asserts that "people see different things when they are exposed to different contingencies of reinforcement."[2] Furthermore, people behave differently because of differences "in past contingencies."[3]

His idea is that contingencies are events, known and unknown, which result in behaviour. He postulates that the evolutionary theory gives rise to the acceptance of selection by contingencies of survival rather than the idea of a predisposed design, and the operant theory gives rise to the acceptance of selection by contingencies of reinforcement rather than the idea of a predisposed plan. He sees a resemblance between the contingencies of survival and of reinforcement "in the production of novelty."[4] Skinner explains:

> The key word in Darwin's title was "origin." Natural selection explained the origination of millions of different species on the surface of the earth, without appealing to a creative mind. In the field of human behavior the possibility arises that contingencies of reinforcement may explain a work of art or the solution to a problem in mathematics or science without appealing to a different kind of creative mind or to a trait of creativity or to the possibility that "men of genius have more creative nervous energy than lesser mortals."[5]

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[1]Ibid., p. 74. [2]Ibid., p. 79. [3]Ibid., p. 80.
[4]Ibid., p. 224. [5]Ibid.

Skinner agrees that arranging contingencies of operant

reinforcement is possible by applying rules and regulations;

however, it is better if one is able to rationalize and respond

positively to warnings, because one then "describes (one's) own

behavior and the contingencies responsible for it, and as a

result is more likely to behave in an appropriate way on future

occasions."[1] His views of education, stated in behavioural

terms are:

> . . . a teacher arranges contingencies under which
> the student acquires behavior which will be useful
> to him under other contingencies later on. The
> instructional contingencies must be contrived; there
> is no way out of this. The teacher cannot bring
> enough of the real life of the student into the
> classroom to build behavior appropriate to the
> contingencies he will encounter later. The
> behaviors to be constructed in advance are as much a
> matter of productive thinking and creativity as of
> plain facts and skills.[2]

Finally, Skinner maintains that it is possible for educators to

arrange contingencies under which the student may acquire

creative behaviour.

Conclusion

We have considered various approaches to the creative

mode of thinking and/or creative behaviour which range from the

psychoanalyst's recognition of a person's inner drive for

creativity, whether conscious or unconscious, to the

behaviourist's claim that although a person's behaviour is

determined by his or her environmental history and genetic

make-up, it is possible for educators to arrange contingencies

under which a student may acquire creative behaviour. We have

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[1]Ibid., p. 182.   [2]Ibid., p. 184.

seen that the humanists go so far as to say that all people have

creative potential and must achieve this potential in order to

be healthy, self-actualized individuals. This leads one to

wonder if music educators take cognizance of the strong

probability that inherent in children are imaginative thoughts,

ideas and insights that emerge from their unconscious (Jung),

from "regression in service of the ego" (Kris), from their

preconscious (Kubie), from the life impulse to serve the

individual will (Rank), from their ability to remain open to the

world around them (Schachtel), from their desire for

self-actualization (Rogers and Maslow), or from their urge to

rise above their animal nature (Fromm).

At this point, it is necessary to pause briefly to

explain, that one reason why we are exploring the nature of

creativity is to enable us to formulate questions, which will be

used to determine to what extent certain works which relate

to elementary music education support the importance of

creativity in elementary music education. These questions will

comprise the evaluation form that will appear at the end of this

chapter. Hence, as a result of having considered various

approaches to the creative mode of thinking, the first question

that we now formulate, and shall explore in Chapter III

by examining the philosophies and processes of music educators

as revealed in their writings, is:

   1. *To what extent do these works take
      cognizance of the fact that creative
      behaviour is thought by some eminent
      psychoanalysts and psychologists to
      be innate in each individual?*

To continue, some music educators may refuse to accept
that creativity is basic to all human mental processing. They
must, nevertheless, take cognizance of the fact that Skinner's
scientific analysis of behaviour led him to propose that, even
though a person is not an initiating creative agent, it is
possible for educators to arrange contingencies under which
students may acquire creative behaviour. This raises the second
question, which we now formulate and shall explore in
Chapter III, by examining the philosophies and processes of
music educators as revealed in their writings:

> 2. *To what extent do these works emphasise*
>   *the presentation of activities or*
>   *"contingencies" which may result in*
>   *creative behaviour?*

1.4 The Problem of Defining Creativity

Another way of unravelling the complexities which
surround the term creativity is to attempt to arrive at a
definition. Most dictionaries today define the adjective
creative, the adverb creatively, and the noun creativeness, but
not creativity. The imprecision of the word creativity is
reflected in one of the few definitions offered, which appears
in Fowler's A Dictionary of Modern English Usage:

> Creativity is a term of praise much affected by the
> critics. It is presumably intended to mean
> original, or something like that, but is preferred
> because it is more vague and less usual. . . . It
> has been aptly called a 'luscious, round,
> meaningless word', and said to be 'so much in honour
> that it is the clinching term of approval from the

school room to the advertiser's studio.'[1]

We are aware that an ever increasing amount of material is appearing on creativity which means that numerous definitions are coming to light. Most definitions are conceptualizations of what creativity is. To be more exact, they are usually semi-explanatory constructs on creativity. The following example illustrates this point.

E. Paul Torrance constructs a process definition:

On the basis of an analysis of the diverse ways of defining creativity and what I consider the requirements of a definition for keeping a program of research on factors affecting creative growth in context, I define creativity as the process of becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonics, and so on; identifying the difficulties, searching for solutions, making guesses, or formulating hypotheses about the deficiencies; testing and retesting these hypotheses and finally communicating the results. This definition describes a natural process.[2]

Irving A. Taylor, Professor of Psychology, Lakehead University, Thunder Bay, Ontario, Canada, comes to the conclusion, after reviewing over 100 definitions of creativity, that a content analysis reveals five distinct psycholinguistic clusters of usages. This indicates that there are levels of creativity, each level involving different psychological experiences. He emphasises that an important point is that creativity varies in depth and scope rather than type.

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[1]H. W. Fowler, A Dictionary of Modern English Usage, 2nd ed. revised by Sir Ernest Gowers (London: University of Oxford Press, 1972), p. 114.

[2]E. Paul Torrance, "Scientific View of Creativity and Factors Affecting Its Growth," Journal of the American Academy of the Arts and Science (Boston, Massachusetts: Daedalus, 1965), p. 663.

1. Expressive creativity - independent expression where skills, originality, and the quality of the product are unimportant, as in the spontaneous drawings of children.
2. Productive creativity - artistic or scientific products where there is a tendency to restrict and control free play and develop techniques for producing finished products.
3. Inventive creativity - inventors, explorers, and discoverers where ingenuity is displayed with materials, methods and techniques.
4. Innovative creativity - improvement through modification involving conceptualizing skills.
5. Emergentive creativity - an entirely new principle or assumption around which new schools florish.[1]

An example of a definition of creativity evolves from one of the more extensive studies of the subject which was conducted by J. P. Guilford. He propounds a general point of view concerning creativity: "Creativity, whatever its range of application, is by no means a unity but is rather a collection of different component abilities or other traits."[2]

This very brief sampling of the multifarious definitions of creativity serves only to sharpen our awareness of the impossibility of arriving at a single definition. We appeal, therefore, for additional enlightenment, to a discussion of this problem which appears in Intelligence and Creativity.[3]

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[1]I. A. Taylor, "The Nature of Creative Process," in Creativity, an Examination of the Creative Process, ed. P. E. Smith (New York: Communication Arts Books: Hastings House, 1959), pp. 51-88.

[2]J. P. Guilford, "Creative Abilities in the Arts," Psychological Review, 64 no. 2 (1957): 110.

[3]Victor Lee, Roy Webberley and Larry Litt: Intelligence and Creativity, The Open University Educational Studies: A Second Level Course: Personality and Learning Block 6 (Milton Keynes: The Open University Press, 1976).

As a starting point, the authors of this study utilize
four broad distinctions of definitions. The first three they
take from T. R. Mills (1957),[1] and the fourth is conceived by
the authors. In this diagram the four categories of definitions
appear as follows:

Real definitions	Nominal definitions	Operational definitions	Ostensive definitions
These attempt to capture the essential meaning.	These are concerned with the way words are typically used, or with particular specified uses.	These are concerned with observable, measurable operations.	These involve pointing out particular instances of the general principle in question.

[2]

We are concerned only with the operational and the
ostensive categories of definitions. The real definition, the
authors maintain, is very elusive as it refers to "an essential
entity to which the concept relates."[3] With respect to
creativity, they say:

> Thus to ask 'What is creativity?' may imply that the
> questioner believes that there is some attribute
> which corresponds to the real nature or real meaning
> of the word. Such an assumption would be at least
> misleading, if not mistaken.[4]

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[1]Victor Lee, R. Webberley and L. Litt, op.cit., p. 58.
quoting T. R. Mills, "Contribution to Intelligence Testing and
the Theory of Intelligence, 1 : On Defining Intelligence" in
British Journal of Educational Psychology, 27:153-165.

[2]Victor Lee, R. Webberley and L. Litt, op.cit., p. 58.

[3]Ibid.   [4]Ibid.

The nominal definition "involves being aware of how 'creativity'
is used in a particular context",[1] which is not really relevent
to our discussion.

Concerning the operational definition, they write:

> The operational definition of creativity is
> frequently encountered in research studies. A
> concept is defined operationally when it is
> identified by means of the operations used to
> measure it. . . . Creativity may be defined as a
> score on a creativity test. This sort of definition
> is implicit in the research reported by Getzels and
> Jackson (1963), Wallach and Kogan (1965), Haddon and
> Lytton (1968).[2]

We shall look at the first two studies in detail at a later
stage in this chapter.

Of the ostensive definition, the authors write:

> This type of definition involves pointing out
> particular instances of the general principle in
> question. Thus, instead of defining creativity per
> se, one could draw up lists of people who, according
> to some consensus of opinion, are recognized to be
> creative. Each individual in the list would be a
> particular instance of creativity in general. An
> analysis of what these people have in common is then
> presumed to indicate some of the major qualities
> which constitute creativity. This, you will
> observe, is the method used in the research reported
> by . . . Donald MacKinnon (1962).[3]

MacKinnon's study will be discussed in detail further on in this
chapter.

The authors explain that they think it is better to
limit themselves

> . . . to a consideration of the adjective 'creative'
> rather than attempting to define the abstract noun
> 'creativity', and thereby risk making the assumption
> that there is an entity to which the term refers.[4]

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[1]Ibid.   [2]Ibid.

[3]Ibid.   [4]Ibid., p. 59.

By using the adjective "creative", the authors make it possible to do the following:

1. "to describe . . . actual products, i.e., the things that are created . . .;"

2. to describe "processes of thought;"

3. to describe "aspects of personality such as interests, motives and values which have a critical influence on creative productivity."

4. to describe environmental "conditions under which creative production may take place."[1]

The following diagram shows that "'creative' may not simply refer to a hypothetical disposition; it may be inherent in certain environments as well as in certain products."[2]

| creative products | process of thinking | aspects of personality | environmental conditions |
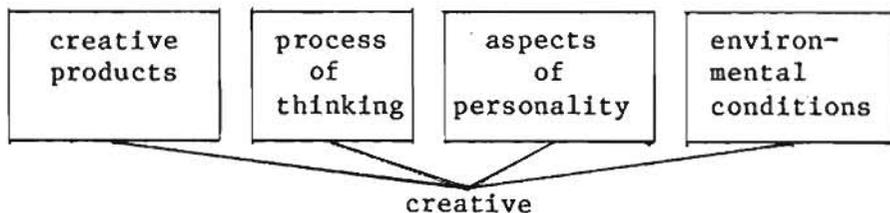
creative [3]

The remainder of this chapter will be devoted to these four factors.

But before we turn to these factors, let us consider one final reference from Webberley and Litt which relates to this complex problem of defining creativity. They explain that:

> While each of these factors [referring to the diagram above] may be necessary for creativity to take place, none may be sufficient by itself. Creativity is a process rather than a simple, unvarying entity. It is a multifaceted phenomenon, each new question showing it up from another angle and reflecting a fresh light upon its surface.[4]

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[1]Ibid.   [2]Ibid.   [3]Ibid.   [4]Ibid.

Thus we see that creativity is indeed a multifaceted

phenomenon, and that the essence of creativity is elusive.

> Creativity is not only complicated and difficult to
> understand, but it is radically different from other
> phenomena that can be explained in terms of cause.
> Basically, there is an unavoidable paradox:
> creations, when they appear, are in some way
> recognizable and familiar to us and, therefore, they
> must have something in common with antecedent
> experiences. However, creations, in the most
> complete sense, are so radically new and therefore,
> in some respect, unfamiliar. Their specific natures
> cannot be predicted from a knowledge of their
> antecedents. Nor can they be deduced from performed
> ideal and future conditions proposed by
> teleologists. In this sense, creations are
> undetermined, both genetically and teleologically,
> and sufficient conditions for their appearance
> cannot in principle be proved. Creativity,
> therefore, cannot be explained according to any
> traditional model of explanation by cause or
> prediction. We maintain, however, that it can be
> made intelligible and our principle for providing
> intelligibility to the phenomenon is a recognition
> of the irreducible paradox: Creativity is both
> determined and undetermined at the same time.[1]

A recognition of the paradoxical and multifaceted nature of

creativity should assuage the misgivings of those who claim that

education must not deal with creativity until we are able to

define the term. It is necessary to accept the postulate that,

even though a single comprehensive definition for this

phenomenon does not yet exist, music educators must be prepared

to come to terms with this concept which is vital to the

creative art of music. Having done this, they should then be

prepared for difficulties that will arise if the social climate

in which they work is alien to individuality, spontaneity,

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[1]A. Rothenberg and C. R. Hausman, The Creativity Question,
p. 23.

and a process involving change, but we shall speak more about
this in our final chapter. We move on now to a study of these
four factors: the creative process, person, product, and
environment.

1.5 The Creative Process

Creativity as a process has been described in various
ways. One of the first to talk about the process was Helmholtz,
who described it as consisting of saturation, incubation, and
illumination. Saturation involves the gathering of data,
facts, and sensations to serve for the development of new
ideas. Incubation occurs without conscious effort and involves
rearranging the material and making new combinations.
Illumination occurs when the solution or some concept of the end
comes to mind. Henri Poincaré, in his famous lecture before the
Société de Psychologie in Paris, described the creative process
in approximately the same way as Helmholtz. The difference was
that Poincaré's first step was called, "preparation", and he
added a fourth called "verification".[1] We shall discover that
the following descriptions of the creative process do not differ
markedly from these.

1.5.1 Patrick's Adaptation of Wallas's Process

Graham Wallas was not intending to make a serious
contribution to the theory of creative thinking in 1926. His
objective was to help his readers to think more creatively.

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[1]Charles S. Whiting, Creative Thinking (New York: Reinhold
Publishing Corporation, 1958), pp. 6-8.

Though derived from his own introspection and
scattered observations rather than systematic
empirical observation, Wallas's phases have been
widely accepted by investigators of creativity.[1]

Catherine Patrick has adapted Wallas's four stages of the

creative process, and, from her detailed experimental research

(1935), (1937) and (1955), she "concluded that creative thought

passed through several distinct stages."[2] They are described as

follows:

1. Preparation
   Where the subject makes himself familiar with
   the problem situation and its materials.
2. Incubation
   At this stage the problem begins to form an
   outline and definition. Suggestions as to
   possible solutions arise. It is possible, of
   course, that these may be many and varied.
3. Illumination (Discovery)
   A specific goal is defined and the subjects
   begin to work towards it.
4. Verification
   The results are fully worked out, analyzed and
   completed.[3]

These stages, Patrick writes, must not be conceived of

as rigidly sequential, but rather as modes of thought,

overlapping, likely to recur, and variable in length and

intensity.

1.5.2. D. W. MacKinnon

MacKinnon points out that a creative person often sees

problems where others do not and has a constantly questioning

attitude. He emphasizes that:

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[1]A. Rothenberg and C. Hausman, op.cit., p. 69.

[2]James Freeman, H. J. Butcher and T. Christie, Creativity, a
Selected Review of Research, 2nd ed. (London: Society for
Research into Higher Education, 1971), p. 46.

[3]Ibid.

It is misleading to refer to the creative
process as though it were a single, unitary
process. The term should be thought of as no more
than a convenient summary label for a complex set of
cognitive and motivational processes, and emotional
processes too, that are involved in perceiving,
remembering, imagining, appreciating, thinking,
planning, deciding, and the like. Such processes
are found in all persons, not merely in a chosen
few.[1]

Once one has isolated the problem to be solved and

gathered the relevant and necessary information, then what is

needed is a "compensating, free, spontaneous look at the whole

situation, a naive and childlike apprehension of what is there"

along with the analytical perception of the problem. He

contends that "such an attitude encourages the use of

imagination . . . so crucial in the insightful reorganization of

any problem."[2]

His description of the "process whereby creative

solutions to complex problems are achieved"[3] is as follows:

1. a period of preparation during which one
   acquires the elements of experience and the
   cognitive skills and techniques which make it
   possible for one to pose a problem to himself,
2. a period of concentrated effort to solve the
   problem which may quickly be solved without much
   delay or difficulty, but which perhaps
   more often involves so much frustration,
   tension, and discomfort that, out of sheer
   self-protection, one is led to
3. a period of withdrawal from the problem, a
   psychological going-out-of-the-field, a period
   of renunciation of the problem or recession from
   it, a time away from the problem that is often
   referred to as a period of incubation, which is
   followed by

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[1]D. W. MacKinnon, In Search of Human Effectiveness:
Identifying and Developing Creativity, pp. 47-48.

[2]Ibid. p. 49.   [3]Ibid.

4. a moment of insight that is accompanied by the exhilaration, glow and elation of the restructuring "a-ha" experience; and

5. a period of verification, evaluation, elaboration, and application of the insight that one has experienced.[1]

1.5.3   S. J. Parnes

Parnes terms the process he uses the "creative problem-solving process" which involves "observation", "manipulation", and "evaluation."[2] Though he is aware of the role that personality characteristics and the unconscious play in the creative process, he focuses primarily upon the cognitive characteristics of creative problem-solving. The five stages of Parnes' process are as follows:

1. Fact-finding: gathering and analyzing data in preparation for defining the problem.

2. Problem-finding: analyzing problematic areas in order to pick out and point up the problem to be attacked.

3. Idea-finding: idea production - thinking up, processing, and developing numerous possible leads to solution.

4. Solution-finding: evaluating potential solutions against defined criteria.

5. Acceptance-finding: adoption - developing a plan of action and implementing the chosen solution.[3]

Parnes puts more emphasis upon the attempt to stretch one's imagination than upon rigidly following each step. He confirms that the openness which he hopes to encourage through his process, relies upon how much imagination one first uses in

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[1]Ibid., p. 47.

[2]S. J. Parnes, Creative Behavior Guidebook (New York: Scribner's, 1967), p. 36.

[3]Ruth B. Noller, S. J. Parnes and Angelo M. Biondi, Creative Actionbook (New York: Scribner's, 1976), p. 1.

approaching a thought before tempering it with reality. In order to stimulate participants' toleration of more ambiguities prior to judging situations, Parnes suggests that exercises in wider imaginative play be used. The result is that in the end more and more factors are taken into consideration in a given unit of time while making decisions.

1.5.4   Morris I. Stein

Stein, Professor of Psychology at New York University, replies to a question which he explains is often asked when he presents lectures about the creative process. The question is, "Why is it that your presentation of the creative process makes it sound so much like problem-solving rather than what one generally has come to think of as creativity?" Stein's reply is:

> It is understandable that the use of such words as "problem," "solution," "hypothesis," and the like, could give the reader the impression that I am talking about problem solving only, since these terms appear quite "rational," as the problem-solving process may be for some persons. The fact of the matter is, though, that it would be an error to think of my presentation of the creative process as the same as problem solving. The terms I selected for my discussion I thought would be quite neutral and could be applied in a variety of ways.[1]

Stein continues:

> . . . it is also wise to point out that the kinds of terms selected in describing the creative process no doubt vary by fields and by individuals within fields. Thus, scientists may well refer to the "problem" or "experiments" they are working on. On the other hand, writers may refer to their "projects" and painters to their "work." To establish some sort of communality among all the

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[1]Morris I. Stein, Stimulating Creativity, vol. 1. (New York: Academic Press, 1975), p. 16.

terms, I would say that I have used the term
"problem" in the same way these others have used
"project" and "work," and I have also used the word
"problem" to refer to some stopping of the ongoing
flow of the creative process. Any attempt to
continue with the work or project I have called a
hypothesis in an effort to underscore its tentative
quality and the fact that the whole effort is still
in the process of development. Finally, the term
"solution" has been used in my discussion in a
manner to indicate the end state or goal of the
creative process.[1]

Turning to Stein's concept of the creative process, he

focuses attention on three stages of the creative process:

"hypothesis formation, hypothesis testing, and the communication

of results - all of which follow a preparatory or educational

stage which is not always uniquely part of the creative

process."[2] Stein also contends that the effects of

interpersonal and intrapersonal factors are seen in each stage.

> . . . these factors reflect the fact that creativity
> occurs in a social context and is a function of the
> transactional relationships between the
> individual and his environment - the creating
> individual is both affected by and affects his
> environment.[3]

The stages of his creative process are:

1. Preparatory (Educational) Stage

This stage includes "all formal and informal

educational experiences which provide an individual with the

information training, and experience necessary for the work

he will do in his chosen field."[4] Stein limits his research

concerning this stage to the school situation, and he

reports:

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[1]Ibid.

[2]Morris I. Stein, Stimulating Creativity, vol. 2, p. vii.

[3]Ibid., pp. vii-viii. [4]Ibid., p. 259.

> Unfortunately encouragement for development in
> the creative direction is lacking. It would be
> a very important step forward if ways could be
> found wherein classmates and teachers would
> value, encourage, and reward the creativity of
> the students with whom they come into contact.[1]

2. Hypothesis Formation

This stage includes the raising of questions related
to a problem and the generation of ideas in response to
these questions. To initiate Stein's process, a person asks
one or more questions which may change as the process
continues. Stein asserts that the individual who remains
passive during this stage and allows ideas to emerge is more
likely to produce an abundance of ideas than the individual
who tries initially to solve the problem in a logical
manner. Furthermore, he maintains that the individual who

> . . . moves back and forth through the range of
> behaviors and psychological processes is capable
> of raising more questions and providing more
> ideas which help to develop creative solutions
> to his questions.[2]

Useful techniques which stimulate ideas, essentially
cognitive in character, involve deferred judgment and
evaluation, making the familiar strange, and becoming aware
of the components of the question. Stein advises that, as a
guide in selecting fruitful ideas that arise, one should
"become aware of an 'aesthetic' feel, an awareness of
something that feels good."[3]

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[1]Ibid.   [2]Ibid., p. 261.   [3]Ibid., p. 262.

3. Hypothesis Testing

During this stage the individual becomes more active and tests the ideas which have been generated. Stein claims that a person may need both mental and emotional support now because self-doubt and anxiety might arise, and he suggests that the following may facilitate the workings of this stage:

> . . . to maintain one's motivation at an optimal level; . . . to learn different and newer ways of solving problems; to learn how to make use of analogies and metaphors by using materials from fields other than the one in which one works; . . . to break down embeddedness; . . . to avoid the carry-over of blocks that stem from logical distance between oneself and one's problems; to increase psychological distance between oneself and one's problem, and so, in all these ways, adapt his behavior to the needs and demands of the problem worked on so that a creative solution may be found.[1]

4. Communication of Results

At this stage Stein is referring to "what goes on between the creative individual and others from the time he has completed his work to when others have accepted it."[2] Though Stein is aware of the difficulties that people might encounter during this period, he declares that it is essential to complete this last stage to have completed the creative process.

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[1]Ibid., p. 263.

[2]Ibid., p. 264.

A COMPARISON OF THE STAGES OF THE CREATIVE PROCESS AS ENVISAGED BY
PATRICK, MACKINNON, PARNES AND STEIN

NAMES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5
PATRICK'S adaptation of WALLAS	PREPARATION: becoming familiar with problem situation	INCUBATION: beginning to form outline and definition of problem	ILLUMINATION: defining goal and working towards it	VERIFICATION: analyzing and working out results in full	
MACKINNON	PREPARATION: gathering skills to pose the problem	CONCERTED EFFORT: leading either to immediate solution or to stage 3	WITHDRAWAL: renouncing the problem temporarily	SUDDEN INSIGHT: experiencing an "A-ha"	VERIFICATION: elaborating, evaluating and applying results
PARNES	FACT-FINDING: gathering and analyzing related data	PROBLEM-FINDING: deciding on the real problem	IDEA-FINDING: processing and developing possible leads to solutions	SOLUTION-FINDING: evaluating potential solutions	ACCEPTANCE-FINDING: implementing the chosen solution
STEIN	PREPARATION: concerning all formal and informal educational experience	HYPOTHESIS FORMATION: raising questions and generating ideas relating to the problem	HYPOTHESIS TESTING: testing ideas and finding solutions	COMMUNICATION OF RESULTS: implementing the chosen solution	

Looking at the chart above, one is able to draw a
comparison between the stages of the four different processes,
and thus, to discover that the core of each process is similar;
i.e., each process involves both generating ideas to solve a
problem and sorting through these ideas to find solutions to the
problem. We also see that the structures of each of the
processes allow for the conditions necessary for change and
progression to occur, and that the aim of each process involves
the refinement of originality, i.e., that which is new to the
person involved. Furthermore each refinement takes place
through meaningful associations of elements from the
individual's knowledge and experience.

The differences we see are variations or modifications
of the procedures of each process. Patrick and Stein use a four
stage process, although Stein emphasises that his stage 1 occurs

prior to his actual creative process. Parnes and MacKinnon use a five stage process. Parnes includes a "fact-finding" stage before dealing with the "real" problems, and MacKinnon includes a "sudden insight" stage. Only Parnes and Stein agree that in order to complete the creative process, it is necessary to have one's solution accepted by others, but they disagree about equating the creative process with problem-solving. Parnes calls his process a creative problem-solving process, but Stein is reluctant to do so and declares that his process may be applied in a variety of ways.

From this presentation, we see that there is a debate concerning whether the creative process is a problem-solving process or something more, and that those concerned with education tend to equate the creative process with problem-solving, e.g., S. J. Parnes. Though we may prefer a wider concept of the creative process, our immediate task is to arrive at a question which will enable us to evaluate whether or not certain works relating to elementary music education make use of the creative process. To facilitate this, we shall restrict our investigation to the problem-solving process.

The question which we shall formulate is based, therefore, upon the first four steps of S. J. Parnes' creative problem-solving process. We delete his fifth step as it goes beyond the process which generates ideas to solve a problem and sorting through these ideas to find a solution. Parnes'

process is the basis of the Creative Studies Project which he

directs at the State University College in Buffalo, New York

and of three Creative Problem-Solving Institutes held annually

in New York, California and Florida.

From our study of the creative process, we now formulate

the third question that we shall explore in Chapter III by

examining the philosophies and processes of music educators as

revealed in their writings.

3. *To what extent do these works encourage
   children to use the creative process, i.e.,
   any of the steps that are similar to or
   the same as the first four steps of
   S. J. Parnes' creative problem-solving process:*

   a. *fact-finding?*

   b. *problem-finding?*

   c. *idea-finding?*

   d. *solution-finding?*

1.6 The Creative Person

We shall look at the creative person in two ways. Firstly,

we shall consider the salient characteristics that are

associated with creative individuals which have been suggested

by studies involving observations, interviews and tests of

creative people. Secondly, we shall consider aptitudes for

creative thinking which J. P. Guilford claims " . . . belong

most clearly logically in the area of creativity and that have

been discovered by factor analysis."[1] It will be shown that

some of the salient characteristics that are associated with

creative individuals are also associated with Guilford's

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[1] J. P. Guilford, "Traits of Creativity," in Creativity and
its Cultivation, ed. H. H. Anderson (New York: Harper and
Brothers, 1959), p. 160.

aptitudes for creative thinking.

1.6.1 Studies of Creative Persons

In 1947, when interest in creativity was just beginning, Anne Roe initiated her study of the personal dynamics of leading research scientists in biology, physics and social science who were considered to be creative. A panel of experts in each field selected those to be investigated. Roe utilized an intelligence test, two projective tests, and the case study to complete her investigation.

In 1959 D. W. MacKinnon studied 40 highly creative American architects. Following research and assistance from experts in the field of architecture, 64 architects were invited to Berkeley, California, for a weekend of intensive research at the Institute of Personality Assessment and Research. From the original group, 40 architects accepted the invitation to participate in MacKinnon's study.

Since these studies were initiated, the personality dynamics of creative people have become the subject of increased research. In order, therefore, to include the more recent findings, as well as those of Roe and MacKinnon, we turn to a review of the literature dealing with personality characteristics associated with the creative individual by Morris I. Stein (1968), a prolific writer in the field of creativity.

> The creative individual:
> 1. Is an achieving person. He scores higher on a Self-Description Test of need achievement (Stein et al., unpublished), than in a projective (TAT) Thematic Apperception Test measure of the same variable (McClelland, 1962), possibly because his

achievement is fulfilled in actuality and need not
be converted into fantasy. Gough (1964), using the
California Personality Inventory, found that
creative individuals score below average on a scale
measuring conformance motivation and the enhancement
of form and structure but above average on
achievement that stresses derivation of form and the
modification of structure. Both scales are
correlated in a student population but uncorrelated
in creative individuals. This is also regarded as
evidence for the complexity of the creative
individual (Gough, 1964).

2. Is motivated by a need for order (Barron,
1958).

3. Has a need for curiosity (Maddi, 1963; Maddi
and Berne, 1964; Maddi et al., 1964, 1965).

4. Is self-assertive, aggressive,
self-sufficient. He leads and possesses initiative
(Barron, 1955, 1957; R. B. Cattell and Drevdahl,
1955; MacKinnon, 1959a; Shannon, 1947; Van Zelst and
Kerr, 1951). He is high in need power as measured
by TAT-like pictures (McClelland, 1962).

5. Rejects repression, is less inhibited, less
formal, less conventional, is bohemianly
unconcerned, is radical, and is low on measures of
authoritarian values (Barron, 1955; Blatt and
Stein, 1957; R. B. Cattell and Drevdhal, 1955;
Drevdhal 1956; Van Zelst and Kerr, 1951). However,
MacKinnon (1959a) finds that the creative individual
is not "bohemian."

6. Has persistence of motive, liking and
capacity for work, self-discipline, perseverance,
high energy-output, is thorough (Blatt and Stein,
1957; Bloom, 1956; MacKinnon 1959a; Peck 1958; Roe,
1946a, 1949; Rossman 1931; Shannon, 1947).

7. Is independent and autonomous (Barron, 1955;
Blatt and Stein, 1957; Peck, 1958; Roe, 1953; Stein,
1962). Although independence has been an important
factor in other groups studied, MacKinnon (1959a)
did not find it to differentiate between groups of
industrial engineers.

8. Is constructively critical, less contented,
dissatisfied (Rossman, 1931; Shannon, 1947; Van
Zelst and Kerr, 1951).

9. Is widely informed, has wide ranging
interests, is versatile (Barron, 1957; MacKinnon,
1959b; R. K. White, 1931).

10. Is open to feelings and emotions. For him,
feeling is more important than thinking, he is more
subjective, he possesses vitality and enthusiasm
(MacKinnon, 1959a, 1959b; Peck, 1958; Shannon, 1947;
Van Zelst and Kerr, 1951).

11. Is aesthetic in his judgement and value
orientation (Blatt and Stein, 1957; Gough, 1964;

12. Is low in economic values (MacKinnon, 1962) or is a poor business man (Rossman, 1931). Blatt and Stein (1957), however, found with the Allport-Vernon-Lindzey Scale of Values that their more creative industrial research chemists did have higher economic values than their less creative colleagues. Using the same test but with a population of physicists, mathematicians, and electronic engineers, Gough (1961) did not find that any of the test's scales correlated with creativity.

13. Possesses freer expression of what has been described as feminine interests and lack of masculine aggressiveness (Blatt and Stein, 1957; Bloom, 1956; MacKinnon, 1959a, 1959b, Munsterberg and Mussen, 1953; Roe, 1946a, 1946b, 1946c).

14. Has little interest in interpersonal relationships, does not want much social interaction, is introverted and is lower in social values, is reserved (Blatt and Stein, 1957; Bloom, 1956; MacKinnon, 1959a, 1959b; Munsterberg and Mussen, 1953; Roe, 1949). Nevertheless, Gough (1961, 1964) found in his study of industrial researchers that social sensitivity (as measured by the Chapin Social Insight Test) was correlated with creativity. In this study the predictive power of the Chapin Social Insight Test was exceeded only by the Barron-Welsh Art Scale.

15. Is emotionally unstable but capable of using his instability effectively, not well adjusted by psychological definition but adjusted in the broader sense of being socially useful and happy in his work (R. B. Cattell and Drevdahl, 1955; Roe, 1953). That creative individuals are not unstable has been found by MacKinnon (1959a) and Stein et al. (unpublished). Blatt (1964), using a Self-Description Test developed by Stein (1965) found that the self-descriptions of industrial research chemists who were regarded as "more" creative were more congruent with psychologists' conceptions of mental health than were the descriptions of "less" creative chemists. Gough (1964) regards the variability found in the creative individual's personal adjustment as a reflection of his complexity.

16. Sees himself as creative (Stein et al., unpublished; C. W. Taylor, 1963). He is also more likely to describe himself in terms that investigators have found to be related to creativity than is true of less creative individuals. For example, MacKinnon in his study of architects (1962) found that his more creative group described themselves more frequently as "inventive, determined, independent, individualistic, enthusiastic and industrious," while his less creative group described themselves more frequently as "responsible, sincere, reliable, dependable,

clear thinking, tolerant and understanding. In short, where creative architects more often stress their inventiveness, independence and individuality, their enthusiasm, determination and industry, less creative members of the profession are impressed by their virtue and good character and by their rationality and sympathetic concern for others." Considered in terms of their ideals, MacKinnon also found that the more creative group would like to be more sensitive, while the less creative groups would like to be more original and, at the same time, more self-controlled and disciplined.

17. Is intuitive and empathic. Test scales of "psychological-mindedness," intuitive preference, and need intraception correlate with creativity (Gough, 1964).

18. Is less critical of himself. He is less inclined to use negative and unfavourable adjectives and has a low self-criticality index on the Gough Adjective Check List (Gough, 1961).

19. Makes a greater impact on others. Gough, (1961) found that assessment staff members who did not know criterion ratings of the subjects did differentiate between more highly and less highly rated research scientists. Some of the adjectives checked by assessors and which correlated positively with the criterion were: clear-thinking, interests wide, versatile, alert and attractive. Among the adjectives that correlated negatively with the criterion were: undependable, pessimistic, commonplace, weak and defensive (pp. 928-930).[1]

Stein concludes:

No creative individual has all these characteristics, but a creative person probably has more of them than does a less creative person. Evidence for personality factors characteristic of creative persons comes from studies of individuals in a wide variety of different scientific and professional fields: biology, psychology, chemistry, engineering, architecture. Just as these individuals differed from each other in field of endeavour, they also differed from each other in age, educational status, administrative status, etc. And in the studies in which they participated, there were also differences in the psychological

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[1]Morris I. Stein, Stimulating Creativity, vol. 1, pp. 58-60.

tests and techniques used to gather data as to their
creativity. [1]

No information has appeared to date as to whether such
characteristics are antecedent to or a consequence of having
been creative; hence Stein poses this question:

> Is it really necessary for an individual
> to be self-confident and autonomous, for
> example, to be creative? Or, is there the
> possibility that some modicum of self-con-
> fidence may be necessary in getting started
> on the creative process and that after a
> person has completed it successfully self-
> confidence increases appreciably.[2]

Though no causal relationships have been found to say that one
case is more valid than the other, theoretically, Stein says
that the "latter certainly can happen."[3]

He points out "that while the characteristics listed are
separate and discrete, it may be the _pattern_ of characteristics
that is most critical."[4]

To conclude, Stein writes:

> Regardless of the temporal relationship between
> personality characteristics and creativity, they are
> used in at least two different ways in stimulating
> creativity: either as models to be adapted or as
> goals to be achieved by removing the forces or
> problems that inhibit or block their manifestation
> and operation.[5]

In the light of these studies, we now formulate the
fourth question which we shall explore in Chapter III by
examining the philosophies and processes of music educators as
revealed in their writings:

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[1]Ibid., p. 60. [2]Ibid., p. 61.

[3]Ibid. [4]Ibid. [5]Ibid.

4. *To what extent do these works encourage
   the following capacities in children:*

   a. *curiosity?*

   b. *initiative?*

   c. *critical faculties?*

   d. *intuitive ideas?*

   e. *aesthetic judgment?*

   f. *wide range of interest beyond music?*

1.6.2. Aptitudes for Creative Thinking

Next we turn to a discussion of aptitudes for what
J. P. Guilford terms "creative thinking." Over thirty years
ago, Guilford began his work on the structure of the intellect.
The end result is the theoretical model for the complete
Structure-of-Intellect devised by Guilford and associates. He
states in his lecture, "Three Faces of Intellect":

> Our knowledge of the components of human
> intelligence has come about mostly within the last
> 25 years. The major sources of this information in
> this country have been L. L. Thurstone and his
> associates, the wartime research of psychologists in
> the United States Air Force, and more recently the
> Aptitudes Project at the University of Southern
> California. . . . The results from the Aptitude
> Project that have gained perhaps the most attention
> have pertained to creative thinking abilities. . . .
> But to me, the most significant outcome has been the
> development of a unified theory of human intellect,
> which organizes the known, unique or primary
> intellectual abilities into a single system called
> the "structure-of-intellect."[1]

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[1] J. P. Guilford, "Three Faces of Intellect," American
Psychologist 14 (1959a):469.

The STRUCTURE-of-INTELLECT MODEL
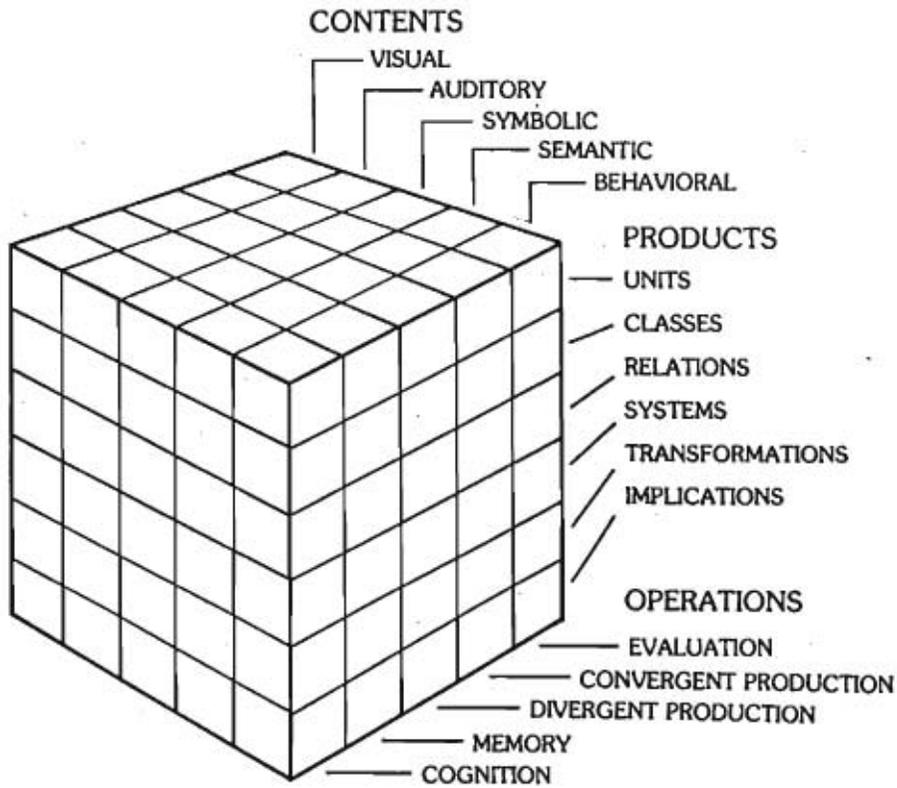
In Guilford's own words:

> The Structure-of-Intellect model is a three-way classification of known and conceivable human intellectual abilities or functions, represented by a three-dimensional cubic design. Each dimension includes a set of categories, one for five kinds of operation, one for five kinds of informational content, and one for six kinds of products. Each ability is represented by a single cell, with its unique conjunction of three values on the three dimensions. Certain psychological relations determine the order of categories along each dimension.[2]

The model, in other words, is a taxonomy designed to show what Guilford considers to be the known components of mental functioning.

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[1]J. P. Guilford, Way Beyond the IQ (Buffalo, New York: The Creative Educational Foundation, 1977), p. 151.

[2]Ibid., p. 155.

To corroborate the model empirically, an extensive number of experiments and factor analytical studies were devised for adult subjects by Guilford and associates. To explain what is meant by factor analysis, Guilford writes:

> . . . each intellectual component or factor is a unique ability that is needed to do well in a certain class of tasks or tests. As a general principle we find that certain individuals do well in the tests of a certain class, but they may do poorly in the tests of another class. We conclude that a factor has certain properties from the features that the tests of a class have in common.[1]

Of the 24 divergent abilities, Guilford claims that 23 have been demonstrated by factor-analysis.

Most of the aptitude factors, which Guilford finds identifiable as belonging in the category of creativity, are classified under divergent production or in a group of divergent thinking abilities. These abilities, by contrast to convergent thinking abilities, i.e., those concerned with satisfying a restricted requirement, emphasise searching activities with freedom to go in different directions, e.g., fluency, flexibility factors and originality of ideas.

Keeping in mind that Guilford holds to a general point of view concerning creativity, i.e., "the notion that creativity, whatever its range of application, is by no means a unity but is rather a collection of different component abilities or other traits,"[2] we now consider a description of the

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[1] J. P. Guilford, "Three Faces of Intellect," American Psychologist, p. 470.

[2] J. P. Guilford, "Creative Abilities in the Arts," Psychological Review 64 no.2 (1957):110.

aptitudes for creative thinking which he identifies.

1. Sensitivity of problems

This ability involves seeing problems, judging that things are not all right or that goals have not been reached. Referring to Guilford's model, this ability falls under the operation of making evaluations which is a cognitive factor and a convergent thinking ability.

2. Fluency of thinking

Guilford points out that this is the ability to produce an abundance of ideas. Three types of fluency are:

a) Associational fluency which is the ability to produce as many synonyms as possible for a given word. Guilford found a correlation between this ability and one's need for adventure and tolerance of ambiguity.

(b) Expressional fluency which is the ability to put ideas into words. Guilford concludes that high expressional fluency relates to high creativity.

(c) Ideational fluency which is the ability to produce ideas to fulfil certain requirements in a limited period of time.

3. Flexibility of thinking

The following forms, Guilford maintains, enable one to desert old ways of thinking or rigidity of thinking and strike out in new directions:

(a) Spontaneous flexibility: Such an ability enables one to roam freely about in one's thinking even when it is not necessary to do so, e.g., in naming the uses of a building brick, one is able to jump from one category of response to another, e.g., to build a wall, to stand on, or to kill a cockroach.

(b) Adaptive flexibility: Such an ability enables one to solve problems which require unusual solutions by freeing the person from using futile methods based upon learnings or mindsets, e.g., "The Nine Dot Problem."

```
   •    •    •

   •    •    •

   •    •    •
```

The reader is urged to solve this problem before uncovering the solution below. The requirements are to connect all nine dots with four straight lines and to go through each dot only once without lifting your pencil.

(a) Spontaneous flexibility: Such an ability enables
one to roam freely about in one's thinking even
when it is not necessary to do so, e.g., in
naming the uses of a building brick, one is able
to jump from one category of response to
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(b) Adaptive flexibility: Such an ability enables
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solutions by freeing the person from using
futile methods based upon learnings or mindsets,
e.g., "The Nine Dot Problem."

The reader is urged to solve this problem before
uncovering the solution below. The requirements
are to connect all nine dots with four straight
lines and to go through each dot only once
without lifting your pencil.

Unless one goes beyond what appears to be the
boundaries, the solution is evasive.

Spontaneous and adaptive flexibility enable one

to adjust more readily to new developments and

changed situations.

4. Originality

This is identified as the unusual or rare

response. Fluency and flexibility of thinking

together with originality fall under the operation

of divergent thinking.

5. Redefinition

This ability involves relinquishing old

interpretations of familiar objects in order to use

them or their parts in some new way. This ability

falls under the operation of convergent thinking,

i.e., finding one response from many possibilities.

6. Elaboration

This ability involves constructing a more

complex object from a simple source.

With respect to the implication of his findings for

education, Guilford writes:

> . . . we now ask whether we have been giving these
> skills appropriate exercise. It is probable that we
> need a better balance of training in the
> divergent-thinking area as compared with training in
> convergent thinking and in critical thinking or
> evaluation.[1]

Although convergent thinking activities tend to converge

upon a single problem solution whereas divergent thinking

involves the production of many solutions to a single problem,

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[1]J. P. Guilford, "Three Faces of Intellect," American
Psychologist, p. 478.

we reiterate that even though Guilford maintains that divergent

thinking abilities are the main source of creative activity, he

holds that convergent thinking abilities are also involved.

This is true, he declares, because problem-solving includes all

of the aptitude factors.   Guilford speaks of creative thinking

in the context of problem-solving and claims that they are

closely related.   To the question: What is creative thinking?,

Guilford replies:

> . . . it is possible to define creative thinking in
> a more definite way by reference to the Structure-of-
> Intellect . . . .
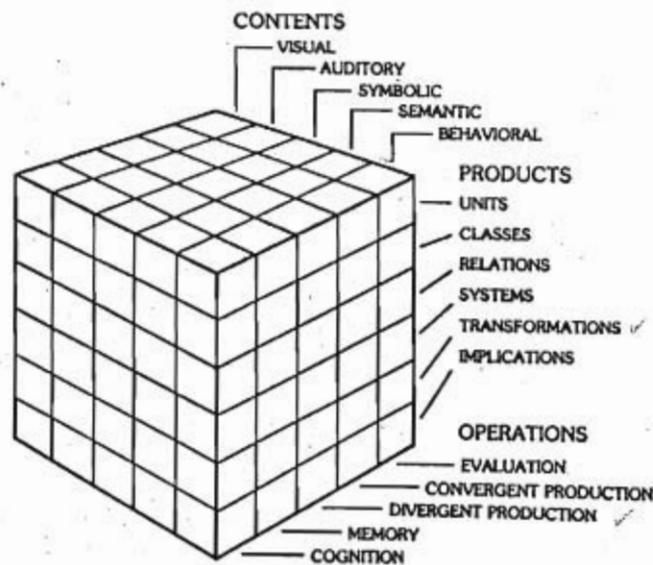
the S.I. abilities most relevant to creative
thinking come in the operation category of divergent
production and the product category of
transformation. Without either or both of these
features being involved in the thinking episode, we
cannot say that creative thinking has taken place.

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[1]Insert from J. P. Guilford, Way Beyond the IQ, p. 151.

> These abilities make essential contributions. They
> are sources of novel ideas. This is not to say that
> other operations and other products do not make
> their contributions, for they do. But their roles
> are secondary and their appearances in the activity
> are incidental.[1]

Problem-solving involves developing a sensitivity to problems,

filling in gaps of knowledge or missing elements, identifying

difficulties, searching for solutions, and formulating

hypotheses, and it is a method or way of using divergent

thinking abilities and other factors of the intellect.

Thus Guilford sees creativity as being meshed in the

multiplicity of intellectual abilities and as operating at

several levels. To conclude, he maintains that creativity

not only operates at the highest level, when an entirely new

principle or idea flourishes, but begins with expressive,

spontaneous activity in children.[2]

In the light of J. P. Guilford's discussion of aptitudes

for creative thinking, we now formulate the fifth question

which we shall explore in Chapter III by examining the

philosophies and processes of music educators as revealed in

their writings:

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[1] Ibid., pp. 160-161.

[2] A detailed account of Guilford's view of the intellect will
be found in the Nature of Human Intelligence (1967) by
Guilford.

5. *To what extent do these works encourage any*
of the aptitudes for creative thinking, as
identified by J. P. Guilford, with respect
to music:

    a. *sensitivity to problems?*

    b. *fluency of ideas?*

    c. *flexibility of ideas?*

    d. *originality?*

    e. *redefinition?*

    f. *elaboration?*

1.7 The Creative Product

A common use of the term creativity is often associated

with creative output or production, and such output is usually

a tangible product such as a poem, a scientific theory, or a

musical composition. This raises the question, what criteria

are used to decide whether the results of one's efforts of

either work or play are creative?

Phillip W. Jackson and Samuel Messick (1965) present one

of the few studies which deals with this problem of the

assessment of creative products. They classify the assortment

of evaluation comments into two categories.

> On the one hand, there are those judgments
> having to do with the "correctness" or "rightness"
> of a person's response. . . . These criteria of
> correctness tend to be categorical: They usually
> admit only one answer. . . . On the other hand,
> there are judgments having to do with worth or
> "goodness" of a person's response. . . . The
> criteria of "goodness" tends to be continuous. They
> admit a wide range of responses that vary in the
> degree of their acceptabilty.[1]

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[1] P. W. Jackson and S. Messick, "The person, the product and
the response : Conceptual Problems in the assessment of
Creativity." Journal of Personality, 33 (1965), in Creativity
and Learning, ed. Jerome Kegan (Boston: Houghton Mifflin Co.,
1967) with minor additions and emendations, p. 2.

Correct responses, on the one hand, relate to the category of intelligent responses, and "they operate within the constraints of logic and reality."[1] They are either right or wrong. Good responses, on the other hand, relate to the category of creative responses which in turn relate to a variety of judgmental standards. As our concern is primarily with the category of creative responses, we shall consider the criteria which Jackson and Messick present for judging whether a response is creative or not. D. W. MacKinnon accords with the first three of these criteria.

1. Unusualness or Novelty

> No matter what other positive qualities it might possess, we generally insist as a first step, that a product be novel before we are willing to call it creative.[2]

In applying this first standard, the "choice of an appropriate baseline or norm against which to judge a creative work" is of utmost importance,[3] e.g., if a child's musical composition has an unusual representation of musical texture, the standard of comparison is other children's compositions.

2. Appropriateness

"To be appropriate a product must fit its context. It must 'make sense' in the light of the demands of the situation and the desires of the producers."[4] This criterion helps eliminate items which are unusual, but perhaps absurd. Within this criterion, there is manoeuvrability. Firstly,

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[1]Ibid. [2]Ibid., p. 3. [3]Ibid., p. 4. [4]Ibid.

appropriateness is acceptable if a product "manages to hang together and to have a logic of its own, even though it may violate conventional logic."[1] Secondly, appropriateness is a continuous quality existing in degrees from the lowest, being a simple response which is clearly related to the situation and is "about right", to the highest, being a response which is considered to be "just right."[2] The judgmental standard for evaluating appropriateness is that "it must 'make sense' in the light of the demands of the situation and the desires of the producer."[3]

MacKinnon concurs with this second criterion and points out that appropriateness applies to the expressive arts as well as to science and technological enterprises.

> . . . in painting, the artist's problem is to find a more appropriate expression of his own experience; in dancing, to convey more adequately a particular mood or theme.[4]

Jackson and Messick maintain that appropriateness and unusualness are used conjointly, rather than independently, as criteria of creativeness.

3. Transcendence

Although all creative products are unusual and appropriate, Jackson and Messick write that

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[1]Ibid.   [2]Ibid. p. 4.   [3]Ibid.

[4]D. W. MacKinnon, In Search of Human Effectiveness : Identifying and Developing Creativity, p. 50.

"some are surely at a higher level of creative excellence than others."[1] This third criterion refers to the power of some products "to transform the constraints of reality."[2] In other words "some objects combine elements . . . that yield a new perspective. They literally force us to see reality in a new way."[3] Concerning the evaluation of a product's transcendency, the authors write:

> Just as the unusualness of a product is judged relative to the norms and its appropriateness relative to the context, the transformation power of a product would be judged relative to the strength and nature of the constraints that were transcended.[4]

MacKinnon's final criterion, the transcending or transforming power of the product, carries a similar meaning.

4. Condensation

The final criterion suggested by Jackson and Messick, and merely alluded to by MacKinnon, is met only by the most highly creative products. Such products "offer something new each time we experience them."[5] Jackson and Messick maintain that:

> The condensation achieved by a creative product summarizes essences, and the summary may be expanded and interpreted in a multiplicity of ways — intellectually or affectively, in terms of image or idea. It may be interpreted differently by different viewers or by the same viewer on different occasions. This

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[1]P. W. Jackson and Messick, op.cit., p. 6.

[2]Ibid. [3]Ibid. [4]Ibid., pp. 6-7. [5] Ibid., p. 10.

> multiplicity of interpretation and the
> extensiveness of the expansions generated by
> the condensation, are an indication of its
> summary power, and an approval of summary power
> provides an important judgmental standard for
> the evaluation of creative condensation.[1]

The authors fully recognize that both the complexity and ambiguity of the criteria of judging creative products increases as we move from the criterion of unusualness to the criterion of condensation. About the judgment of creative products, they write:

> The transformation of a creative product must be
> appropriate and unusual; the condensation must
> also be appropriate and unusual, but it may not
> always represent a transformation. If we accept
> unusualness and appropriateness as necessary
> properties for a product to be considered
> creative, then the hierarchical ordering of
> transformation and condensation provides an
> additional basis, along with degrees of
> variation within each of the response
> dimensions, for distinguishing levels of
> creative attainment within the class of
> creative products.[2]

Jackson and Messick find a relationship between personal qualities and properties of the creative response. The likelihood of an unusual response is greater, though by no means guaranteed, they declare, from persons predisposed towards ideational fluency, impulse expression, and cognitive styles of tolerance of unreality and inconsistency. An appropriate response, they continue, is best given by persons who are intuitively sensitive, and the criterion of transformation requires flexibility.

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[1] Ibid., p. 11.

[2] Ibid., pp. 12-13.

The final criterion, condensation, requires reflectiveness and spontaneity.

It has been pointed out how both the complexity and the ambiguity of the criteria of judging creative products increase as we move from the first to the fourth criteria of Jackson and Messick; therefore, possibly only the first two criteria would be applicable in judging most creative products. MacKinnon adds that, to be of value, the creative products must be produced, sustained, elaborated and communicated to others.

An attempt to arrive at criteria for judging creative products is fraught with dangerous pitfalls and raises more questions than answers. Jackson and Messick agree that their theoretical approach needs empirical studies to support it. MacKinnon concurs with Jackson and Messick that the first two criteria, unusualness and appropriateness, are the necessary properties for a product to be considered creative.

This discussion of the assessment of creative products raises the sixth question which we now formulate and shall explore in Chapter III by examining the philosophies and processes of music educators as revealed in their writings:

   6. *To what extent do these works encourage
      children to produce musical ideas that
      are unusual and that are appropriate?*

2. The Nurture of Creativity

2.1 The Home

Though various claims have been made for the effectiveness of such factors as birth order and family size in relation to the home environment and the creative person, we shall concentrate mainly upon parent-child relationships and how these relationships nurture or inhibit creativity in the home. This focus will enable us to draw comparisons between parent-child relationships and teacher-child relationships which nurture or inhibit a child's creative behaviour.

Weisberg and Springer (1961) conducted an extensive study which involved the families of thirty-two nine year olds. They were chosen from the top fifty of a sample of 7000, to whom the Kuhlmann-Anderson intelligence test was administered, and with whom interviews were conducted. Having selected the children, they then administered the criterion tests of creativity, some of which were designed by E. Paul Torrance, the Rorshach test, and the Draw-a-family test. In addition, interviews were held with each child and with their parents. The first purpose of this study was "to gain evidence as to possible environmental factors involved in the development of creative functions."[1] Weisberg and Springer comment:

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[1]P. S. Weisberg and K. J. Springer, "Environmental Factors in Creative Function," in Explorations in Creativity, eds. R. Mooney and T. Razik (New York: Harper and Row, 1967), p. 133.

It appears from the data that there are certain
family characteristics correlated with creative
performance in the children. There are, in summary,
expressiveness without domination, acceptance of
regression and a lack of dependency of each parent
on the other, or on the marriage or family as a
means of reinforcing their own individual status.
Actually, in no case among the children who ranked
high on the criterion testing was a family pattern
found which differed markedly from that described
above. The suggestion is thus strengthened that
environmental factors may be essential in the
development of creative function.[1]

The second purpose of this study was:

. . . to attempt to formulate from the data, the
ways in which the family setting may facilitate
creative responses in children. The characteristic
pattern found in families of creative children is an
openness of exchange and active interaction between
two well-defined adult personalities, with the
better defined personality of the two tending to be
that of the parent of the same sex as the child. .
. . These parents depend less on the parent-child
relationship as a means of reinforcing their own
security as individuals than do the parents of the
low-ranking child.[2]

We turn next to MacKinnon (1962) who, in

collaboration with Wallace B. Hall, initiated an extensive

study of architects because:

. . . it is in architects, of all our samples, that
we can expect to find what is most generally
characteristic of creative persons. . . . The
successful and effective architect must, with the
skill of a juggler, combine, reconcile, and exercise
the diverse skills of businessman, lawyer, artist,
engineer, and advertising man, as well as those of
author and journalist, psychiatrist, educator, and
psychologist.[3]

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[1] Ibid.

[2] Ibid., p. 133.

[3] D. W. Mackinnon, op.cit., p. 56.

Though we shall deal with MacKinnon's study in more
detail at a later stage, some observations regarding
parent-child relationships are relevant here, and particularly
those which he found characterized the parents of these future
creative architects, e.g.:

    a. an extraordinary respect for the child;
    b. confidence in his ability to do what was
        appropriate;
    c. granting of unusual freedom in exploring
        his universe;
    d. granting of freedom in making discisions
        for himself;
    e. expecting the child to act independently
        but responsibly and reasonably. This
        appears to have contributed immensely to
        the latter's sense of personal autonomy
        which was to develop to such a marked
        degree.[1]

Similar findings are reported by Drevdhal (1964) with
respect to psychologists, and Nichols and Holland (1963) with
respect to literary and musical achievement among first-year
college students. A corollary of the effective autonomy of
the creative child is a lack of intense closeness or of strong
emotional ties with one or both parents, and MacKinnon noted
that this is the case for architects in general. Further,
MacKinnon observed that, because there were neither positive
nor negative relationships, the distance between parent and
child had a "liberating effect as far as the child is
concerned."[2]

Anne Roe (1953) reports that when studying the family
background of creative individuals, she discovered that they
came primarily from professional families where "there was a

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[1]Ibid., p. 67. [2]Ibid.

plentiful supply of successful and respected models for

identification," and that "early feelings of personal or family

superiority on a social or intellectual basis were common."[1]

Weisberg and Springer (1961) also found "that the degree to

which the father was professionally autonomous was very

significantly associated with the child's divergent ability."[2]

Looking again at MacKinnon's study (1962), he found that

clear standards of what was right and wrong regarding conduct

were set by the parents of future architects, and discipline

was consistent and predictable. This fact should be of

interest to critics of creativity in education who assert that

the creative environment is synonymous with total freedom, and

therefore, total chaos. MacKinnon found, moreover, that formal

religion was of no importance for two-thirds of the architects'

families; rather they encouraged children to develop their own

personal code of ethics. Weisberg and Springer (1961) also

found that religion was a less powerful force in the home of

the more creative children.

Finally, MacKinnon reports that all architects

manifested an early interest in artistic abilities, and that

their parents encouraged and rewarded such abilities and

allowed them to develop at their own pace.

From these studies, we find that the following factors

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[1]Freeman, Butcher and Christie, Creativity: a Selected
Review of Research, p. 63.

[2]Ibid.

emerge concerning parent-child relationships in the home as being those which nurture creative behaviour in the child.

1. relationship between parent-child one of independence;

2. freedom for the child to explore his or her environment:

3. freedom for the child to make decisions:

4. openness of parents to human contact;

5. acceptance of regressive tendencies in the child;

6. respect for the child;

7. confidence in the child;

8. encouragement of the child's abilities:

9. standards of conduct and discipline clearly set;

10. actions expected from the child: independence, responsibility and reasonableness.

We move on to see if similar factors with respect to teacher-child relationships and creativity are significant in the school environment.

2.2 The School

What kinds of teachers and classroom processes and environments are best suited to encourage and develop a child's creative potential? This question assumes that there is some kind of relationship between teacher personality, teacher classroom behaviour, and pupil gain in creativity. As research has indicated, this relationship, if it exists, is far more complex than simple cause-and-effect. When the peculiar difficulties in assessing precisely what is happening in a classroom are taken into account, it becomes obvious that any conclusions about classroom interaction can only be tentative, as we are treading on thin ice during these early stages in the study of creativity in the classroom.

Without trying to be comprehensive, we shall present some studies that deal with three aspects of creativity and education. Firstly, we shall consider studies relating to environmental conditions in schools which either foster or inhibit creativity. Secondly, we shall consider studies relating to teachers' attitudes to the intelligent child and the creative child and to rewarding creative behaviour. Thirdly, we shall look at the few studies relating to creativity and classroom processes and some unique methods for developing creativity. Referring the reader back to our discussion of the definition of "creative", it is clear that we are using the operational definition as our information will result from observable and measurable operations.

2.1.1   School Environment

The first study is that of Barker-Lunn (1970).

> . . . her study of streaming in the primary school
> . . . examined the prediction that the schools and
> teachers favouring a more informal progressive
> approach to curriculum and methods would do more
> to foster divergent thinking than those preferring
> to adhere to the more formal methods associated
> with the achievements of accepted standards of
> academic attainment.[1]

A description of the study is as follows:

> A test of divergent thinking was constructed,
> designed to measure three aspects of divergent
> thinking; fluency in ideas, flexibility of ideas
> and associations, and originality of response.
> Statistical originality was the criterion adopted,
> with marks being awarded to the rarity of the response
> among a representative sample. The material form for
> the construction of this test was drawn, to a
> large extent from the work of Guilford (1959) and
> Torrance (1965). Two parallel versions of this
> test were administered to a cohort of 5,500 primary
> school children, one version at the end of their
> third year, and the other at the end of their fourth.
> The critical analysis was based on the scores in
> each year of a sample of approximately 1,800 children
> consisting of the same children in both years. A
> test of free writing in the form of essays was also
> administered in both years, and was specifically
> designed to encourage expression of original and
> imaginative ideas.[2]

The description continues:

> Teachers were divided into two groups. In
> non-streamed schools they were divided into
> (1) "progressive" teachers, and (2) teachers who
> were less in favour of "progressive" lessons and,
> in terms of aptitude and personality, more character-
> istic of the type of teacher found to predominate in
> streamed schools. It was considered that the majority
> of the teachers in these schools were type 2.[3]

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[1]Freeman, Butcher and Christie, op. cit., p. 104.

[2]Ibid., p. 105.   [3]Ibid.

With respect to the influence of the two types of

teachers and schools, these results emerged:

> The 'flexibility' scores of lower social class boys
> in streamed schools showed a significant drop, whereas
> comparable boys with type 1 teachers in non-streamed
> schools showed an improvement in scores which approached
> statistical significance.[1]

Furthermore, the results showed that:

> . . . type 1 teachers were not only associated with
> the greatest number of high scores (children in the
> top five per cent on the test of divergent thinking)
> but also with the smallest proportion of children
> whose scores fell in the bottom 20 per cent on the
> test. Type 2 teachers, on the other hand, seem to
> be less successful in developing the divergent think-
> ing of their pupils.[2]

Yates (1970), in his evaluation of Barker-Lunn's

study, suggests that the most important contribution the

study makes is that teachers' views and interpretations

of school requirements determine, to a great extent, the form

of school organization. Freeman, Butcher and Christie add

that current research suggests that this is crucial in the

development of creativity. Yates continues, concerning the

value of Barker-Lunn's finding in relation to the development

of creativity:

> . . . it would seem that it is not the degree of
> permissiveness but rather the attitude of the
> teacher, the emphasis upon self-initiated learning,
> the freedom of access, often unsupervised, to
> school libraries, relatively less use of class
> teaching and relaxed, friendly atmosphere.[3]

A study by Ogilvie (1974), concerning school organi-

zation, makes the point that "there are no agreed theoretical

bases to support the common view that traditional environments

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[1]Ibid.   [2]Ibid.   [3]Ibid., p. 106.

are detrimental to creativity."[1] An important feature of

Ogilvie's research design is the specification of different

degrees of structure in the school environment. Rather than

the simple dichotomy between formal and informal, Ogilvie

suggests that:

> . . . the relationship between creative behaviour
> and informality . . . is curvilinear. That is to
> say, creativity does not automatically increase as
> the degree of informality increases.[2]

Ogilvie's conception of creativity "stresses what

might loosely be called the *cognitive* context - the need for

a background or pool of information from which fruitful

associations may be drawn."[3] To Ogilvie, it is simplistic

to suggest that creativity will occur "miraculously out of

nothing, simply on provision of a permissive atmosphere or an

unstructured curriculum."[4]

Two final investigations, which provide us with further

insight into creativity and school structure, are Spaulding

(1963) and Sears (1963).

> . . . Spaulding identifies two teaching styles which
> tended to reduce flexibility and originality scores
> on the Torrance tests:
> a. A formalized highly structured situation,
>   controlled by shame, ridicule and admonition;
> b. A tendency for teachers to react to socio-
>   emotional qualities rather than cognitive
>   performance. (This type of class was
>   characterized by permissiveness but also by
>   a lack of concern for achievement and
>   performance).[5]

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[1] Lee, Webberley and Litt, Intelligence and
Creativity, p. 95.

[2] Ibid. [3] Ibid. [4] Ibid.

[5] Ibid., pp. 95-96.

Sears "found positive correlation between creativity and teachers' use of the technique of rewarding children by personal interest in their ideas rather than evaluation."[1]

These studies indicate some of the effects of school environments upon creative thinking, and they also make us aware of the controversy which surrounds the debate concerning the effects of formal and informal schooling on creative thinking.

As it is the teacher who, to a large extent, determines what the environment will be, we consider further the attitudes of teachers in relation to creativity in the classroom.

2.2.2 Teachers' Attitudes

We shall examine the attitudes which teachers adopt when dealing with the intelligent and the creative child, and we shall look at Torrance's studies of teachers' attitudes towards rewarding the creative behaviour of children. But first, let us investigate the extent to which the terms "intelligent" and "creative" describe independent traits.

Studies of these terms result in conflicting reports. Some suggest that they are virtually indistinguishable.

> . . . it seems clear that, in any group of people covering the usual range of ability, creativity as assessed by the Guilford-Torrance-Messick test of divergent thinking overlaps considerably with intelligence as assessed by conventional tests.[2]

Others suggest that almost little or no overlap exists.

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[1]Hugh Lytton, op. cit., p. 101.

[2]Freeman, Butcher and Christie, op. cit., p. 14.

With respect to the second suggestion, consider the study by
Wallach and Kogan (1965). Their aim is to determine what
creativity might rightfully signify if, in fact, it constitutes
a type of excellence different from intelligence. A descrip-
tion of this study is presented by Webberley and Litt.

> The theoretical basis of Wallach and Kogan's study
> is Mednick's Remote Association Theory.[1] From
> this theory Wallach and Kogan (1964) predict two
> different types and rates of associative production.
> In response to a given stimulus-word, a largely
> uncreative person can be expected to begin with a
> high number of usual, common or stereotyped associa-
> tions which will diminish rapidly. The highly
> creative person will produce associates for a longer
> period of time though at a slower rate initially.
> This eventually leads to the production of unusual,
> rare, and ultimately unique associates.[2]

Webberley and Litt point out:

> This analysis led Wallach and Kogan to two important
> conclusions.
> a. In order for subjects to think of less sterotyped
>   associates, sufficient time must be allowed.
>   Thus, unlike the Minnesota Tests, virtually
>   unlimited time was allowed for each subject to
>   respond to the tests, which were administered
>   under relaxed, playful and stress-free conditions.
> b. The scoring of the tests should be according to
>   fluency (i.e. the overall number of responses)
>   and uniqueness.[3]

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[1] Mednick's theory is that creativity is "the forming of
associative elements into new combinations which either meet
specified requirements or are in some way useful. The more
mutually remote the elements of the new combination, the more
creative the process or solution." from S. A. Mednick, "The
associative basis of the creative process." Psychological
Review, 69, No. 3, p. 221. Based on his theory and for the
purpose of measuring creativity, he developed the Remote
Associates Test (RAT). The subject is given a series of three
words such as "cheese," "blood," and "water" and is asked to
find a fourth word which is common to all three words. The
correct answer in this case is "blue."

[2] Lee, Webberley and Litt, op.cit., p. 76.

[3] Ibid.

Webberley and Litt continue:

> They defined a response as unique if it occurred only
> once in the sample under consideration. The tests
> they devised appear to be a simple, but adequate
> reflection of their theoretical position. The tests
> show a direct line of descent from those of Guilford,
> a fact the authors acknowledge; but the conditions of
> administration and scoring derive from a different
> theoretical model. They did not use Mednick's Remote
> Associates Test because of what they considered to be
> its convergent style, since it is scored by the number
> of correct responses.[1]

Definite divergences occurred when comparing creative

assessment procedures with the results of the intelligence

measures; this had not been found in earlier studies. The

conclusion drawn by Wallach and Kogan was that the obtained

facts did support the view that, in school children, creativity

is a different type of cognitive excellence from general

intelligence. They write:

> Such an outcome was especially striking in light of
> the fact that our procedures for assessing creativity
> of necessity called upon the child's verbal ability
> in some degree – and verbal ability is known to
> contribute substantially to performance on IQ tests.
> Despite this possible source of commonality, the
> chances that a child of high intelligence would also
> display high creativity by our measures were no more
> than about 50-50.[2]

Still from Webberley and Litt:

> Ward (1967), using a much more sophisticated technique of
> factor-analysis, found results which largely supported
> Wallach and Kogan's claims that their data showed a
> definite distinction between creativity and intelligence.
> However, like the Getzels and Jackson study [which we
> shall consider next], the subjects were of above
> average intelligence, so generalizing the results

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[1] Ibid., pp. 76-77.

[2] Michael A. Wallach and Nathan Kogan, "Creativity and
Intelligence in Children's Thinking" in Creativity : Theory and
Research, ed. M. Bloomberg (New Haven, Connecticut: College and
University Press, 1973), p. 252..

to include the whole range of intelligence may be
unwarranted and indeed, might produce a different
picture. The evidence – and this is available
from a number of sources (see Hargreaves and Bolton,
1972, for summary) – suggests that creativity and
intelligence become identifiable as separate ways
of thinking above a certain level of intelligence
(approximately IQ 120).[1]

Thus it is that the question of whether and to what extent

intelligence and creativity are distinctive traits remains

an open one.

We turn to look briefly at a study that concerns

creativity and intelligence and inspired the work of Wallach

and Kogan, the controversial but significant publication

by Getzels and Jackson, Creativity and Intelligence:

Explorations with Gifted Students. The controversy arises in

part because the sampling of subjects from the University of

Chicago Laboratory School is atypical and because a minority

of extreme cases is chosen for detailed investigation.

Concerning our attempt to discover what the attitudes of

teachers are towards the creative child, however, this study

bears significant results.

With respect to the ways teachers rated students on

the degree to which they would like to have them in class,

Getzels and Jackson found the following:

The high IQ group stands out as being more desirable
than the average student, the high creativity group
does not. It is apparent that an adolescent's
desirability as a student is not a function only of
his academic achievement. Even though the
scholastic performance is the same, the high IQ
students are preferred over the average students by

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[1]Lee, Webberley and Litt, op. cit., p. 77.

their teachers, the creativity students are not.[1]

Getzels and Jackson point out that Torrance corroborates these

findings when he concludes:

> Two of the most consistent findings are for the high-
> IQ pupils to be better known by their teachers and
> to be considered more desirable as pupils than the
> highly creative subjects.[2]

This study of Getzels and Jackson also shows that the

high-IQ child tends to hold a self-image consistent with what

he or she feels the teacher would approve, seeking to conform

to the projected values of the teachers; the creative pupil,

on the other hand, tends to hold a self-image consistent with

his or her own projected values, often not conforming to the

teacher's values.[3]

One of many problems arising from this particular attitude

of teachers towards creative students in the United States is that:

> . . . the two most common criteria applied to a
> prospective college student in the United States of
> America are (1) scholastic aptitude measures of the
> intelligence test (IQ) type, and (2) school recommen-
> dations based on teacher evaluations of student char-
> acteristics. Both of these indices tend to penalize
> the high creativity student in favor of the high IQ
> student; his aptitude scores and his ratings by
> teachers are likely to be less promising.[4]

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[1]J. W. Getzels and P. W. Jackson, Creativity and Intelligence: Exploration with Gifted Students (London: John Wiley and Sons, 1962), p. 30.

[2]E. P. Torrance, "Explorations in Creative Thinking in the Early School Years: a progress report," in The Third (1959) University of Utah Research Conference on the Identification of Creative Scientific Talent, ed. Calvin W. Taylor (Salt Lake City: University of Utah Press, 1959), p. 66.

[3]J. W. Getzels and P. W. Jackson, op. cit., p. 35.

[4]Ibid., p. 32.

These results indicate that teachers tend not to
favour the child who is more creative. The creative child,
according to Torrance (1965), is one who asks questions, is
preoccupied with tasks, has the courage of his convictions, is
independent in judgment and thinking, is willing to take risks
and unwilling to accept authority's dictates. Teachers tend
rather to favour the child who is more intelligent, which may
mean, according to Torrance, that the child is courteous, does
his work on time, is obedient and is willing to accept the
judgment of authorities. Although many factors in the present
school systems make the results of these studies seem to be
foregone conclusions, it is important that teachers become
aware of the bias that exists against the creative child, and
make an effort to rethink and alter attitudes which may
inhibit creative behaviour.

Next we look at E. Paul Torrance's studies of teachers'
attitudes towards rewarding creative behaviour of children as
found in Rewarding Creative Behavior. Torrance believes that
creativity needs to be energized and guided almost from birth,
and he maintains that longitudinal and cross-cultural develop-
mental studies of creative-thinking abilities evince support
for his belief. He claims that if creativity is stifled
early, "apparently it will only become imitative if it survives
at all."[1]

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[1]E. Paul Torrance, Rewarding Creative Behavior:
experiments in the classroom (Englewood Cliffs, New Jersey:
Prentice-Hall, 1965), p. 12.

Torrance holds that it is important for teachers to respect and reward creative behaviour, and he demonstrates that he is not alone in this. Barken (1960) observed when dealing with elementary school art that if children's "inventions and ideas are viewed with interest, children are encouraged to create more ideas. If their efforts are unnoticed or rejected, children lose confidence in their ability to create."[1] The Overstreets in their book, Mind Alive

> . . . see the rewarding of creative thinking as a counteractant to the forces which discourage self-initiated learning. They observe that at the stage in life when we insist that a child learn what we want him to learn, we discourage his learning what he wants to learn by our ill-placed humor, irritation, or evasiveness.[2]

In Rewarding Creative Behavior, Torrance seeks to specify situational factors which are functionally related to creativity and to isolate important variables which foster or inhibit creative expression. These factors and variables relate particularly to the "forces which are at play when teachers are asked to apply deliberately a few widely accepted educational principles in their classrooms."[3] His research provides us with some answers to the following five questions, i.e., questions based on his topics of research and concerned with rewarding creative behaviour.

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[1]Ibid., p. 13. [2]Ibid. [3]Ibid., p. 42.

The first question is: What principles does Torrance suggest for rewarding creative behaviour? Realizing that some may consider the principles which he states to be obvious, Torrance proceeds, nevertheless, to list five, i.e., (a) to (e), because they are "neither understood nor practised by any large number of teachers."[1]

(a) "Be respectful of unusual questions."[2] This leads, Torrance claims, to the creation of and acceptance of the questioning situation in the classroom rather than the ready-made answer situation. He is aware that such a situation will create problems for many teachers; furthermore, he mentions that Margaret Mead (1962) also realizes and sympathizes with the position in which the adoption of such an attitude places teachers, when she affirms that many teachers may not be able to cope.

Torrance points out that children are given the impression that to ask questions in the school is bad manners "and is cause for disciplinary action",[3] and he mentions Einstein in this regard.

> We are told that during his early school years, Einstein was frequently beaten for asking questions. Finally, before completing his course in the *gymnasium*, his science teacher asked him to withdraw from the school because the questions he was asking were undermining the status of the teacher . . . all, except for his mathematics teacher, apparently agreed that Einstein should be asked to withdraw.[4]

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[1]Ibid., p. 43.   [2]Ibid.

[3]Ibid., p. 44.   [4]Ibid.

(b) "Be respectful of imaginative, unusual ideas."[1]

Torrance relates that although teachers may stimulate and encourage unusual ideas, they have not learned "how to respect them" or "how to use them when they are offered."[2]

(c) "Show children that their ideas have values."[3]

Torrance points out that we often think children are only to be taught, or that they cannot possibly have their own ideas. Such an attitude has negative effects on creative thinking. Barkan (1960) points out "that kindergarteners need from their teachers signs of assurance which convey the feeling that their ideas are valued and respected."[4]

(d) "Provide for periods of non-evaluated practice."[5]

This allows one to determine the limits of the extent of his or her ability. "He must also test the medium - whatever it is - to discover its limits; its possibilities."[6]

(e) "Tie in evaluation with causes and consequences."[7]

Torrance sets down that we should steer clear of using "This is good" or "This is bad"; rather use "I like this because . . ." or "This could be improved by . . ."[8] Causal thinking, he emphasised, is necessary to provide direction for creative behaviour.

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[1] Ibid.   [2] Ibid., p. 45.   [3] Ibid.   [4] Ibid.
[5] Ibid.   [6] Ibid., p. 46.   [7] Ibid.   [8] Ibid.

A manual, Rewarding Creative Thinking, based upon
the above five principles, was compiled by the Bureau of Educa-
tional Research in the fall of 1959. In less than six months,
approximately 750 copies were distributed to teachers upon
request. From this group 150 teachers were selected to "seek
systematically and consciously to apply in a reasonable way"[1]
these five principles of Torrance.

> We urged them, however, to experiment with deliberate
> applications of the principles. We cautioned that
> all these principles must be applied within the
> limitations of the age group being taught. It was
> emphasized that applications should be continued and
> consistent rather than just "one-shot treatments".
> After a period of experimentation, it was requested
> that each recipient write a description of some
> specific experience in which he had tried to apply
> one or more of these principles and to answer certain
> questions about each experience described.[2]

As a result, 114 teachers of children at every grade level,
from kindergarten through ninth grade, in thirty-five public
and private schools, in thirteen states and the District of
Columbia, supplied reports.

> From the reports, ten personality factors seem
> to have contributed to a rejection of the five
> principles. The teachers who were unable to apply
> the principles were authoritarian . . . ; defensive
> . . . ; dominated by time . . . ; insensitive to their
> pupils' intellectual and emotional needs . . . ;
> intellectually inert . . . ; lacking in intellectual
> energy . . . ; preoccupied with information-giving
> function . . . ; disinterested in promoting intellect-
> ual curiosity in their pupils . . . ; preoccupied
> with disciplinary matters . . . ; and unwilling to
> give much of themselves to the teaching-learning
> compact.[3]

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[1]Ibid., p. 47.   [2]Ibid.   [3]Ibid., p. 72.

The second question is: What are the effects of

differential rewards on the production of original ideas?

Torrance concludes

> . . . that differential rewards influence originality
> of thinking. Giving instructions in terms of
> rewards for correctness or for quantity with secondary
> attention to originality appears to work against the
> production of original ideas.[1]

His description of the simpler of the two experiments

upon which his conclusion is based is as follows:

> First, come with me to a first-grade class.
> These children range in IQs from about 80 to 180, . . .
> They come from a variety of backgrounds. . . . They
> are indeed different. Let us see, however, how they
> behave when I administer the test. First, I shall
> administer the Picture Construction Test, using a
> colored triangle which is gummed on one side. Let
> us ask them to think of a Picture which they can
> make using the colored triangle as one of the main
> parts and see what happens. . . .
> Here is a quick little Mary. She is using the
> triangle as the roof of a house. . . . Mark is
> drawing a house too, . . . Tom . . . Ann . . . As we
> go around the classroom, we find that 24 of the 25
> children have drawn houses. Only unruly, energetic,
> nonconforming Madeline over in the "isolation corner"
> has dared draw anything different. She used her
> triangle as a diaper on a baby. . . .[2]

Moving to a different class of the same age in the same

school, Torrance finds:

> . . . the same range in IQ, socio-economic status, and
> the like that we found in the first class. Again,
> we shall administer the Picture Construction Test,
> only this time we shall make the instructions a little
> different. We shall do more this time to try to
> free them to express their own ideas, to be creative. . . .
> Let us give them these instructions:

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[1]Ibid., 140. [2]Ibid., p. 132

> You have been given a blank sheet of paper and
> a triangular-shaped piece of paper. Think of a
> picture or an object in which this triangle will be
> an important part . . . Try to think of a picture
> that no-one else will think of. If you draw the
> picture that you think of, it probably will be
> different from anyone else's. Keep adding new
> ideas to your first idea to make it tell an interest-
> ing and exciting story.[1]

Torrance described the results.

> Here is Sally. She is using her triangle as the
> top of an umbrella being carried by a girl leading
> a pig down the street. Bill is using his triangle
> as a Christmas tree and is decorating it with all
> the presents he wants for Christmas . . . and
> Sue's is a sail on a boat skimming on Lake Nokomis.
> No two are alike. . . . They have gotten away from
> the obvious, the safe, the reproductive and dared
> to express their own individual thoughts.[2]

The third question is: Do individuals working under unevaluated practice and with encouragement to experiment freely, produce better creative work on subsequent occasions than individuals working under conditions of evaluated practice? Although this is similar to one of the five principles listed in his reply to the first question, i.e., (d), Torrance provides us with more information when answering this particular question.

> Although the experiment comparing the effects of
> unevaluated practice with positive, constructive
> evaluation was not entirely conclusive, the evidence
> is strong enough to tip the scales in favor or
> unevaluated practice. The results suggest that
> some individuals need the structure given through
> evaluated practice, while others perform more
> creatively under conditions of unevaluated practice.
> In general, the importance of unevaluated practice
> seems to be clearer in the first four grades than in
> the fifth and sixth grades.

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[1]Ibid., pp. 132-133.   [2]Ibid., p. 133.   [3]Ibid., p. 259.

The fourth question is: Is creative peer-evaluation
more conducive to creative work and thinking than critical
peer-evaluation? About this Torrance writes:

> . . . a classroom experiment was carried out in a
> metropolitan public elementary school. The classes
> at each grade level were asigned randomly to the
> experimental conditions of creative and critical peer
> evaluation. The two tasks were the Picture Construc-
> tion and the Incomplete Figures Tasks. First, the
> students worked for five minutes on the practice task.
> Before they were administered the test task, the
> experimenter manipulated the evaluation variable.
> The results on the Picture Construction Task
> indicate that the students in the upper grades do
> better creative work under the creative peer evaluation
> than under critical peer evaluation. To the younger
> children, differences in the types of evaluation appear
> to make no difference. The results on the Incomplete
> Figures Test show, however, that younger as well as
> older children do better creative thinking under the
> creative peer evaluation than under critical peer
> evaluation. Students in the intermediate grades are
> not differentially affected by the different types of
> peer evaluations. [1]

Thus, his answer to the fourth question is:

> Doubtless, there are conditions under which one
> type of peer-evaluation is more productive than the
> other. Generally, however, the scales seem to tip
> in the direction of creative peer evaluation.[2]

The fifth and final question is: What effect does
positive, negative, or trouble-shooting evaluation have on
creative problem-solving? Torrance attempts to analyze the
nature of the evaluative behaviour of mathematics teachers
participating in the Minnesota National Laboratory for the
Improvement of Secondary Mathematics under the direction of
Professor Paul C. Rosenbloom. The work began when two sets

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[1] Ibid., p. 172.

[2] Ibid., p. 260.

of logs of teacher and pupil activities, each consisting of

reports of seventh-, eighth-, and ninth-grade mathematics

teachers, were presented to him. One set was submitted by

the five most effective teachers and the other set by the five

least effective. Prof. Rosenbloom, who was then Director of

the Minnesota National Laboratory for the Improvement of

Secondary Mathematics, challenged Torrance to devise a way of

analyzing the thinking of these two groups of teachers in such

a way as to differentiate between them. This is what Torrance

did.

First, the daily logs of the five most and five
least effective teachers in the 1958-59 experiments
were analyzed in an attempt to determine the types of
mental operations represented by the teacher and pupil
activities reported. Guilford's mental operations
(cognition, memory, convergent thinking, divergent
thinking, and evaluation) were adopted for this purpose.
The analyses indicated that the distribution of
activities among the mental operation categories for
the two groups differed significantly. The more
effective teachers tended to report more thinking
activities (convergent, divergent, and evaluative)
than the less effective ones who reported proportion-
ately more recognitive and memory activities.

A new scheme was then devised for analyzing the
evaluative behavior of these teachers as reflected in
their logs. The categories used were: negative
evaluation, positive evaluation, and trouble-shooting
or hypothesis-making and hypothesis-testing evaluation.
The more effective teachers were found to report far
more of the trouble-shooting or hypothesis-making type
of activity, whereas the less effective ones reported
more negative and positive evaluation. The logs of
the fourteen most and fourteen least effective teachers
in the 1959-60 experiments were analyzed according to
the same procedure with essentially the same results.
Detailed examination of the hypothesis-making behavior
of these two groups indicates that the thinking
represented by the hypothesis-making behavior of the
less effective teachers tends to be too general,
stereotyped, and vague to be of real value. These
teachers also tend to report conclusions or hypotheses
as having been tested, rather than actual hypotheses
about the reasons for difficulties and possibilities
concerning their solution. It was also suggested

that teachers whose evaluations are predominantly
positive may actually be unaware of the difficulties
their pupils are having in learning. They may
perform so creatively themselves that they give
their pupils no opportunity to learn creatively.[1]

Before concluding our discussion of issues raised by

Torrance and his thoughts about them, it is important to

include one further idea to which he subscribes because it

relates to a criticism often levelled at supporters of

creativity in education, i.e., that creativity in education

will lead to chaos. Torrance is well aware that there are

two extremes of learning theories, i.e., learning by authority,

imitation, or direction versus laissez-faire learning with no

imposed direction, anchor, or guide. He attacks both extremes

and advocates, instead, "that some moderate position is

necessary for realistic design of instruction."[2] He claims

that the proponents of "guided learning" take the moderate

position, and here are three of the seven characteristics of

instruction which they endorse:

1. The human learner is self-acting and creative,
requiring guidance and direction but not dictation
and coercion.
2. It is natural and healthy for learning to be a
continuous process, and it becomes such with appro-
priate guidance.
3. Human intelligence is not a single function but
consists of a union of all of the little functions
of discrimination, observation, retention, reasoning,
analysis, synthesis, divergent thinking, judgment,
and the like.[3]

Thus, it is within this framework that we now summarize the

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[1]Ibid., pp. 217-220.

[2]E. Paul Torrance, "History of the concept 'guided
learning' and its application in teaching for Creative Develop-
ment" in G. E. Snelbecker, Learning Theory, Instructional Theory
and Psychological Design, (New York: McGraw-Hill, 1974), p. 432.

[3]Ibid.

factors which emerge from Torrance's studies concerning teacher-child relationships, as being those which will facilitate creativity in the classroom. Paraphrasing Torrance:

1. Respect unusual questions.
2. Respect imaginative and unusual ideas.
3. Show children that their ideas have value.
4. Provide periods for non-evaluative practice.
5. Tie evaluation with cause and consequence.
6. Give differential rewards for originality of thought.
7. Encourage creative peer-evaluation of children's work.

This concludes our presentation of Torrance's ideas. It remains for us to see the similarities between some of the factors listed above, which nurture creativity in children in the school according to E. Paul Torrance, and some of the factors from our prior discussion of parent-child relations, which nurture creativity in children in the home. In this regard, consider the following table:

HOME	SCHOOL
1. Show respect for the child.	1. Show respect for the child's unusual questions.
2. Show confidence in the child and grant him or her freedom to make decisions.	2. Show the child that his or her imaginative ideas have value.
3. Encourage development of the child's abilities.	3. Encourge originality of thought.
4. Grant freedom to explore the environment.	4. Provide periods for non-evaluative practice.
5. Set clear standards of conduct.	5. Provide guidance for the creative learner.

Though we may not say with certainty that these attitudes
and conditions will definitely facilitate a child's creative
potential, we can say that these conditions will facilitate
rather than inhibit creative potential. Thus, we now
formulate the seventh question arising from our study of both
parents' and teachers' attitudes towards creative behaviour
that we shall explore in Chapter III by examing the
philosophies and processes of some music educators as revealed
in their writings:

7. *To what extent do these works encourage teachers*
   to show:

   a. *respect for unusual questions?*

   b. *confidence in children by:*

      1. *valuing their ideas?*

      2. *granting freedom to explore their ideas?*

      3. *granting freedom to explore their*
         environment?

      4. *granting periods for non-evaluative*
         practice of ideas?

2.2.3   Classroom Processes

Under this heading we shall present several studies and
some ideas that relate to creativity and classroom processes.
Few studies of this nature exist, and therefore our understanding
of what creativity is and how it can function within official
systems can only be tentative.

One study by Burkhart (1962) concerns the question-asking behaviour of teachers. He used

> . . , a test which required of a sample of teachers
> in training that they ask divergent questions about
> an object after they had been offered a definition
> of divergent thinking and an exemplar:- "Why did God
> choose the apple to tempt Eve in the Garden of Eden
> rather than some other fruit?" The majority of
> Burkhart's samples proved unequal to the task and in
> some cases produced lists of 40 to 50 unfailingly
> convergent questions. They realized that they were
> doing so but could not break their set. Such
> teachers tend to run highly evaluative classroom,. . .[1]

Another study by Fowlkes (1962) indicates that provocative questions "are rarely asked at any level of education."[2] A sample of junior high school social studies teachers reported, that over 90% of the questions they asked, called only for the reproduction of textbook information.

According to Torrance and Myers, a teacher may use eight or more different types of questions.[3] The first type is the single-answer variety, when the answer must be correct; e.g., the type referred to in the studies above. The pupil may be required to fill-in the blank or to recall an answer verbally. The second type requires recognition of information. This may take the form of multiple-choice or matching questions. Third is the convergent thinking question. For a solution the student must put together information and arrive at a solution. Fourth is the type of question requiring analytical thinking. Such a question may demand comparisons. Fifth is the question

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[1] Freeman, Butcher and Christie, op.cit., p. 69.

[2] E. Paul Torrance and R. E. Myers, Creative Learning and Teaching (New York: Harper and Row, Pub., 1970), p. 219.

[3] Ibid., pp. 151-222.

which calls for evaluation. This may require critical
examination of a picture, a poem or a piece of music. It
may take the form of a true-false question. Sixth is the
question that requires a synthesis, or bringing-together of
ideas, that results in considerations which have not been
previously thought of. Seventh is the open-ended question,
which requires divergent thinking by the pupils, and acceptance
of all replies and deferring of judgment on the part of the
teacher. About this the authors write:

> . . . one of the most persistent findings by teachers
> themselves when they have utilized open-ended questions
> and activities that feature divergent thinking is that
> a new set of luminaries begins to sparkle. The child-
> ren who are the stars when activities call for re-
> cognizing, remembering, and repeating are often quite
> undistinguished in responding to open-ended questions.[1]

Eighth is the provocative question which incites children
beyond their present frame of reference and involves them
intellectually and emotionally. Such a question will stimulate
the children to learn more and encourage them to ask their own
questions. Each type of question has advantages and dis-
advantages; yet certain types of questions, such as the open-ended
and the provocative questions, lend themselves more to abilities
such as ideational fluency, spontaneous flexibility and origin-
ality as well as to logical thinking.

Another study concerns the teaching processes and tasks
preferred by children with creative thinking ability.

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[1]Ibid., p. 195.

Macdonald and Raths (1964) split an elementary school
year group into three creativity levels (as assessed
by tests) and in effect streamed by creativity rather
than by intelligence. Each group was given twelve
tasks, three of each of four types - frustrating,
open, closed and passive. Group involvement was
judged by raters and the children also rated each task
on a like/dislike dimension. They concluded that
pupils who are low in creative thinking ability tended
to dislike frustrating curriculum assignments and to
respond in an unproductive way to open and frustrating
tasks whereas 'pupils who are high in creative ability
tended to dislike closed tasks'.[1]

One final study is that of Hutchinson (1963) which

involved learning in junior high school social studies.

The control group received what might be termed
unplanned experiences and apparently was concerned
primarily with the acquisition of information. The
experimental group received planned, guided experiences
which involved opportunities for using divergent think-
ing and evaluative abilities in acquiring information
and skills. In the experimental classes where the
methods were geared to the full range of mental
abilities (memory, logical reasoning, ideational
fluency, spontaneous flexibility, originality, elabora-
tion, redefinition, sensitivity to problems, judgment,
and the like) and not just to those abilities assessed
by intelligence tests (primarily memory, recognition,
logical reasoning, and the like), new productive and
creative stars emerged. The relationships (coefficients
of correlation) between measures of achievement and
measures of creative thinking were higher in the experi-
mental classes than in the comparison classes. In one
of the experimental groups, three of the students in the
lowest quartile on mental age were the creative and
productive stars.[2]

These studies reveal that processes which optimize the

abilities of creative children, i.e., those which encourage

discovery or which are open-ended, appeal to the more creative

child. They also suggest that it is possible to improve a

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[1]Freeman, Butcher and Christie, op.cit., pp. 70-71.

[2]E. Paul Torrance and Myers, op.cit., pp. 274-275.

child's creative thinking ability through planned and guided
experience involving opportunities for using divergent thinking.
More specifically, the results of these studies show us that
processes which encourage teachers to stimulate creativity in
children involve:

1. posing of open-ended and provocative questions;

2. tapping the child's curiosity;

3. providing opportunities for children to discover
   their own solutions;

4. guiding and directing the full range of mental
   abilities, i.e., memory, reason, ideational
   fluency, spontaneous flexibility, originality,
   elaboration, redefinition, sensitivity to
   problems and judgment.

Thus, we now formulate the eighth question which we
shall explore in Chapter III by examing the philosophies
and processes of music educators as revealed in their
writings:

8. *To what extent do these works present
   processes that involve:*

   a. *open-ended questions?*

   b. *provocative questions?*

   c. *synthesis of ideas?*

   d. *open-ended learning situations that encourage
      the discovery method of learning?*

   e. *planned and guided experiences using
      divergent thinking abilities?*

Other aspects of the classroom process and creativity that we shall explore are some unique methods for developing creativity. Specific methods and teaching materials provide a means of extending a child's thinking, by suggesting new directions, associations, adaptations and applications. Our intention is to provide an explanation of a few methods which have achieved some degree of success.

In 1963 a group problem-solving method, i.e., brainstorming, was developed for industrial use by Alex F. Osborn in his book Applied Imagination. This technique is used to produce ideas relating to a particular problem, topic, or theme. The basic ground rules for the procedure are as follows:

(1) *Criticism is ruled out.* Adverse judgment of ideas must be withheld until later.

(2) *"Free-wheeling" is welcomed.* The wilder the idea, the better; it is easier to tame down than to think up.

(3) *Quantity is wanted.* The greater the number of ideas, the more the likelihood of useful ideas.

(4) *Combination and improvement are sought.* In addition to contributing ideas of their own, participants should suggest how ideas of others can be turned into *better* ideas; or how two or more ideas can be joined into still another idea.[1]

The success of brainstorming sessions depends upon each participant adhering strictly to these rules. This is not as easy as it may seem. Consider rule number 1, no

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[1]Alex F. Osborn, Applied Imagination (New York: Scribner's, 1957), p. 156.

criticism. We are educated to be critical, and rewarded for so being. It is, therefore, not easy to defer judgment of others or of self; however, the potential of the procedure is lost if this ground rule is not maintained. Judging of the quality of ideas does occur, but only after the "brainstorming session" has taken place, when individuals are given the lists of generated ideas for evaluation and selection.

Though this strategy was initially related to adult performance, educators are now suggesting that it be used in the schools, e.g., E. Paul Torrance and R. E. Myers in Creative Learning and Teaching and S. J. Parnes in Guide to Creative Action.

A second problem-solving method, the use of check lists, was also introduced by Alex F. Osborn. He proposed a list of what he termed, idea-spurring questions, which provide new ideas or new twists to old ideas and increase individual resourcefulness.

(1) To what *new uses* can it be put?

(2) How can I *adapt* the idea to another use? What else is like this? What other ideas does it suggest?

(3) How can I *modify* the idea? For instance, could I change the meaning, color, motion, sound, odor, taste, form, shape - give it a new twist?

(4) How could I *magnify* the idea? Could I add something to it - more time, greater frequency, extra value - make it stronger, higher, longer, thicker, larger, heavier? Could I duplicate, multiply, exaggerate?

(5) Could I *minify* the idea: subtract something, make smaller, condense, put in miniature, lower, shorten, narrow, lighten, omit, slow, streamline, understate?

(6) Could I *substitute*: who else, what else, other ingredients, other material, other process, other place, other power, other plane, other approach, other tone of voice, other time?

(7) Could I *rearrange* it: change components, pattern, layout, sequence, schedule, change pace?

(8) Could I *reverse* it: transpose positive and negative, opposites, turn it around, turn it backward, upside down, inside out, reverse roles, turn tables, transfer cause and effect?

(9) Could I *combine* it with something else: a blend, an alloy, an assortment, an ensemble, combine units, purposes, appeals, ideas?[1]

Osborn maintains that once people are introduced to these kinds of questions, they are able and desirous of generating further questions to stimulate their own thinking.

A third problem-solving method, called forced relationships, was developed by Charles S. Whiting. This procedure assists one in relating ideas or objects, which have not been related before, in order to generate answers to problems and/or new ideas or objects. One technique which results in forced relationships is the listing technique which entails the following.

First a problem is presented, and then a list of unrelated objects is drawn up such as the list seen on the following page, i.e., magazine, grass, oil, etc.

> The children must take each object on the list in turn and associate it with the problem statement . . . The relationship should be derived by a free associate method, that is, taking the first relationship that comes to mind. By doing this, judgment of the relationship is initially deferred. After all relationships have been recorded, the children go back through the list and evaluate the ideas for possible modification, development, and implementation. Evaluation of the responses should be recorded with a + or -. A third run through of the responses serves as a planning stage to begin development of the ideas.[2]

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[1] Alex Osborn, op.cit., pp. 175-176.

[2] J. F. Feldhusen and D. J. Treffinger, Teaching Creative Thinking, (Dubuque, Iowa: Kendall/Hunt Publishing Co., 1977), pp. 27-28.

The following demonstrates the use of this technique

when dealing with the problem, "Fighting on the Playground":

List	Freely Associated Responses	[Evaluation]
magazine	Take magazine to playground for diversion of fighters.	+
grass	If they must fight, grass is better than blacktop, so plant grass.	+
oil	Oil shoes of the fighters so they cannot stand up.	−
shoe	Make the fighters go barefoot in warm weather. Blacktop and gravel will hurt feet and prevent fighting.	−
puzzles	Give children puzzles to solve to calm them down.	+
ice	Use ice cream to reward good behavior.	+
typewriter	Let children type to reward good behavior.[1]	−

Next we consider the method or teaching materials

which Covington, Crutchfield and Davis devised for schools,

the Productive Thinking Programme. Their programme trains

students in creative thinking skills. One of the main

objectives is to build up the subjects' self-confidence in

dealing with the complex thinking tasks and demonstrating the

value of such principles as "don't be afraid of being wrong"

and "everyone can use his mind."

> The programme teaches the student to define in his
> own words the problem he is working on, to plan his
> attack on the problem (e.g., by systematically listing
> the main ideas, then exploring the particular ideas
> which follow from the main ones), to check ideas
> against the pertinent facts, to search for many and

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[1]Ibid., p. 28.

unusual ideas, and to look at the problem from a
different point of view if he gets stuck. Opportunity
for repeated practice of these thinking guides is
built in . . . instead of requiring the student to
make a "correct" response, (the programme) provides
feedback to the student in the form of a range of
valuable ideas, worthwhile questions, or fruitful
strategies, . . .[1]

Finally, five books by Torrance and Myers contain
teaching materials intended to develop the creative potential
of children.

Invitation to Thinking and Doing, 1964.

Invitation to Speaking and Writing Creatively, 1965 (a).

Can You Imagine, 1965 (b).

Plots, Puzzles and Ploys, 1966 (a).

For Those Who Wonder, 1966 (b).

Central to the success of many of the activities found
in these books is the encouragement of independent ideas
and active demonstration of their value. The authors warn,
however, that the materials which they present should not
be regarded as recipes for creativity.

Programmes such as those we have touched on are being
introduced into schools in the United States. S. J. Parnes
says that evidence of current research points to a definite
contradiction of the age-old notion that creativity cannot be
developed. Parnes contends that:

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[1] W. E. Roweton, Creativity, A Review of Theory and
Research, p. 13.

. . . recent research does seem to warrant the postulate that the gap between an individual's innate creative talent and his lesser actual creative output can be narrowed by deliberate education in creative thinking. [1]

Crutchfield (1966) supports the contention that suit-able instruction enhances creative abilities, and he is concerned with, what he calls, a "master thinking skill."[2]

"This refers to the creative person's basic ability to plan, organize, mobilize and deploy his repertory of specific skills in optimal attack on a creative problem". (Crutchfield, 1966). It is through its exercise that the creative individual is able "to maintain a constant and always precarious balance between the conflicting and competing demands that arise out of the inherent antinomies in the creative process", fluency and evaluation, divergence and convergence, freedom from compulsive closure and a strong desire toward ultimate closure, passionate commitment and cool detachment. To enhance this ability Crutchfield adopts a 'creative-acts-in-miniature approach'. By undertaking a series of meaningful creative problems of some complexity and being guided step by step through the instructional program to a final successful solution of each problem, trained children surpassed control children for every one of the different specific attributes of effective problem solving which Crutchfield measured, question asking, sensitivity to discrepancies, generation of many good ideas and utilization of clues, and also in the ultimate pay-off, getting an idea that gives an actual solution. Five months later there was still a clear, though reduced superiority.[3]

To conclude:

Crutchfield qualifies his striking results with one rider: "it may be that almost any honest, intelligent, and direct effort made by the teacher to arouse and guide the child's interest in problem solving, and to give him ample opportunities to practice it and to discover that he can succeed in it, will produce substantial gains".[4]

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[1]S. J. Parnes, "Can creativity be discussed?" in G. A. Davis and Scott, Training Creative Thinking (New York: Holt, Rinehart and Winston 1971), p. 275.

[2]Freeman, Butcher and Christie, op.cit., p. 71.

[3]Ibid., pp. 71-72. [4]Ibid., p. 72.

These methods and studies lend support to the concluding paragraph of Torrance's paper, "Can We Teach Children to Think Creatively?"

> In answer to the question posed by the title of this paper, it does indeed seem possible to teach children to think creatively. The most successful approaches seem to be those that involve both cognitive and emotional functioning, provide adequate structure and motivation, and give opportunities for involvement, practice, and interaction with teachers and other children. Motivating and facilitating conditions certainly make a difference in creative functioning but differences seem to be greatest and most predictable when deliberate teaching is involved.[1]

Ultimately, there can be no textbook approach to a topic such as creativity; yet the teaching materials for developing one's creative abilities which have been presented, demonstrate that enhancement of creativity need not be a muddle of anarchy and inspiration.

This brings us to the ninth and tenth questions which we now formulate and shall explore in Chapter III by examining the philosophies and processes of music educators as revealed in their writing:

9. *To what extent do these works encourage children to:*

    a. *learn from their own mistakes?*

    b. *share and work together on ideas?*

10. *To what extent do these works encourage children to use the following techniques when searching for ideas:*

    a. *brainstorming?*

    b. *forced relations?*

    c. *check lists?*

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[1]E. Paul Torrance, "Can We Teach Children to Think Creatively," <u>The Journal of Creative Behavior</u>, 6, no. 2 (1972): 132-133.

2.3 Detrimental Effects of a Conforming Environment

on Creativity

We shall look at Richard Crutchfield's study "Conformity and Creative Thinking", which makes two general points concerning the detrimental effects of a conforming environment on creativity. Firstly, he writes that ". . . conformity pressures tend to elicit kinds of motivation in the individual that are incompatible with the creative process."[1] Secondly, he claims that ". . . high susceptibility by the individual to conformity pressures tend to be associated with certain personality traits that are detrimental to creative thinking."[2]

Looking at the first point, Crutchfield writes that ego-involved, extrinsic motivation, as contrasted with intrinsic, task-involved motivations, is detrimental "both to the ability of the creator to free himself from constraints of old ways of thought and to his capacity to produce original insights."[3] Crutchfield continues:

> In the light of this, part of the reason that conformity pressures may be expected to be injurious to creative thinking now becomes somewhat clearer. The outer pressure and inner compulsion to conform arouse extrinsic, ego-involved motives in the problem-solver. His main efforts tend to become directed toward the goals of being accepted and rewarded by the group, of avoiding rejection and punishment. The solution of the problem itself becomes of secondary relevance, and his task-involved motivation diminishes. In being concerned with goals extrinsic to the task itself, and particularly as rendered anxious about

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[1] R. S. Crutchfield, "Conformity and Creative Thinking" in H. E. Gruber, Glenn Terrell, and Michael Wertheimer, Contemporary Approaches to Creative Thinking (New York: Prentice-Hall, 1962), p. 121.

[2] Ibid. [3] Ibid., p. 125.

potential threats in the situation, his cognitive processes become less flexible, his insights less sensitive.[1]

Moving to Crutchfield's second point, he clarifies that, by conformity, he means the yielding of an individual to the pressure of group opinion, which is contrary to one's own opinion. A measurement of conformity tendencies is undertaken by using a standard measurement technique administered to more than 600 persons under a number of systematically varied conditions.

> In this technique persons are tested in groups of five, without knowledge of the purpose of the task. They are required to make individual judgments of a series of stimuli presented to the group by the experimenter. Although the five persons sit together during the task, they are not permitted to speak with one another. Instead they can communicate only indirectly by means of an electrical signal network.[2]

Thus the experimenter is able to confront all five persons at each step throughout the test session with the same standard series of faked "group" judgments. Each person is confronted by a sharp discrepancy between his own perception and that of the group, i.e., the peer group, and, Crutchfield notes, is able to make one of two possible responses. He or she either independently gives the correct answer, despite the unanimous group consensus against each person, or conforms to the false group consensus. Fifty such critical pressure items are exposed. Some of the findings are as follows:

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[1]Ibid. [2]Ibid., pp. 129-130.

Among male samples, the most conforming of those
studied is a group of fifty military officers, whose
average yielding score is 33%. In descending order
of conforming, then come college sophomores (26%),
and senior honor students in engineering (20%). Most
independent of all is a group of high-level research
scientists working in industry, whose average conform-
ity score is only 14%.[1]

Other findings are:

Among female samples, the most conforming of those
studied are college sophomores (37%). Considerably
less conforming is a group of college seniors (32%).
And least conforming of all is a group of middle-aged
alumnae from a prestige women's college (22%).[2]

Crutchfield explains that:

These comparative conformity scores seem to be
reasonably consistent with what we would expect to be
the relative levels of creative ability of these groups,
the relationship, of course, being inverse. Thus,
among males the well-selected research scientists, who
show themselves the most independent in the conformity
test procedure, are presumably relatively the highest
in creativity. The senior honors students might be
expected to come next highest in creative ability and
the unselected college sophomores considerably lower.
Military officers, it would seem reasonable to guess,
are not mainly selected for creativity.[3]

Crutchfield goes on to ascertain "some features of the

personality of the typical conforming person, and of the typical

independent person."[4] He explains that:

. . . the evidence for each of these main personality
characteristics was based not on a single measure but
on multiple measures, including objective test scores,
and on ratings by the assessment staff made in complete
ignorance of the subject's performance in the conformity
procedure.[5]

His findings are as follows:

1. Intellectual functioning: The conformists prove
to be less intelligent than the independent persons.

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[1]Ibid., pp. 129-130.   [2]Ibid., p. 130.   [3]Ibid.

[4]Ibid., p. 131.   [5]Ibid.

Moreover they show tendencies toward rigidity of
cognitive processes and poverty of ideas, as con-
trasted with the greater cognitive flexibility and
ideational fluency found in the independent persons.
2. Motivational and emotional functioning:
The conformists are clearly lower in ego-strength
and in ability to cope with stress. They exhibit
more emotional constriction, lack of spontaneity,
repression of impulse, and tendency toward indirect
expression of hostility. They are more anxious.
3. Self-conception: The conformists are inclined
toward pronounced feelings of personal inferiority
and inadequacy. They lack self-confidence. More-
over, they tend to be less insightful and realistic
in their self conceptions than are the independent
persons.
4. Relations with others: The conformists exhibit
a strong sociocentric orientation, and an intense
preoccupation with other people, as contrasted with
the more self-centred, autonomous attitude of the
independent persons. The interpersonal behavior of
the conformists tends to show far more in the way of
passivity, suggestibility, and dependence towards
others, while at the same time there is considerable
evidence of disturbed and distrustful attitudes to-
ward other people. Moreover, the conformist proves
to be inferior to the independent person in social
acuity, that is, in his ability to judge other people's
reactions quickly.
5. Personal attitudes and values: The conformists
express attitudes and values of a far more conventional
and moralistic nature than do the independent persons.
Often this is coupled with a somewhat rigid and
authoritarian outlook.[1]

Other studies of creative persons, Crutchfield writes,

show consistent evidence for a relationship between conformity

tendencies in a person and lack of manifest creativity.

The first study involves the intensive personality
assessment of forty-five research scientists working
in industrial laboratories on such problems as missile
development. These men were all engaged in full-time
research activities, and information collected follow-
ing the assessments indicate that they represent a
range of moderate to high creativity as scientists.

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[1]Ibid., p. 132.

Twenty-eight of them hold Ph.D.'s in physics, mathe-
matics, or engineering. Their ages range from twenty-
five to fifty-four. As one part of the intensive
assessment the standard conformity procedure was ad-
ministered. As we have already indicated in discussing
group difference, the average amount of conforming in
these research scientists was relatively low, being
only 14% on the standard set of twelve objective items.
Yet even within this superior group the range of
individual differences in conformity is large, with
some of the scientists conforming to as many as seven
of the twelve bogus group judgments and others conform-
ing to none.
        We can ask, then, how these wide individual differ-
ences in conformity scores may relate to differences in
the degree of creative ability . . . One preliminary
approach to the question is through use of the assess-
ment staff's rating of "originality" on each man . . .
The difference is in the hypothesized direction, the
more "original" scientists being the less conforming.[1]

Crutchfield also mentions the study of forty American architects

under D. W. MacKinnon's guidance which provides similar results.

        To conclude, we show summarily how Crutchfield accounts

for the relationship between conformity tendencies in the person

and lack of manifest creativity. Firstly, he says that "the

motives that are aroused in the conformist by the outer pressure

and inner compulsion to conform are ego-involved motives."[2]

Secondly, that "the extreme conformist is more anxious, insistent

on securing a safe and stable environment, desirous of avoiding

uncertainty and ambiguity at any cost."[3] Thirdly, that "the

conformist is assailed by doubts concerning self and one's

personal adequacy."[4] Finally, Crutchfield maintains that

because of the preceding factors, the conformist:

        . . . may therefore seek to avoid exposing himself
        nakedly to the actuality of the creative try. In
        such cases, group pressures towards conformity may

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[1]Ibid., pp. 133-134. [2]Ibid., p. 136. [3]Ibid.

[4]Ibid.

even sometimes be, in an underlying way, really
<u>welcome</u> to him, in that they reinforce his
<u>defenses</u> against the creative try.[1]

In other words, the group standard may tend to become the
standard of not creating, Crutchfield explains; moreover, for
the "expedient" conformers, i.e., those who agree outwardly but
not inwardly, there may be some deleterious effect of the group
pressure on their creativity, because these individuals avoid
exposing their view to the group and, therefore, get no aid
from group approval.

Crutchfield proposes that the ideal individual in whom
creative thinking is at its best is the independent thinker,
i.e., "someone who can accept society without denying him-
self."[2]

Thus arising out of this study is the eleventh question
which we later shall explore in Chapter III by examining the
philosophies and processes of music educators as revealed in
their writings:

> 11. *To what extent do these works encourage*
> *independent musical thought in all*
> *children?*

2.4 A Study by Peter R. Webster

> The major intention of this study is to define music
> creativity and to develop procedures for measurement
> of music creativity that are sensitive to the music
> process. [3]

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[1]Ibid.　[2]Ibid., p. 139.

[3]Peter R. Webster, "Relationship Between Creative
Behavior in Music and Selected Variables as Measured in
High School Students," in <u>Journal of Research on Music
Education</u>, 27, no. 4 (Winter, 1979): 227.

The theoretical basis for Webster's study is the research of

J. P. Guilford and E. Paul Torrance. In Webster's words:

> . . . Guilford and his associates (1967, 1971) have
> developed a theoretical model of intelligence based
> on the assumption that intellectual processes should
> be viewed as the interaction between several individual
> factors. Many of these hypothesized factors have been
> verified through an extensive number of factor analytic
> studies.
> Important among these verified factors have been
> those that are divergent in nature, as opposed to the
> more traditional convergent skills that are often
> surveyed by the standard intelligence test. Divergent
> abilities can be defined as those skills that allow an
> individual to arrive at a number of possible answers
> to a given question or problem. Among these factors
> are:
> 1. Fluency - the ability to generate a number of
> ideas in a given situation,
> 2. Flexibility - the ability to generate a number
> of different ideas in a given situation,
> 3. Elaboration - the ability to extend or embellish
> one idea,
> 4. Originality - the ability to generate unique
> ideas.
> Within the last twenty years, the work of Guilford
> and his associates has given impetus to the careful
> study of creative behavior as a function of intelli-
> gence. . . . A major contribution of Torrance (1974)
> has been the publication of a series of creative
> ability measures, based in part on the Guilford factors,
> that employ both verbal and figural content.[1] These
> measures present problems that require divergent thought
> processes and are scored for the four Guilford factors.[2]

Webster views the creative process in music in the con-

text of problem-solving "with the belief that, within this

process, the divergent factors of intellect play a critical

role."[3] The three modes of creative behaviour in music which

he chooses as his criteria measures of music creativity are:

---

[1]Figural: Information in concrete form as perceived or as
recalled in the form of images. The term "figural" minimally
implies figure-ground, perceptual organisation. It includes
auditory and kinaesthetic subclasses as well as visual.

[2]Ibid., pp. 227-228.   [3]Ibid., p. 229.

(1) composition, (2) performance (improvisation) and (3)

analysis. He writes:

> These are the three ways that people intimately
> involve themselves with music as art, and each of
> these modes yields products that are subject to the
> same thought processes as any creative product.[1]

Webster continues concerning composition:

> Music composition was considered as the organization
> of sounds and silence through symbols yielding a symbol-
> ized sound structure that can be aurally realized by
> others.[2]

Concerning performance, which includes improvisation,

Webster writes:

> Music performance was viewed as the translation
> of the symbolic sound structure into aural terms to
> be received by others. The symbolic sound structure
> may be either formally written by the composer,
> realized completely within the mind of the performer
> (as in improvisation), or may be a combination of
> written music and improvisation. . . . The performer
> who improvises is placed in a dual role of composer
> and performer and is subject to elements of both
> processes. The final product of improvisation is, in
> many ways, uniquely more creative than the performance
> product that is based solely on interpretation of
> strict written symbol.[3]

Concerning analysis, he contends that "music analysis

is the process of drawing conclusions based on the symbolic

sound structure of a composer."[4]

To conduct his investigation Webster selected:

> . . . 77 high school students from three separate high
> schools in Rochester, New York area. The high schools
> were varied according to size, location, and socio-
> economic class. The sample was limited to those
> students who participated in some performance ensemble
> and who had had no systematic training in music crea-
> tivity skills such as composing or improvisation.[5]

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[1]Ibid. [2]Ibid. [3]Ibid. [4]Ibid. [5]Ibid., p. 233.

He explains that:

> A close study of the sample revealed a good
> balance in terms of age, grade level, sex, perform-
> ance medium, and years of piano study. Also, an
> investigation of the variability of responses in the
> many continuous variables, both musical and non-
> musical, suggested an excellent score spread.[1]

Looking at the results of this study, one of Webster's general observations is that "those students who scored highly in music achievement tend to score highly on all three criteria measures of music creativity,"[2] i.e., improvisation, composition, and analysis. The final analysis of the data reveals:

> (1) music achievement correlated significantly with
> all modes of creative behavior and was the single
> best predictor of each mode, (2) figural creativity
> correlated significantly with improvisation and
> analysis creativity and was a significant predictor
> when used with other variables, (3) verbal creativity
> was significantly correlated with analysis creativity
> but was shown not to be a good predictor when combined
> with other variables, (4) IQ and sex were significantly
> related to improvisation creativity but not to other
> modes, and (5) age, grade level, performance medium, and
> piano lesson background did not relate significantly
> with any of the modes.[3]

In light of the three criteria measures of creativity used in this study, we now formulate the twelfth and last question which we shall explore in Chapter III by examining the philosophies and processes of music educators as revealed in their writings:

> 12. *To what extent do these works stress the*
> *importance of using the following modes*
> *of creative expression in music:*
>
> a. *composition?*
>
> b. *improvisation?*
>
> c. *analysis?*

---

[1]Ibid. [2]Ibid., p. 240. [3]Ibid., p. 227.

3. Conclusion

Having explored the nature and nurturing of creativity and formulated twelve questions concerning creativity which will make up the evaluation form that is to follow, this chapter concludes with three thoughts of Lowenfeld and Brittain, outstanding art educators in the United States, which relate to creativity and education.

Firstly, they declare that:

> Every child is born creative. We should not be worried about motivating children for creative behavior; what we should be worried about are the psychological and physical restrictions that the environment puts in the way of the developing child to inhibit his natural curiosity and exploratory behavior.[1]

Secondly, they criticize the function of the school system because it is geared to:

> . . . producing people who file away little bits of information and then repeat them at a given signal. Once the student has achieved a certain competency at producing the proper bits of information at the correct time, he is considered ripe for graduation from school.[2]

They recognize the complexity of the learning process but claim that we emphasise "only one factor in human development, the one that is measured by intelligence tests."[3] Furthermore, they point out that:

> The abilities to question, to seek answers, to find form and order, to rethink and restructure and find new relationships are qualities that are not generally taught; in fact, they seem to be frowned upon in our present educational system.[4]

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[1] V. Lowenfeld and W. L. Brittain, Creativity and Mental Growth, (New York: MacMillan Pub. Co., 1975), p. 63.

[2] Ibid., p. 3. [3] Ibid., p. 4. [4] Ibid.

Thirdly, they endorse a far-reaching concept which is
that learning, besides being the accumulation of knowledge,
implies an understanding of how this knowledge can be used.
They feel that we must be able to use our senses freely and
creatively, and thus develop positive attitudes towards our-
selves and our neighbours for this learning to become effective.

> There is always need to identify with others, those
> we fear, those we do not understand, those who appear
> strange . . . As a child identifies himself, he begins
> to identify with others and to appreciate and under-
> stand his environment. By becoming involved in it, he
> develops the spirit that helps him understand the
> needs of his neighbors. To live cooperatively as well-
> adjusted human beings and to contribute to such a
> society becomes the most important objective for educa-
> tion. The focus of teaching should be on this aware-
> ness of the child and his environment.[1]

This is not unlike the concluding sentence of the
recommendation made by the International Commission established
by the United Nations Educational, Social and Cultural Organ-
ization. It reads:

> Finally, it [education] should try to awaken the
> feeling in an individual that he belongs to a
> community and that each person has a creative res-
> ponsibility towards himself and others.[2]

As from sunlight, space, and soil a plant receives its
nourishment, *so from the surroundings and circumstances in*
which a child lives, he or she receives nourishment. The
research we have considered concerning the nurture of creativ-
ity lends validity to the proposition, that certain environ-
mental conditions in the home and in the school and certain
types of relationships between parent and child and between

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[1]Ibid., pp. 16-17.

[2]Edgar Faure et al., Learning to Be, p. 183.

teacher and child are conducive to the nurture of the child's creative potential, and to the improvement of his or her opportunities of utilizing creative behaviour. In other words, we have seen that we may nurture creativity by creating social environments and intellectual climates which are appropriate to the encouragement of creative abilities and their realization.

Now we are ready to enter into the debate about music education and creativity which seems often to be carried on by simple unverified assertions. We come back to the question which was first raised at the end of Chapter I: To what extent do works available for use by music educators in England and the United States suggest that creativity is an important aspect of contemporary elementary music education? This question will now, however, take the following more specific form: To what extent do certain works published in England and the United States by well-known music educators support the importance of creativity in contemporary elementary music education? This second question will be approached by evaluating the extent to which twelve selected works on music education take into account the conditions and relationships which we have found to be relevant to the recognition, utilization and development of children's creative capacities or abilities. To enable us to make this evaluation, the following evaluation form, composed of the twelve questions which have arisen from our exploration of the nature and nurture of creativity, will be used.

EVALUATION FORM

WORK:

AUTHOR/S:

PLACE, PUBLISHER & DATE:

- -

Each question has one of 4 possible answers as listed
below; each one indicates the extent to which the
work supports the point in question. The relevant
number will be circled for each question, and a brief
explanation will be given to verify the answer.

3. This indicates that the point in question receives
    <u>strong support</u>, either explicitly or implicitly.

2. This indicates that the point in question receives
    <u>moderate support</u>, either explicitly or implicitly.

1. This indicates that the point in question receives
    <u>weak support</u>, either explicitly or implicitly.

0. This indicates that the point in question receives
    <u>no support</u>, either explicitly or implicitly.

1. To what extent does this work take
    cognizance of the fact that creative
    behaviour is thought by some eminent
    psychoanalysts and psychologists to
    be innate in each individual? 3 2 1 0
    (from "The Creative Mode of Thinking")

2. To what extent does this work emphasise
    the presentation of activities or
    "contingencies" which may result in
    creative behaviour? 3 2 1 0
    (from "The Creative Mode of Thinking")

3. To what extent does this work
    encourage children to use the creative
    process, i.e., any of the steps that
    are similar to or the same as the
    first four steps of S. J. Parnes'
    creative problem-solving process:

    a. fact-finding? 3 2 1 0

    b. problem-finding? 3 2 1 0

    c. idea-finding? 3 2 1 0

    d. solution-finding? 3 2 1 0
        (from "The Creative Process")

4. *To what extent does this work encourage*
   the following capacities in children:

    a. *curiosity?* 3 2 1 0

    b. *initiative?* 3 2 1 0

    c. *critical faculties?* 3 2 1 0

    d. *intuitive ideas?* 3 2 1 0

    e. *aesthetic judgment?* 3 2 1 0

    f. *wide range of interest beyond music?* 3 2 1 0
   (from "The Creative Person")

5. *To what extent does this work encourage any*
   of the aptitudes for creative thinking, as
   identified by J. P. Guilford, with respect
   to music:

    a. *sensitivity to problems?* 3 2 1 0

    b. *fluency of ideas?* 3 2 1 0

    c. *flexibility of ideas?* 3 2 1 0

    d. *originality?* 3 2 1 0

    e. *redefinition?* 3 2 1 0

    f. *elaboration?* 3 2 1 0
   (from "The Creative Person")

6. To what extent does this work encourage
   children to produce musical ideas that
   are unusual and that are appropriate? 3 2 1 0
   (from "The Creative Product")

7. To what extent does this work encourage
   teachers to show:
   a. respect for unusual questions? 3 2 1 0

   b. confidence in children by:
       1. valuing their ideas? 3 2 1 0

       2. granting freedom to explore their ideas? . 3 2 1 0

       3. granting freedom to explore their
           environment? 3 2 1 0

       4. granting periods for non-evaluative
           practice of ideas? 3 2 1 0
           (from "The School")

8. To what extent does this work present
   processes that involve:
   a. open-ended questions? 3 2 1 0

   b. provocative questions? 3 2 1 0

   c. synthesis of ideas? 3 2 1 0

   d. open-ended learning situations that encourage
       the discovery method of learning? 3 2 1 0

   e. planned and guided experiences using
       divergent thinking abilities? 3 2 1 0
       (from "The School")

9. *To what extent does this work encourage children to:*

    a. *learn from their own mistakes?* 3 2 1 0

    b. *share and work together on ideas?* 3 2 1 0
        (from "The School")

10. *To what extent does this work encourage children to use the following techniques when searching for ideas:*

    a. *brainstorming?* 3 2 1 0

    b. *forced relationships?* 3 2 1 0

    c. *check lists?* 3 2 1 0
        (from "The School")

11. *To what extent does this work encourage independent musical thought in all children?* 3 2 1 0
    (from "Detrimental Effects of a Conforming Environment on Creativity")

12. *To what extent does this work stress the importance of using the following modes of creative expression in music:*

    a. *composition?* 3 2 1 0

    b. *improvisation?* 3 2 1 0

    c. *analysis?* 3 2 1 0
        (from "A Study by Peter R. Webster")

CHAPTER III

AN EVALUATION OF THE EXTENT TO WHICH WORKS RELATING TO

CONTEMPORARY ELEMENTARY MUSIC EDUCATION SUPPORT THE

IMPORTANCE OF CREATIVITY IN MUSIC EDUCATION

Introduction

The purpose of this chapter is to address the question:
To what extent do certain works published in England and the
United States by well-known music educators support the importance
of creativity in contemporary elementary music education? To
answer this, we shall evaluate the extent to which twelve contem-
porary works from these countries relating to elementary music
education support the importance of creativity in music education;
i.e., we shall evaluate the philosophies and processes of twelve
works on the basis of the questions found on the evaluation form
which the reader has just seen from the end of Chapter II.

The works to be presented and evaluated have been selected
primarily because they represent the wide spectrum of approach to
contemporary elementary music education found in England and in
the United States. They range from works which view the teaching
of music literacy as the end product of elementary music education,
to works which view music education as a process through which the
teacher may guide children in the development of their abilities
and potential. Secondly, as we are looking at contemporary ele-
mentary music education, the works selected have all been published
within the last twenty-six years, and more than half were pub-
lished in the 1970's. Thirdly, as we are concerned with elemen-

tary music education in England and the United States, an attempt
is made to select an approximately equal number of works published
in both countries. A further attempt is then made to select an
approximately equal number of works from both countries to repre-
sent, in approximately equal proportions, what are differing
approaches to contemporary elementary music education. Fourthly,
each work presents a philosophy and a process, either prescribed
or described, relevant to elementary music education. Fifthly,
the works selected are being used today, and, with the exception
of M. L. Stone whose inclusion we shall explain, the writers are
generally well known to music educators. Finally, in order to
keep the material to be discussed within manageable bounds, each
work selected is complete within one volume with one exception,
the Manhattanville Music Curriculum Program of 1970. This will be
supplemented with the second edition of MMCP Interaction.

Since it is more useful to present these works in terms
of their contrasts, for the sake of both sharp comparison and
greater definition of varying approaches to music education,
they will be divided into four groups of three contrasting works,
i.e., the reader will be presented with three works of contrast-
ing points of view relating to elementary music education in each
group. Justification for these groupings will become clear as
the material is presented.

The following works, grouped accordingly, are the twelve
representative works selected to be evaluated on the basis of the
questions arising from the study of creativity.

Group A

1. The Class Music Teacher by Charles Proctor. London:
   Herbert Jenkins, 1965.

2. Ears and Eyes: Teacher's Book and Work Cards (Oxford
   Music Book for Schools) Foundation Course by Jack
   Dobbs, Roger Fiske and Michael Lane. London:
   Oxford University Press, 1974.

3. Creative Music Education: A Handbook for the Modern Music
   Educator by R. Murray Schafer. New York: Schirmer
   Books, 1976.

Group B

1. The Playground as Music Teacher: An Introduction to Music
   Through Games by Madeline Carabo-Cone. New York:
   Harper and Brothers, 1959.

2. Music in the Elementary School, 4th ed. by Robert Evans
   Nye and Vernice Trousdale Nye. Englewood Cliffs:
   Prentice-Hall, 1977.

3. Manhattanville Music Curriculum Program:
   Final Report and Synthesis by Ronald B. Thomas and
   MMCP Interaction by A. Biasini, R. B. Thomas and
   L. Pogonowski. Purchase, New York: Manhattanville
   College of the Sacred Heart: ERIC document, ED 045 865.
   MMCP Interaction 2nd ed. Bardonia, New York:
   Media Materials, n.d.

Group C

1. Teaching Music Creatively in the Elementary School by
   Irving Cheyette and Herbert Cheyette. New York:
   McGraw-Hill, 1969.

2. The Study of Music in the Elementary School: A Conceptual
   Approach by MENC Elementary Music Study Commission,
   Charles L. Gary, ed. Washington, D.C.: Music
   Educators National Conference. 1967.

3. Sound and Silence: Classroom Projects in Creative Music
   by John Paynter and Peter Aston. London: Cambridge
   University Press, 1970.

Group D

1. School Music Method by Reginald Hunt. London: Edwin
   Ashdown, 1957. 4th reprint, Lowe and Brydone, 1968.

2. "Kodaly and Orff Music Teaching Techniques: History and
   Present Practice" by Margaret L. Stone. Ph.D. thesis.
   Ohio: Kent State University, 1971. Ann Arbor,
   Michigan: University Microfilm, 1971.

3. Sun: Creativity and Environment by Trevor Wishart and
   friends. London: Universal Edition, 1974.

The reader may ask why the unpublished thesis by Margaret L. Stone, "Kodaly and Orff Music Teaching Techniques: History and Present Practice", is included. The reason is Carl Orff. Though Orff is not an English-speaking music educator, and though he did not write a work that states his philosophy and process of music education, he has had such an impact on music education over the last 25 years in the English-speaking world that it is inconceivable not to include him in a study of current contemporary elementary music education thought and practice in England and the United States. This impact has been made mainly through the adaptation of the German edition of the Orff-Keetman series, Orff-Schulwerk, by two Canadians, Doreen Hall and Arnold Walter with their five volume publication, Orff-Schulwerk, Music for Children. Doreen Hall also published Music for Children, Teacher's Manual, in 1960. A second adaptation of Orff-Schulwerk, also in five volumes, was later published in England by Margaret Murray, and this was used extensively throughout the English-speaking world. Orff's influence has also been felt through translations of some of his speeches, through several biographies and through the writings of his students.

Because it is not possible to glean what has evolved as Orff's philosophy and method of education by selecting for discussion one book by him, a thesis which outlines both has been selected. Although Stone writes about Orff and Kodaly, we have elected to consider only Orff's philosophy and process of music education because Orff's method has had a greater impact on western music education than has Kodaly's, and Orff's method spans a wider range of musical activities than does Kodaly's.

While both Orff and Kodaly emphasise singing and reading music, Orff also deals with speech, movement, instruments and with play.

To facilitate our understanding of the philosophy and process of each of the twelve works, we shall explore two questions:

1. WHAT IS THE UNDERLYING PHILOSOPHY OF THIS WORK?

2. WHAT PROCESS OF MUSIC EDUCATION DOES THIS WORK ADVOCATE? Though these questions are an honest attempt to tease out, firstly, the philosophy and, secondly, the process advocated in each work, it is only in the case of some works that one is able to distinguish unambiguously what is philosophical discussion and what is procedural discussion. In other words, the philosophy and the process are intertwined. Thus, the reader will find that, at times, what may appear to be philosophical content is mentioned under discussion of process and vice versa. The writer, therefore, begs the indulgence of the reader concerning this point, as the questions are simply the means of extracting the content, and the essential task is to present the content.

Having explored the philosophy and process of the first work, we shall then be in a position to evaluate the extent to which this work supports the importance of creativity in elementary music education. The same procedure will be followed for each succeeding work. We turn now to the first work from Group A, The Class Music Teacher by Charles Proctor.

Group A

1. The Class Music Teacher by Charles Proctor

WHAT IS THE UNDERLYING PHILOSOPHY OF THIS WORK?

Charles Proctor, professor and lecturer at Trinity College of Music, London, is also an examiner of the subject of class music teaching. In this book, he states that all music is essentially vocal, and he supports this by saying:

> . . . but let us remind ourselves that the modern orchestral conductor tells his instrumentalists that they must make their instrument "sing" in order to give maximum effect to the music.[1]

Proctor continues:

> . . . we must insist that the essentials of music are in the vocal manifestations rather than in the instrumental. That the vocal aspect is more natural and more real than any other.[2]

Finally, he adds that the beginning of musical wisdom is the "conscious cultivation of song."[3] He writes:

> It is of some significance that the great composers, Bach, Mozart, Schumann, Schubert and Mendelssohn (and in our day, Britten) have written largely, although not exclusively, for voice.[4]

Concerning education, Proctor defines it as "a conscious effort to establish and present a wholesome tradition."[5] In his words:

> Education only begins to function when a tradition of behaviour is engendered and stimulated for the better fulfilment of a personality and to the ultimate service of the community. On this civilization depends.[6]

---

[1]Charles Proctor, The Class Music Teacher (London: Herbert Jenkins, 1965), p. 13.

[2]Ibid., p. 14. [3]Ibid., p. 16. [4]Ibid. [5]Ibid., p. 14.

[6]Ibid.

He bemoans the fact that much of the cultural tradition has been lost in England because cultured persons are no longer able to sing and to play an instrument.

> In fact the cultured persons of today are the least articulate and it is left to the teenagers and the teddy boys and girls to express the vitality and imagination of their youth. But when we see and hear the material in which they express themselves . . . largely of decadent taste and limited poetic aspirations, we have only ourselves to blame in not having prepared for this present tradition in a more conscious and imaginative way.[1]

Finally, Proctor leaves with us his definition of music. "Music is a language of communication," and the essential ingredients of this means of communication are "zeal, inspiration . . . and poetic joy . . . if the means of communication are to be charged with life."[2]

WHAT PROCESS OF MUSIC EDUCATION DOES THIS WORK ADVOCATE?

Classwork: Proctor specifies that vocal exercises can form a part of class work. He adds that if the children find singing scales dull, it is the teacher's fault. What is required, he says, is something of more rhythmic interest with a sense of vitality, and this can only be obtained by making rhythmic patterns in the pianoforte part. He then presents a series of vocal exercises.

Regarding repertoire, he suggests the use of English folksongs and writes:

---

[1]Ibid., p. 15. [2]Ibid., p. 16.

With the ever increasing inroads made into
Nationalism by World Internationalism and social
advancements, we must be always careful that the
national characteristics of speech, behaviour and
song are not lost.[1]

In addition, he says that every school repertoire should

include a fair amount of classical songs.

By Classical, one means not only the great German
Classics. One should include Arne, Giordani,
Purcell, Sterndale-Bennett, Lully as well as Bach,
Beethoven, Brahms, Schubert, Schumann, Haydn,
Mendelssohn and Handel.[2]

Proctor coaxes the teacher to his way of thinking by saying:

Beethoven is not quite so remote once a child has
taken part in singing his "Creation Hymn." Bach
becomes a more intimate person when one has learnt
"My Heart ever Faithful." Mendelssohn becomes more
friendly when one has learned to sing "On Wings of
Song."[3]

He then devotes several chapters to methods of

presenting vocal music such as dramatization of songs, pro-

duction of operas, music festivals, school concerts and the

assembly. To assist teachers in their choice of music for

these occasions, he says that:

It would seem that the chief requirement in the
choice of music should be that the music is written
within the classical framework and in the style of
the accepted Masters of the Classical and Romantic
periods of music, so that the dignity of the
occasion is upheld.[4]

Class Management: Proctor points out initially that

for music teachers, as compared to teachers of other subjects,

"the difficulties are increased a thousandfold, for the

teacher will not only have to instruct children what to do and

how to do it, but be active himself at the same time."[5]

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[1]Ibid., p. 45. [2]Ibid., p. 47. [3]Ibid., p. 48.

[4]Ibid., p. 85. [5]Ibid., p. 95.

He maintains that "selling" a piece of music such as Stanford's "The Bluebird" to a class, "is an aspect of Music Education which must concern us these days."[1] Proctor admits, however:

> Now this [selling] is a vulgar expression which one hesitates to use in a volume on an aspect of education, more particularly on music in education, where refinement and culture, poise and good taste are among the attributes of the art which should be fostered in the young.[2]

The only way a teacher can "sell" a piece of music so that the class "will respond to its demands with appreciation and alacrity," advises Proctor, is by "attack," i.e., keeping up the interest of the class.

The two questions that he suggests teachers ask themselves at the end of each lesson are:

1. What have I taught this class during the past period?
2. What have I learned during the past period?[3]

Proctor advises that lessons should proceed according to a plan. The children, he says, prefer an orderly period and a teacher who is able to get his own way.

> The well-being of the class should be the teacher's chief concern. But to court favour, or to "give them a good time" is fraught with danger, and almost certain disaster. The well-being of the class must be the result of satisfaction that something has been accomplished. More is now known. Horizons have been enlarged. Values of co-operative Music-Making have been demonstrated. Inspiration has been stimulated. The value of life has been enhanced.
> Is this too altruistic? Maybe, but if none of these points have been made, be it consciously or wholly unconsciously, the purpose of education is at naught.[4]

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[1]Ibid., p. 96. [2]Ibid. [3]Ibid., p. 97.

[4]Ibid.

Proctor suggests that a forty-minute period could be broken down as follows:

> vocal exercises - 5 minutes
> revision of last week's work - 10 minutes
> new music - 15 minutes
> general knowledge - 5 minutes
> rudiments of music - 5 minutes.[1]

He reminds the teacher that "ingenuity is required to make a class learn rudiments and obtain a general knowledge of music." He continues:

> Puzzles, quizzes, questions and demonstrations can
> all be used as a form of technique in teaching
> these subjects. Mental arithmetic can be a most
> stimulating occupation. A class can be stimulated
> to find the answers to a question regarding the cost
> of 6 dozen oranges at 5½d. each. Why not how many
> quavers in 17 minims?[2]

Proctor concludes his discussion of class management with these words: "The Class Music Teacher must have at his finger-tips as many ideas as possible, so that not a dull moment is possible when a class is in his presence."[3]

Having presented the philosophy and the process of music education as found in The Class Music Teacher, we are now in a position to answer the questions that will determine to what extent this work supports the importance of creativity in elementary music education.

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[1]Ibid., p. 98.   [2]Ibid.   [3]Ibid.

EVALUATION FORM

WORK: The Class Music Teacher

AUTHOR/S: Charles Proctor

PLACE, PUBLISHER & DATE: London: Herbert Jenkins, 1965.

- -

Each question has one of 4 possible answers as listed
below; each one indicates the extent to which the
work supports the point in question. The relevant
number will be circled for each question, and a brief
explanation will be given to verify the answer.

3. This indicates that the point in question receives
    strong support, either explicitly or implicitly.

2. This indicates that the point in question receives
    moderate support, either explicitly or implicitly.

1. This indicates that the point in question receives
    weak support, either explicitly or implicitly.

0. This indicates that the point in question receives
    no support, either explicitly or implicitly.

1. *To what extent does this work take
    cognizance of the fact that creative
    behaviour is thought by some eminent
    psychoanalysts and psychologists to
    be innate in each individual?* . . . . 3 2 1 ⓪
    (from "The Creative Mode of Thinking")

    Creativity is not discussed.

2. *To what extent does this work emphasise
    the presentation of activities or
    "contingencies" which may result in
    creative behaviour?* . . . . 3 2 1 ⓪
    (from "The Creative Mode of Thinking")

    Proctor does not deal with this; thus,
    by implication, the answer is 0.

3. *To what extent does this work
    encourage children to use the creative
    process, i.e., any of the steps that
    are similar to or the same as the
    first four steps of S. J. Parnes'
    creative problem-solving process:*

    a. *fact-finding?* . . . . 3 2 1 ⓪
    This work is primarily concerned with vocal music, and
    it does not make use of the creative process.

    b. *problem-finding?* . . . . 3 2 1 ⓪
    The explanation is the same as that given for 3 a.

    c. *idea-finding?* . . . . 3 2 1 ⓪
    The explanation is the same as that given for 3 a.

    d. *solution-finding?* . . . . .3 2 1 ⓪
        (from "The Creative Process")
    The explanation is the same as that given for 3 a.

4. *To what extent does this work encourage*
   the following capacities in children:

    a. *curiosity?* . . . . 3 2 1 ⓪
Proctor encourages his concept of education, i.e., "a conscious
effort to establish and present a wholesome tradition."

    b. *initiative?* . . . . .3 2 1 ⓪
The explanation is the same as that given for 4 a.

    c. *critical faculties?* . . . . .3 2 1 ⓪
The explanation is the same as that given for 4 a.

    d. *intuitive ideas?* . . . . 3 2 1 ⓪
The explanation is the same as that given for 4 a.

    e. *aesthetic judgment?* . . . . ③ 2 1 0
The judgment called for is that based on the "wholesome
tradition" of folk and classical music.

    f. *wide range of interest beyond music?* . . . . . . 3 2 1 ⓪
      (from "The Creative Person")
This work is concerned only with music.

5. *To what extent does this work encourage any*
   of the aptitudes for creative thinking, as
   identified by J. P. Guilford, with respect
   to music:

    a. *sensitivity to problems?* . . . . 3 2 1 ⓪
This work encourages aptitudes necessary for learning the
rudiments of music and for obtaining an appreciation of
classical music.

    b. *fluency of ideas?* . . . . .3 2 1 ⓪
The explanation is the same as that given for 5 a.

    c. *flexibility of ideas?* . . . . .3 2 1 ⓪
The explanation is the same as that given for 5 a.

    d. *originality?* . . . . 3 2 1 ⓪
The explanation is the same as that given for 5 a.

    e. *redefinition?* . . . . .3 2 1 ⓪
The explanation is the same as that given for 5 a.

    f. *elaboration?* . . . . 3 2 1 ⓪
      (from "The Creative Person")
The explanation is the same as that given for 5 a.

6. *To what extent does this work encourage*
   children to produce musical ideas that
   are unusual and that are appropriate? . . . . 3 2 1 ⓪
   (from "The Creative Product")

This work encourages the production of good vocal music of
particular styles.

7. *To what extent does this work encourage*
   teachers to show:
   a. *respect for unusual questions?* . . . . 3 2 1 ⓪

Proctor is not partial to the unusual as is evident in his
description of the imagination of the teddy boys and girls,
"largely of decadent taste and limited poetic aspiration."

   b. *confidence in children by:*
      1. *valuing their ideas?* . . . . 3 2 1 ⓪

Proctor writes that teachers must "sell" their music to
children.

      2. *granting freedom to explore their ideas?* . 3 2 1 ⓪

Ideas are presented to children, not explored by them.

      3. *granting freedom to explore their*
         environment? . . . . 3 2 1 ⓪

The explanation is the same as that given for 7. b. 2.

      4. *granting periods for non-evaluative*
         practice of ideas? . . . . 3 2 1 ⓪
         (from "The School")

This work aims to teach children what is right and wrong
with respect to music education.

8. *To what extent does this work present*
   processes that involve:
   a. *open-ended questions?* . . . . 3 2 1 ⓪

The process suggested by Proctor is that children are taught
how to sing, to appreciate folk, national and classical music,
and to understand the rudiments of music.
   b. *provocative questions?* . . . . 3 2 1 ⓪

The explanation is the same as that given for 8 a.

   c. *synthesis of ideas?* . . . . 3 2 1 ⓪

The explanation is the same as that given for 8 a.

   d. *open-ended learning situations that encourage*
      the discovery method of learning? . . . . . . 3 2 1 ⓪

The explanation is the same as that given for 8 a.

   e. *planned and guided experiences using*
      divergent thinking abilities? . . . . 3 2 1 ⓪
      (from "The School")

The explanation is the same as that given for 8 a.

9. *To what extent does this work encourage*
    children to:

    a. *learn from their own mistakes?* . . . . *3 2 1 ⓪*
    This work explains that teachers are to instruct children,
    and that children should be active; thus, by implication
    the answer is 0.
    b. *share and work together on ideas?* . . . .*3 ② 1 0*
    One of the concerns of teachers, which Proctor advocates, is
    that they are to help children to value cooperative music-
    making.

10. *To what extent does this work encourage*
    children to use the following techniques
    when searching for ideas:

    a. *brainstorming?* . . . . *3 2 1 ⓪*

    b. *forced relationships?* . . . .*3 2 1 ⓪*

    c. *check lists?* . . . . *3 2 1 ⓪*
        (from "The School")
    No mention is made of these techniques.

11. *To what extent does this work encourage*
    independent musical thought in all
    children? . . . . *3 2 1 ⓪*
    (from "Detrimental Effects of a Conforming
        Environment on Creativity")
    The work is structured so that teachers instruct the
    children, i.e., teachers encourage aptitudes necessary for
    learning the rudiments of music and for obtaining an
    appreciation of classical music.

12. *To what extent does this work stress the*
    importance of using the following modes of
    creative expression in music:

    a. *composition?* . . . . *3 2 1 ⓪*
    Proctor does not discuss the use of composition.

    b. *improvisation?* . . . . *3 2 1 ⓪*
    Proctors does not discuss the use of improvisation.

    c. *analysis?* . . . . *3 2 1 ⓪*
        (from "A Study by Peter R. Webster")
    Proctor does not discuss the use of analysis.

2. Ears and Eyes: Teacher's Book and Work Cards (Oxford
    Music Book for Schools) Foundation Course by Jack Dobbs,
    Roger Fiske and Michael Lane

WHAT IS THE UNDERLYING PHILOSOPHY OF THIS WORK?

The best reason for teaching music is "that making

music can give so much sheer pleasure."[1] The authors maintain

that singing, music appreciation and theory should be

approached as though each was a part of the other. Not to do

so, they contend, "could be harmful." In their words:

> Appreciation should permeate singing and all music
> making, and theory should grow out of these
> activities. . . . Singing, playing, moving, and
> listening should all be related to each other as far
> as is practicable, and the best kind of music lesson
> allows for them all.[2]

The authors define music as sound. They suggest,

therefore, that:

> . . . at an early stage the exploration of sound will
> give an insight into its nature and into the various
> ways of organizing it to make satisfying patterns of
> pitch and rhythm. We have provided a number of
> opportunities for simple improvisation on instruments,
> and these lead to the playing of music from notation.[3]

As the authors advance that "singing will always be

the corner-stone of children's musical experience,"[4] they use

the song as the basis of most of their classroom activities.

Along with singing, movement and listening are included.

Listening, they write, should first involve training the child

to:

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[1]Jack Dobbs, Roger Fiske and Michael Lane, Ears and Eyes:
Teacher's Book (London: Oxford University Press, 1974), p. 1.

[2]Ibid. [3]Ibid. [4]Ibid., p. 24.

> . . . listen to the sounds going on around him, as
> well as those he himself is making. He must then
> learn to listen to his own sounds in conjunction
> with those made by other children; this is the
> beginning of ensemble playing, as also, for that
> matter, of group singing. He may then be ready to
> listen to music made entirely by others.[1]

They write that the playing of instruments encourages children's
ability to make up tunes, and both activities encourage his
listening, "an essential part of music training."[2]

The authors contend that "although music needs no
pictorial stimulus, it does have links with visual art."[3]
Thus pictures, as well as poetry, are included, the authors
maintain, to stimulate the imagination, to illustrate the text
of the songs, and, at times, simply to be enjoyed for their own
intrinsic value. Both the pictures and the poetry are also
used for creative activities.

Though less emphasis is placed on the teaching of
notation in this work, as compared with the previous junior
series of the Oxford School Music Books by Fiske and Dobbs,
the authors suggest with regard to notation that:

> . . . a few minutes every lesson is much better than a
> whole lesson once a week. The pace cannot be forced,
> and teachers should be patient rather than risk killing
> the children's interest by over-insistence.[4]

About children they testify:

> They are great explorers, and, given the opportunity,
> they will sometimes teach themselves skills and even
> facts more quickly than they would learn them from
> you. For this reason they should be allowed opportunities
> of making music outside the normal timetable.[5]

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[1]Ibid., p. 2.   [2]Ibid.   [3]Ibid.

[4]Ibid., p. 28.   [5]Ibid., p. 3.

Finally, some advice is given for the teachers. Apart from the fact that being a good musician helps the teacher to be more effective and self-confident, the authors urge teachers: "Do not be too cautious. There will be times when you must be prepared to take risks. You need not despair if at first your efforts seem to fail; you can always start again."[1]

WHAT PROCESS OF MUSIC EDUCATION DOES THIS WORK ADVOCATE?

First we shall look at some of the information presented by the authors that is intended to be of help to teachers. With regard to the teaching of new songs, they suggest that the early songs be taught by rote because they believe that sound must precede pitch and rhythm. Later on, they write that sol-fa syllables should be used. Still during the early stages, they suggest that children associate rhythm names with names of flowers, animals or their own names to build up rhythmic experiences. Following this, the use of the French time names is advocated, and they are to be used only as spoken sounds, not written, as this would cause confusion.

The authors write that the method of teaching a song should vary according to the song being taught. The following methods involve teaching by rote and relying on children's memory.

1. Strophic Songs:

. . . first give the children a general idea what it is about, and then sing the first verse while the children

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[1]Ibid.

listen; sing two verses if the sense demands it. . . .
Next take the song section by section; . . . After you
have sung the first section get the children to sing
it back immediately without interupting the rhythmic
flow. . . . Repeat the process for the second line.
If this is secure, sing both lines together and get
the children to repeat them after you.[1]

2. Chorus Songs:

The teacher sings the song and the children gradually join

in the chorus when they have assimilated it.

3. Cumulative Songs, i.e., songs with many short verses:

These are taught by assimilation.

With regard to the process of music reading, the

authors suggest that after children have learnt songs by rote,

they can be shown what music looks like on the printed page.

The procedure should be:

> Ask the children to sing with you and at the same
> time imitate your hand movements. Then suggest that
> they follow the melody given in their books, with
> their fingers or with one end of the pencil. They
> can also try drawing the melody as a continuous line
> on paper or on the blackboard.[2]

The authors continue:

> The next stage is the introduction of the sol-fa
> syllable; not all of them, but only those that are
> needed for a particular song. . . . Again the work
> should be done by imitation. Sing the song slowly
> enough for the children to follow and then let them
> sing from the printed page. Practice in stepwise
> melodies should be followed by the introduction of
> small leaps.[3]

Moving on to rhythm, they write:

> At first give plenty of practice in clapping and
> playing on instruments the main beats in some song
> or instrumental piece. The children should also

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[1]Ibid., p. 24.   [2]Ibid., p. 27.   [3]Ibid., p. 27.

imitate rhythms clapped or played by the teacher,
rhythms that the teacher keeps varying. They will
then be ready to read rhythms from notation . . .
Begin with one of the earlier songs based on
simple crotchet and quaver patterns. Sometimes
the natural rhythm of the words to be sung can be
used to demonstrate the musical rhythm. French
time names will prove useful.[1]

Turning to look at some of the activities for children,

the authors claim that the purpose is "to help the children

understand what music is about."[2] These are suggested only as

starting points as the authors hope that teachers will then be

led "to better ideas of your own."[3] Some of the activities

are for small groups and some are for individual children.

One manner of presenting such activities is by using

twenty-one work cards.

They are intended to give pleasure, while also having
an educational aim. For instance cards 1 and 2 explore
the quality of instrumental sound, cards 3 and 4 explore
word rhythms, and cards 5 and 6 derive instrumental
sounds from a picture. . . . The cards are also pro-
gressive and should be used in the right order.[4]

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[1]Ibid., p. 28.   [2]Ibid., p. 38.

[3]Ibid.   [4]Ibid.

Here is one of the work cards.

Think of the sounds of a railway station.

There are
          Trains
          People walking
          People talking
          Doors shutting
          Milk cans rattling.
What other sounds do you hear at the station?

With a friend find instruments
   to make the sounds of the station.

You may need two or three each.

1

[1] J. Dobbs, R. Fiske and M. Lane, Ears and Eyes: Work Cards, Book 1, card I 6.

Here is a second.
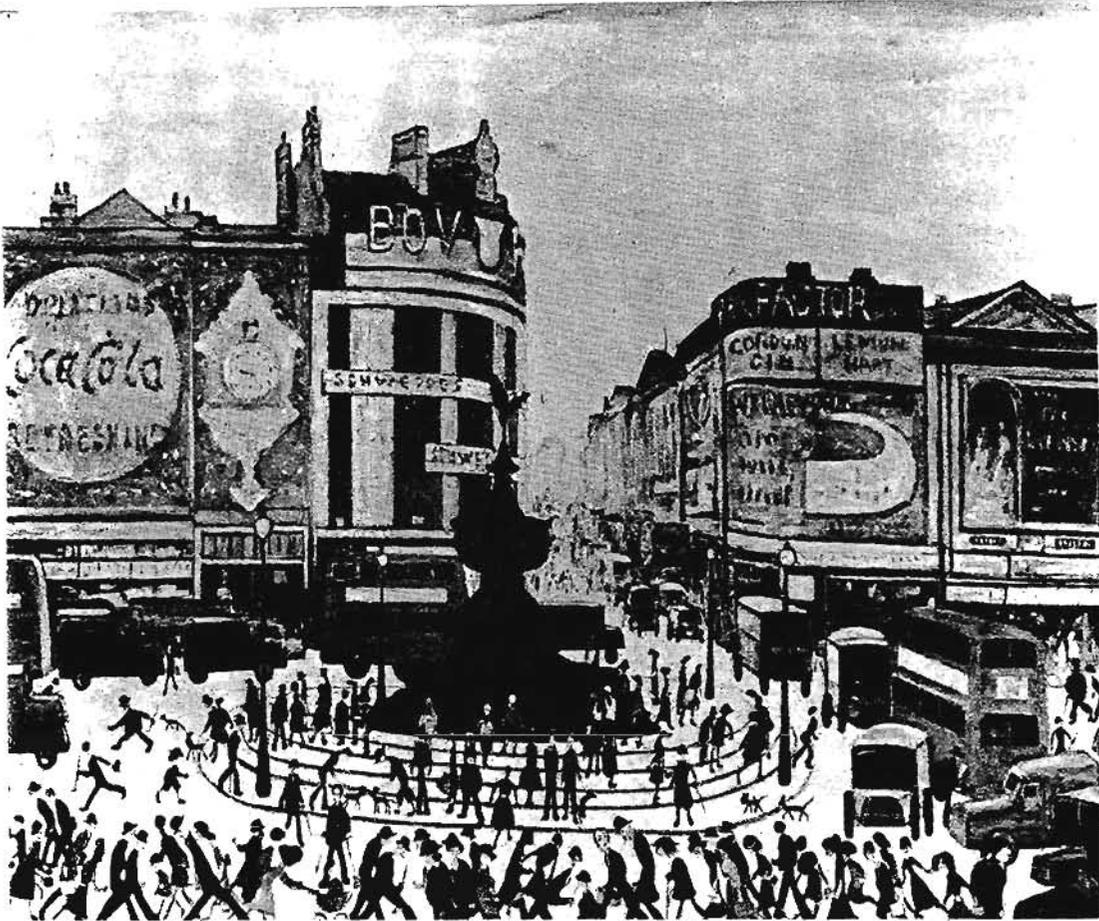
How many things in this picture make sounds?
Can you make the sounds on instruments?
With two friends play the sounds.
        Will you play all together?
        Or will you play in turn?

Now make a picture in colours on a piece of paper.
    Put in it things that make sounds.
When you have finished,
    play the sounds of your picture with some friends.

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[1]Ibid., card I 10.

One last example of the work card is the following.

Here are some questions about the sea.

Where is the nearest sea to your home?
What colour is the sea?
Is it always the same colour?
How many kinds of boat do you know?
What people work at sea?
How many fishes can you name?

Write down on a piece of paper some
sentences about the sea.
Take a drum
and tap your sentences on it.

1

Another manner of presenting activities is through
the varied suggestions that accompany each song. We shall

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[1]Ibid., card I 8. The original card is in colour.

look only at those found in Book I, as the authors write that "many of the same teaching points will be found in the second book, though usually with different application."[1]

1. Incorporate movements that arise from the text and instrumental sounds that can be used to accompany the movements.

2. Make use of pictures to accompany the songs, e.g., To accompany the song from the Himalayas is a picture of the Himalaya mountains and other mountains.

> Ask one of the children to draw the rise and fall of the melody on the blackboard; the result will suggest a mountain range, and this simple act will draw attention to an important aspect of melody.[2]

3. Find ways of dividing the group into three to represent high, medium, and low pitches on various instruments.

4. Ask the children if they can recall hearing similar rhythmic or melodic ideas to those that they heard in earlier songs. Write them on the board and then point to each in turn and ask the children to play or clap what is written on the board.

5. Listen to "Le Basque" by Marin Marais on the tape that accompanies the Teacher's Manual as its rhythm is similar to what has been both sung and spoken.

6. Discuss the subject of water with children after singing about it and choose an aspect of water, such as a rainstorm. Discuss further the instrument that could be used to compose a storm and do so.

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[1] J. Dobbs, R. Fiske and M. Lane, Ears and Eyes: Teacher's Book, p. 110.

[2] Ibid., p. 44.

7. Make the basis of a musical project the story that precedes the singing of the African lullaby, "Abijojo."

> Pete Seeger tells how this lullaby traditionally comes at the end of an African bedtime story in which a dragon threatens the children. They are given a charm which helps them to sing the song, and it has such an effect on the dragon that he begins a slow dance; by the end of it he is so lulled that he is easily driven away.[1]

Questions suggested by the authors that the teachers should ask of the children are: "How many children are there in the story? Where do they live? What is the dragon like? What does he sound like when he dances?"[2] The authors then suggest that the children compose music that will illustrate the story. Other questions of a provocative nature are suggested.

8. Put melodic patterns on the blackboard for practice in reading notation and do the same for rhythmic patterns.

9. Try out ostinato patterns for songs using different instruments.

10. Ask open type questions, e.g., As the children look at a painting that appears in their book, the teacher asks related questions, e.g., What sounds do you think would come from their instruments?

11. After singing carols, shape an entire Christmas scene. "Draw from the children as much of the material as you can and only add your own suggestions where absolutely necessary."[3]

12. Make up a story based on the song that is sung and make pictures to put on the wall about the song.

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[1]Ibid., p. 64. [2]Ibid. [3]Ibid., p. 63.

13. Make up a round,

> . . . not from a tune, but from illustrative
> sounds. . . . e.g., birds, a farmyard, a town street.
> Talk about each in turn, inviting suggestions . . .
> Experiment with the children to find the most
> effective way of reproducing the sounds that you
> have chosen together. . . . Let the children make
> the sound they think best, and encourage them to
> be individuals.[1]

14. Use songs to explain triple time.

15. Add rhythmic accompaniments to the songs for the children
to play.

16. Use the autoharp or chime bars (one child to each note)
and add chords to simple songs.

17. Use this song "to establish the interval between doh and
the other sol-fa steps that the children have encountered."[2]

18. Use the shanty pieces to stimulate the children's imagina-
tions to organize a piece using vocal sounds and instrument.
When the piece has been heard, then ask questions that require
the children to be critical of their music.

Having presented the philosophy and process of music
education as found in Ears and Eyes: Teacher's Book and Work
Cards, we are now in a position to answer the questions that will
determine to what extent this work supports the importance of
creativity in elementary music education.

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[1]Ibid., p. 74.   [2]Ibid., p. 93.

EVALUATION FORM

WORK: Ears and Eyes: Teacher's Book and Work Cards
          (Oxford Music Book for Schools) Foundation Course

AUTHOR/S: Jack Dobbs, Roger Fiske and Michael Lane

PLACE, PUBLISHER & DATE: London: Oxford University Press, 1974.

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Each question has one of 4 possible answers as listed
below; each one indicates the extent to which the
work supports the point in question. The relevant
number will be circled for each question, and a brief
explanation will be given to verify the answer.

3. This indicates that the point in question receives
    strong support, either explicitly or implicitly.

2. This indicates that the point in question receives
    moderate support, either explicitly or implicitly.

1. This indicates that the point in question receives
    weak support, either explicitly or implicitly.

0. This indicates that the point in question receives
    no support, either explicitly or implicitly.

1. To what extent does this work take
    cognizance of the fact that creative
    behaviour is thought by some eminent
    psychoanalysts and psychologists to
    be innate in each individual? 3 ②1 0
    (from "The Creative Mode of Thinking")
    Though this is not discussed, the authors do make
    use of some creative activities which implies
    moderate support for the above.

2. To what extent does this work emphasise
    the presentation of activities or
    "contingencies" which may result in
    creative behaviour? 3 ②1 0
    (from "The Creative Mode of Thinking")

    Work cards include activites, some of which will result
    in creative behaviour.

3. To what extent does this work
    encourage children to use the creative
    process, i.e., any of the steps that
    are similar to or the same as the
    first four steps of S. J. Parnes'
    creative problem-solving process:

    a. fact-finding? 3 2 ①0
    A few of the work cards encourage this, e.g., I 8, but there
    is very little encouragement of fact-finding in the text.

    b. problem-finding? . . . . 3 2 1 ⓪
    This is given no consideration in this work.

    c. idea-finding? 3 ②1 0
    This is encouraged through some of the work card activities
    and some activities which accompany songs in the text.

    d. solution-finding? 3 2 ①0
        (from "The Creative Process")

    A few of the work cards encourage this, e.g., I 8, but there
    is very little encouragement of solution-finding in the text.

4. *To what extent does this work encourage
the following capacities in children:*

   a. *curiosity?* . . . . 3 ② 1 0
When creative activites are suggested, this is encouraged, i.e.,
about 1/5 of the suggestions which accompany the songs and
more than half of the cards that accompany the text.

   b. *initiative?* . . . . .3 2 ① 0
The explanation is the same as that given for 4 a, but
to a lesser extent.

   c. *critical faculties?* . . . . .3 2 ① 0
The explanation is the same as that given for 4 b.

   d. *intuitive ideas?* . . . . 3 2 ① 0
The explanation is the same as that given for 4 b.

   e. *aesthetic judgment?* . . . . ③ 2 1 0
The authors do encourage the exploration of sound at an early
age in order to give children "insight into its nature and
into various ways of organizing it . . ."

   f. *wide range of interest beyond music?* . . . . 3 2 ① 0
     (from "The Creative Person")

Poetry and interesting drawings are used in conjunction with
musical activities.

5. *To what extent does this work encourage any
of the aptitudes for creative thinking, as
identified by J. P. Guilford, with respect
to music:*

   a. *sensitivity to problems?* . . . . 3 2 ① 0
This occurs in a few of the creative activities that appear
on the 21 work cards, e.g., work card I 10.

   b. *fluency of ideas?* . . . . .3 ② 1 0
The explanation is the same as that given for 5 a, but to
a greater extent.

   c. *flexibility of ideas?* . . . . .3 ② 1 0
The explanation is the same as that given for 5 b.

   d. *originality?* . . . . 3 2 ① 0
The explanation is the same as that given for 5 a.

   e. *redefinition?* . . . . .3 2 1 ⓪
This is given no consideration in this work.

   f. *elaboration?* . . . . 3 2 ① 0
     (from "The Creative Person")
Work card I 6 which begins, "Think of the sounds of a
railway station", is one of the few activities which
encourages this.

6. *To what extent does this work encourage
   children to produce musical ideas that
   are unusual and that are appropriate?* 3 2 (1) 0
   (from "The Creative Product")
   A few work cards do this, e.g., I 10: "Now make a picture in
   colours on a piece of paper. . . . Play the sounds of your
   picture with some friends."

7. *To what extent does this work encourage
   teachers to show:*
       a. respect for unusual questions? 3 2 (1) 0
   Though this is not stated, such questions could occur in the
   creative activities that are suggested.

       b. confidence in children by:
          1. valuing their ideas? . . . . (3) 2 1 0
   Teachers are told to draw as much as possible from the
   children.

          2. granting freedom to explore their ideas? .3 2 (1) 0
   This occurs in a few of the creative activities, e.g.,
   work card I 10.

          *3. granting freedom to explore their
             environment?* 3 2 (1) 0
   This occurs in a few creative activities, e.g., work card I 6.

          *4. granting periods for non-evaluative
             practice of ideas?* 3 (2) 1 0
          (from "The School")
   The creative activities would allow for this.

8. *To what extent does this work present
   processes that involve:*
       a. open-ended questions? 3 (2) 1 0
   Though this work suggests, "Ask open type questions", and
   half of the work cards do, only about 1/5 of the material
   in the teacher's book makes use of them.
       b. provocative questions? 3 2 (1) 0
   Though the work cards do use these a few times, scant evidence
   of provocative questions occurs in the teacher's book.

       c. synthesis of ideas? 3 2 (1) 0
   The explanation is the same as that given for 8 b.

       *d. open-ended learning situations that encourage
          the discovery method of learning?* 3 2 (1) 0
   Though emphasis is primarily placed on planned and guided
   experiences, open-ended learning situations do appear on some
   of the work cards.
       *e. planned and guided experiences using
          divergent thinking abilities?* 3 (2) 1 0
          (from "The School")
   Many of the work cards do encourage this as do a few
   activities in the text.

9. *To what extent does this work encourage children to:*

    a. *learn from their own mistakes?* 3 2 ①0

One activity suggests that children organize a piece, and the teacher then asks questions that require children to be critics of their music. A few other activites also encourage this.

    b. *share and work together on ideas?* . . . . ③ 2 1 0

Most of the activities allow for this.

10. *To what extent does this work encourage children to use the following techniques when searching for ideas:*

    a. *brainstorming?* . . . . 3 2 1 ⓪

    b. *forced relationships?* . . . . 3 2 1 ⓪

    c. *check lists?* . . . . 3 2 1 ⓪
    (from "The School")

No mention is made of these techniques.

11. *To what extent does this work encourage independent musical thought in all children?* 3 2 ①0
    (from "Detrimental Effects of a Conforming Environment on Creativity")

The main concern is the teaching of musical skills and facts.

12. *To what extent does this work stress the importance of using the following modes of creative expression in music:*

    a. *composition?* 3 2 ①0
This is used to a lesser extent than improvisation.

    b. *improvisation?* . . . . 3 ② 1 0
Although the authors write: "We have provided a number of opportunities for simple improvisation on instruments", this simply means that improvisation is given moderate support.

    c. *analysis?* . . . . 3 ② 1 0
    (from " A Study by Peter R. Webster")

Children are asked to critically analyse their music in some instances which indicates moderate support for this mode of creative expression.

3. Creative Music Education: A Handbook for the Modern
    Music Teacher by R. Murray Schafer

WHAT IS THE UNDERLYING PHILOSOPHY OF THIS WORK?

Murray Schafer, Canadian born composer and music

educator, considers the principles of "ongoing musicianship"[1]

in this work. He presents his material in the form of

discussions about music education and of personal experiences

of teaching music in Canada and the United States for over

fifteen years to both adults and children. Thus, his manner of

presentation is descriptive rather than prescriptive. "Nothing

in this book says 'Do it this way'. It only says 'I did it

this way'."[2]

Creative Music Education is divided into five parts.

Part I, "Composer in the Classroom" deals primarily with

creativity, "perhaps the most neglected subject in Western

musical education."[3] Schafer believes that the teaching pro-

fession should be attuned to change. Furthermore, he main-

tains that educators who are in touch with change are trying to

place creative music-making at the heart of the curriculum.

To understand what Schafer means by creative music-making, we

read:

> I would like to think all teachable subject-
> matter can be broken down roughly into two classes,
> according to whether it satisfies the instinct for
> gaining knowledge or for self-expression.
> . . . I see music as predominantly an expressive
> subject, like art, creative writing, or making of all
> kinds.[4]

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[1]R. Murray Schafer, Creative Music Education, (New York:
Schirmer Books, 1976), p. ix.

[2]Ibid., p. x. [3]Ibid., p. ix. [4]Ibid., p. 228.

What music should be and what it is, Schafer sees as two totally different things. From his point of view music has unfortunately become predominantly a knowledge-gaining subject.

He claims that the teaching of visual arts is well ahead of the teaching of music.

> There is in music, for example, no equivalent to the Basic Course which Johannes Itten developed for the first-year students at the Bauhaus, a course which has been widely duplicated all over the world. This was a course in free expression, but taxed creatively by the progressive limitation of choice, so that the student was led almost imperceptibly into contact with the great, elementary issues of visual expression. We can profit from the experience of art teaching. Could music not be taught as a subject which simultaneously releases creative energy and trains the mind in the perception and analysis of its own creations?[1]

Schafer continues:

> The big problem with education is one of tense. Education traditionally deals with the past tense. You can only teach things that have already happened. (In many cases they happened a long time ago.) It is the tense questions that has kept artists and institutions apart, for artists, through acts of creation, are concerned with the present and future rather than the past. Education is neither news nor prophecy, neither present nor future. To perform, to interpret music, is to engage in a reconstruction of the past, which may certainly be a desirable and useful experience.[2]

But, he asks:

> . . . . could we not spend some of our energies in teaching to make things happen? Is this not a question worth considering? The only way we can turn the past-tense subject of music into a present-tense activity is by creating. Marshall McLuhan has written: "We are

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[1]Ibid. [2]Ibid.

entering a new age of education that is programmed for discovery rather than instruction."[1]

About a knowledge-gaining subject, Schafer writes:

In a knowledge-gaining subject the teacher has all the answers and the student has an empty head – ready to assimilate information. In a class programmed for creation there are no teachers at all: there is only a community of learners. The teacher may initiate a situation by asking a question or setting a problem; after that the role as teacher is finished. One may continue to participate in the act of discovery but no longer as a teacher, no longer as a person who already knows the answer.[2]

Finally, he contends:

I emphasize this again: in a class programmed for creativity the teacher must plan for his own extinction. And I will add parenthetically that it took me several years before I felt comfortable doing this. I lead off a class by asking a question or setting a problem. These are of a special type; they must allow for as many solutions as there are students in the class. The class must become an hour of a thousand discoveries, and the secret is in the question asked.[3]

Schafer relates that he is often asked where the emphasis on creativity will lead us. His reply is "Anarchy, anarchy."

A totally creative society would be an anarchic society. The possibility of whole societies becoming self-actualized remains, nevertheless, slight, due to a persistent terror of original acts of all kinds.[4]

Schafer is quick, however, to point out the following:

. . . some other approaches to the subject are related to equally provocative social models. For instance, the orchestra or band, in which one man hectors sixty or a hundred others, is at best aristocratic, and more frequently dictatorial.[5]

Balance in social organizations is important to Schafer's way

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[1]Ibid.   [2]Ibid., p. 229.   [3]Ibid.

[4]Ibid., p. 223.   [5]Ibid.

of thinking, and because he views the music class as a "society

microcosm", he believes that balance in the curriculum is

important. This means that as much importance should be given

to individual self-expression as to "improving the executive

abilities of young musicians."[1]

He is totally opposed to the genius syndrome in music

education as it "often leads to a debilitation of confidence

for more modest achievements."[2] Schafer maintains that a child

with average human intelligence may take part in the activities

that he has devised.

> The best thing any teacher can do is to plant the
> spark of a subject in the minds of students, so that
> it may grow, even if the growth takes unpredictable
> forms. I have tried to make the enthusiastic discovery
> of music precede the ability to play an instrument or
> read notes, knowing that the right time to introduce
> these skills is when the child asks for them. Too
> often teaching is answering questions which nobody
> asks.[3]

To explain one of his maxims for educators,

"Teach on the verge of peril,"[4] Schafer writes:

> If the edge of the art is to grow, we must live
> dangerously; which is why I teach my students that
> their failures are more useful than their successes,
> because a failure provokes further thought and self-
> criticism. A successful person, in any field, is
> often a person who has stopped growing.
>   Sometimes we do not know which is a failure and
> which is a success. What the teacher thinks has been
> a failure may be considered a success by a student,
> though the teacher may not know this until months or
> years later.[5]

Part II: "Ear Cleaning" is intended to expand "tradi-

tional concepts of ear training in order to deal with both the

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[1]Ibid.   [2]Ibid., p. 224.   [3]Ibid., p. 225.

[4]Ibid., p. 221.   [5]Ibid., p. 225.

newer forms of today's music and the acoustic environment at large," or the "soundscape."[1] Schafer does not wish to confine the habit of listening to the music studio and the concert hall. Ear-training, for him, involves listening to environmental sounds and remembering them. An ear-training exercise, he suggests, could involve the following questions:

> How, precisely, are you listening at the moment?
> (Schafer claps his hands.)
> What was the last sound you heard before I clapped
> my hands?
> What was the first sound you heard after I clapped
> my hands?[2]

Musicians, Schafer contends, are the "architects of sound."[3] It is therefore their responsibility to take the initiative and approach the problem of noise pollution in a positive manner.

> My approach to this problem is to treat the
> world soundscape as a huge macrocosmic composition.
> Man is the principal creator of this composition.
> He has the power to make it more or less beautiful.
> The first task is to learn to listen to the sound-
> scape in a piece of music--to listen to it as
> intensively as one would listen to a Mozart Symphony.
> Only when we have truly learned to listen to it can
> we begin to make value judgments about it. Which
> sounds do we like? Which do we want to keep? Which
> are unnecessary? Are some of the more delicate
> sounds being threatened by the larger or more brutal?
> For instance, my students discover that they cannot
> hear the sounds of the birds when a helicopter or
> motorcycle passes by. The solution is implicit. If
> we want to continue to hear birds at all we will have
> to do something about the sounds of helicopters and
> motorcycles.[4]

Parts III, IV and V of Schafer's work touch upon the idea that there should be a meeting place for all the arts.

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[1]Ibid., p. ix. [2]Ibid., p. 230.

[3]Ibid. [4]Ibid., p. 231.

In Part III, "The New Soundscape", music touches upon geography, sociology, communications and public affairs. In Part IV, "When Words Sing", an investigation is made of the meeting place between music and poetry. In Part V, "The Rhinoceros in the Classroom", Schafer ventures more strongly into the other arts, "particularly drama and the visual arts."[1]

> The longer I am involved in music education, the more I realize the basic "unnaturalness" of existing art-forms, each of which utilizes one set of sense receptors to the exclusion of all others. The fantastic demands made to achieve virtuosity in any of the art-forms have resulted in abstract accomplishments to which we can rightly apply the term "unnatural," for they in no way correspond to life as we experience it on this earth.[2]

Concerning the unnatural separation of the arts, here is another of his maxims to educators:

> For the 5-year-old, art is life and life is art. For the 6-year-old, life is life and art is art. This first school-year is a watershed in the child's history: a trauma.[3]

He is not saying that the separation of art-forms is totally wrong in education. He is saying:

> Of one thing I am growing unyieldingly convinced. In the first years of school we should abolish the study of all the arts. In their place we should have one comprehensive subject, perhaps called "media studies," or better "studies in sensitivity and expression," which would include all yet none of the traditional arts.
> Yet, at a certain point we could still separate out the individual arts as separate studies, . . . This would be the middle period of study. Ultimately, having cleaned each of the lenses of perception, we might turn to a reconfiguration of all the art forms into the total work of art again--a situation in which "art" and "life" would be synonymous.[4]

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[1]Ibid., p. ix. [2]Ibid., p. 231.

[3]Ibid., p. 221. [4]Ibid., pp. 232-233.

We conclude our discussion of Schafer's philosophy by
looking at his answers to four questions.

1. Why teach music?

> Music exists so that we may feel the echo of the
> universe vibrating through us. To catch these vibra-
> tions we need a bold music - mind-stimulating, heuristic,
> imaginative - a music in which the mind and body join
> in acts of self-discipline and discovery.[1]

2. What should be taught?

Schafer holds that there are two obligations. First,
we should keep alive the music of our heritage, and to gain
musical perspective, we should introduce the music of other
cultures. Second, we must "expand the repertoire" and "keep
alive the exploratory instinct for creative music-making."[2]
He devotes his attention to exercises which fall naturally
into three groups, i.e., listening, analysing and making music.
These, in turn, are related to what Schafer calls, "the real
nerve of music" - that being "present-tense creating."[3]

3. How should music be taught?

Schafer advocates programmes which are basically
experimental and discovery orientated, e.g., the teacher,
acting as a catalyst, sets heuristic problems for from seven
to nine children in a group. Such a group should allow "for
free discussion, and it also permits a leader or conductor to
cue or coordinate the entire group in an improvisation or
exercise."[4] Schafer believes that all children can lead, and
he allows leaders to "arise naturally." He finds games useful

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[1]Ibid., p. 237.   [2]Ibid.   [3]Ibid., p. 239.

[4]Ibid., p. 241.

and fun, and he does not try to stop a music class from "spilling over" into another discipline.

4. Who should teach?

Schafer believes that the professional is needed to present the traditional approach, though he would also accept people with little training who are sensitive to sound.

WHAT PROCESS OF MUSIC EDUCATION DOES THIS WORK ADVOCATE?

We shall present at least one idea from each part of Schafer's work, beginning with "Getting Acquainted" from Part I. His first session involves getting to know the children, and this he does by asking questions about themselves and about their musical tastes and interests. Out of this arises a discussion of their replies. At the end of this session Schafer says to the children:

> Someone once said that the two most important things in developing taste were sensitivity and intelligence. I don't think this is so; I'd rather call them curiosity and courage. Curiosity to look for the new and the hidden; courage to develop your own tastes regardless of what others may say or think. People who will risk being laughed at by others because they have individuality in musical tastes (and this will happen) show real courage. People who like things only because it is socially useful for them to do so we call snobs. Listening to music is a deeply personal thing and with society moving as it is today towards uniformity and conventionalism, it takes real courage to discover that you are an individual with an individual mind and individual tastes in art.[1]

His next session, still from Part I, is "What is Music?" The purpose behind this session is to arrive at a definition of music with the children. First Schafer asks

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[1]Ibid., p. 6.

the class to supply him with their individual definitions of music. One answers: "Music is something you like." Another says: "Music is sound pleasing to the ear." Schafer then uses both open-ended and provocative questions to examine each definition. We shall look at part of the discussion of the second definition.

Schafer, having asked the student to speak about his definition, "Music is sound pleasing to the ear," records the following:

> STUDENT: Well, there are certain sounds which are pleasing to everybody's ear and certain sounds that are displeasing. The sounds in the street aren't music.
> SCHAFER: A car in the street screeches its brakes--is it music?
> EVERYONE: NO!
> SCHAFER: Why?
> A pause: no comments.
> All right, we'll leave that for a moment and return to it later. But you all agree that noise can't be music.
> Nods of agreement.
> All right, let's see.
> Schafer goes to the bass drum and strikes it rhythmically several times.
> Is that music?
> CLASS: Yes!
> At the back of the classroom there is a large garbage can. This is also struck several times rhythmically.
> SCHAFER: Is that music?
> CLASS: No!
> SCHAFER (surprised): Oh! There's a difference? Can you tell me what it is?
> STUDENT: The drum sounds a definite tone but the garbage can is just a noise.
> SCHAFER: Can anyone tell me what the definite tone of the bass drum is?
> BASS DRUM PLAYER: I think its "A."
> SCHAFER: All right: (beating the drum) Class sing "A."
> Confusion results. There are nearly as many different pitches sung as there are students.

> SCHAFER: An odd "A" (Laughter). I think you've been
> misled into thinking the bass drum has a definite
> pitch. It is true that sometimes it seems to
> take on the tonality of the other instruments in
> the orchestra when it is played with them; but in
> fact it has no definite pitch itself. The sound
> it produces is "noise" just as that produced by
> the garbage can is noise.[1]

A brief discussion of the difference between regular and irregular vibrations follows. It is pointed out that it is this which distinguishes sounds of definite pitch from mere noise. Then Schafer again goes to the drum and the garbage can and strikes each in an identical manner, and asks: "Now what about it? Do you still think one is music and the other not?"[2]

Following the discussion, Schafer then sets a task for the class, and each child has an instrument.

> You have just been commissioned by Alfred Hitchcock
> to write the musical score for his most recent horror
> film. In this particular scene we are scoring today
> the victim is entering a darkened house. The
> murderer hides behind the door and at a certain point
> leaps out and stabs the victim. How shall we rein-
> force this dramatic scene with our music?[3]

The students make many suggestions. Schafer helps them to find a chord to be played as the murderer springs from behind the door and also to include the singers in the class. The result is a chord made up of a different note from each player accompanied by shrill screams by the singers.

Having completed and repeated the musical sequence several times, Schafer then says:

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[1]Ibid., pp. 8-9.   [2]Ibid.   [3]Ibid., p. 10.

Now, no one was in any doubt as to whether that sound
was agreeable to the ears; it certainly wasn't. But
as a sound it was effective for our purposes. I am
assuming it was a musical sound because it was a
"musical" score we were asked to write for the film.
But if that is so, what happens to our definition of
music as "Sound pleasing to the ears?" Think about
that until tomorrow.[1]

The following day Schafer returns with a recording of

Arnold Schoenberg's, A Survivor from Warsaw. After hearing

the recording the students decide that their original definitions

of music must be abandoned, and they begin searching again for

new and more exact definitions.

"Melody" from Part II concludes with some of Schafer's

exercises which call for improvisation:

1. Instrumentalists or vocalists are given two tones
   and allowed freedom to treat them as expressively
   as possible in brief improvisation. Then three
   tones are given, then four, etc. But every care
   must be taken in these initial stages to ensure
   that the full expressive potential of, say, two
   given notes is exploited before the student is
   given new notes. The full effects of amplitude,
   silence, rhythmic articulation, phrasing, etc.,
   must be realized. The effects of timbre change
   may be obtained by giving the same two notes to
   two or three voices or instruments to improvise
   in consort. . . .

2. Individual students are asked to improvise, vocally
   or instrumentally, free melodies suggested by the
   following words. (1) high swinging, (2) deep and
   sad, (3) light tripping, (4) "that strain . . . had
   a dying fall," (5) cold getting warmer, (6) agony
   to laughter, (7) heavy to light, (8) it flees into
   the distance, (9) thick, (10) help! Analyze the
   characteristics of the different melodies produced.[2]

"The Sonic Environment" from Part III was devised to

increase the child's awareness of sound and his or her ability

to describe these sounds more fully.

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[1]Ibid., p. 11.   [2]Ibid., p. 62.

For ten minutes on four consecutive days, the class

sat with chairs turned to the wall in order that they might

"receive sound-messages." Then "on the fifth day they were

asked to describe what they had heard."[1] Schafer found that

most of the participants used common terms such as footstep,

breathing, etc. This led him to ask the question: "But the

difference between my footstep and yours, or his cough and hers,

how were we to describe that?"[2]

Schafer encouraged them by saying:

> If the new orchestra is the sonic universe, how
> do we differentiate between the instruments? How
> could we write the complete biography of a footstep
> in such a way that we would know it was your footstep's
> story and not mine?[3]

He then records that "one determined girl went down to a street

corner on Saturday and tried to work out a descriptive notation

for the different feet of the passers-by."[4]

Schafer next suggested that they expand their lists of

sounds by spending ten minutes in different places listening

and listing sounds heard. Then they discovered that their

various sounds could be divided into the sounds made by nature,

by humans, and by electric or mechanical gadgetry. As a

result:

> Two students catalogued the sounds. Did people
> always hear the same sounds as we do? To make a
> comparative study, everyone was asked to take a
> historical document and note down all the sounds
> or potential sounds in it. Any document would do:
> a painting, a poem, a description of an event, a photo-
> graph. Someone took The Battle Between Carnival and
> Lent by Pieter Brueghel the Elder and gave us the sounds of

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[1]Ibid., p. 101. [2]Ibid. [3]Ibid.

[4]Ibid.

a 17th century Dutch townscape. Someone else took
a passage from an Arnold Bennett novel and gave us
the sounds of an industrial North-of-England city
in the 19th century. Someone else took a North-
American Indian village, another a biblical scene,
and so on.[1]

Out of the many things the class discovered, one was

the following:

	Natural Sounds	Human Sounds	The Sounds of Tools and Technology
Primitive Cultures	69%	26%	5%
Medieval, Renaissance and Pre-Industrial Cultures	34%	52%	14%
Post-Industrial Cultures	9%	25%	66%
Today	6%	26%	68%

[2]

From Part IV the exercises of two short events are

presented. First, from "Melisma", the class experiments with

extended vocalization on one vowel or consonant and with what

their voices can make of different shapes, such as:
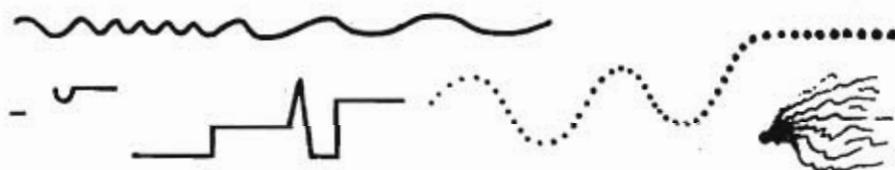
Schafer then suggests these exercises:

Draw some other shapes for yourself and perform them.
In the following picture I intend a composition
for solo voice. Try to perform it. What do you make
of the high, low, continuous or interrupted shapes,
the dark shapes or those that explode or wiggle or

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[1]Ibid., p. 102.   [2]Ibid.

drip? There will be as many different realizations
of my piece as there are singers. It is a piece of
infinite possibilities.
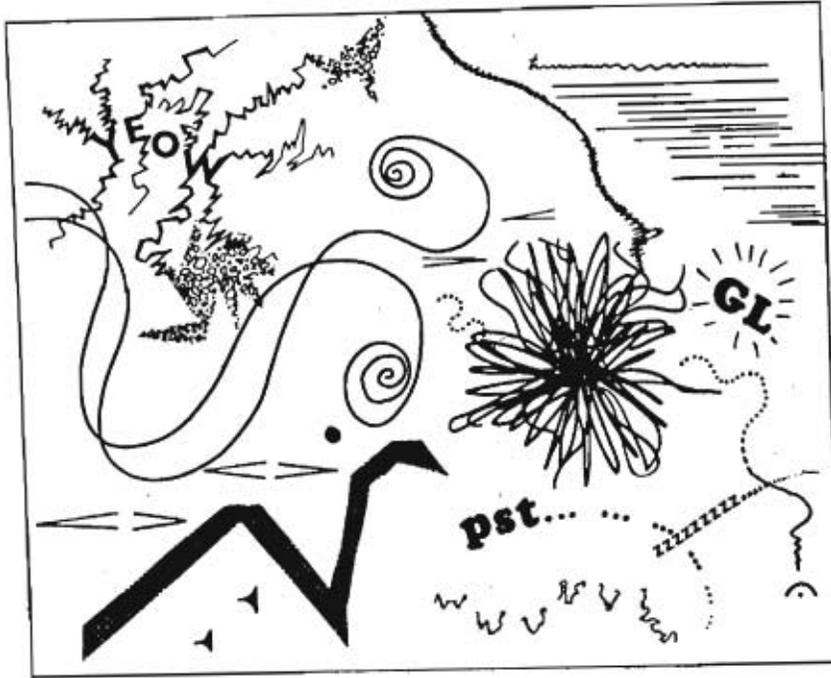
Draw a composition of your own and perform it.
Or try to get a friend to perform it. You will need
friends from time to time in this book.[1]

Second, from "Nature Concert", Schafer gives the

following problem to 80 amateur musicians from the ages of 6

to 60.

Using only your own voices, create a composition
based on the sounds of nature. Make your imitations
as convincing as possible. Everyone must participate
and the piece should have some sense of form. You
have fifteen minutes.[2]

Participants are divided into groups and sent off to

compose. When they return, each group is asked to perform.

One group, Schafer says, gives a concert of "surprising magni-

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[1]Ibid., p. 164.   [2]Ibid., p. 165.

ficence and beauty" and is asked to record their work.   This

is the result.

1

Finally, "The Music Box" from Part V is the result of

an invitation that Schafer and others received from the

Ontario Arts Council in 1969 "to participate in the preparation

of a media kit for music education."[2]   Of the more than 300

items, part of one idea which Schafer included is found on

the following page.

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[1] Ibid., p. 166.

[2] Ibid., p. 252.

A composer once took a recording of a symphony and by re-recording it several times he reduced it to a single click. Q. How did he do it?

Find a three-dimensional object. "Sing" it as you move around it.

With your voice describe the sound a shovel makes:
(a) in clay
(b) in gravel
(c) in sand
(d) in snow

If concert halls were shaped like this
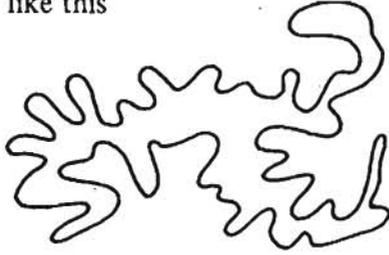
or this
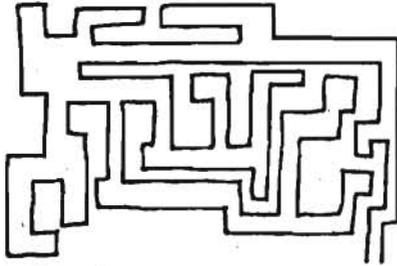
or this

instead of this

What kind of concerts would we have?

Sing a steady *glissando* up one octave lasting precisely ten seconds.

Bring a high, thrilling sound to school. The next day bring a dark, gloomy one, then an explosive one, etc.

In a private language create a word to describe the sound of walking
(a) in fresh snow
(b) in hard-packed snow
(c) in slushy snow

Improvise a solo and record it. Play back the tape. Add a live improvisation in counterpoint.

[1]Ibid., p. 254.

Having presented the philosophy and process of music education as found in Creative Music Education: A Handbook for the Modern Music Teacher, we are now in a position to answer the questions that will determine to what extent this work supports the importance of creativity in elementary music education.

EVALUATION FORM

WORK: <u>Creative Music Education: A Handbook for the Modern Music Teacher</u>

AUTHOR/S: R. Murray Schafer

PLACE, PUBLISHER & DATE: New York: Schirmer Books, 1976.

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Each question has one of 4 possible answers as listed below; each one indicates the extent to which the work supports the point in question. The relevant number will be circled for each question, and a brief explanation will be given to verify the answer.

3. This indicates that the point in question receives <u>strong support</u>, either explicitly or implicitly.

2. This indicates that the point in question receives <u>moderate support</u>, either explicitly or implicitly.

1. This indicates that the point in question receives <u>weak support</u>, either explicitly or implicitly.

0. This indicates that the point in question receives <u>no support</u>, either explicitly or implicitly.

1. *To what extent does this work take cognizance of the fact that creative behaviour is thought by some eminent psychoanalysts and psychologists to be innate in each individual?* . . . . ③ 2 1 0
   (from "The Creative Mode of Thinking")

   In the words of Schafer: "Could music not be taught as a subject which simultaneously releases creative energy and trains the mind in the perception and analysis of its own creations?"

2. *To what extent does this work emphasise the presentation of activities or "contingencies" which may result in creative behaviour?* . . . . ③ 2 1 0
   (from "The Creative Mode of Thinking")

   Schafer's work has many such activities. One is "Melisma", Part IV. Students are "given two tones and allowed freedom to treat them as expressively as possible in brief improvisation."

3. *To what extent does this work encourage children to use the creative process, i.e., any of the steps that are similar to or the same as the first four steps of S. J. Parnes' creative problem-solving process:*

   a. *fact-finding?* . . . . ③ 2 1 0
   "What is Music" is one of many projects which encourages this.

   b. *problem-finding?* . . . . 3 2 ① 0
   "What is Music" involves problem-finding, and it is one of the few projects which does.

   c. *idea-finding?* . . . . ③ 2 1 0
   "Melody", Part II, is one of many activities which encourages this.

   d. *solution-finding?* . . . . ③ 2 1 0
      (from "The Creative Process")
   The exercises in Part IV are some of the many activities which encourage this.

4. *To what extent does this work encourage
the following capacities in children:*

a. *curiosity?* . . . . ③ 2 1 0
Schafer writes: "Someone once said that the two most important
things in developing taste were sensitivity and intelligence.
. . . I'd rather call them curiosity and courage.

b. *initiative?* . . . . ③ 2 1 0
"The Sonic Environment" is one of the many activities that
involves partipants in initiating action.

c. *critical faculties?* . . . . ③ 2 1 0
"The Sonic Environment" is one of the many activites which
encourages this.

d. *intuitive ideas?* . . . . ③ 2 1 0
Schafer advocates programmes that are basically experimental
and discovery orientated, and improvisation is used
extensively.

e. *aesthetic judgment?* . . . . ③ 2 1 0
One of Schafer's major projects is to open people's ears to the
problem of noise pollution because he believes that we have
power to make the world's soundscape either more or less beautiful.

f. *wide range of interest beyond music?* . . . . . . ③ 2 1 0
(from "The Creative Person")
The "New Soundscape" touches on geography, sociology,
communications and public affairs.

5. *To what extent does this work encourage any
of the aptitudes for creative thinking, as
identified by J. P. Guilford, with respect
to music:*

a. *sensitivity to problems?* . . . . 3 ② 1 0
Schafer's manner of arriving at a definition of music with
children requires this as do some other activities.

b. *fluency of ideas?* . . . . ③ 2 1 0
"Music Box" is one of many activities that encourages
fluency of ideas.

c. *flexibility of ideas?* . . . . ③ 2 1 0
"Melody" is one of the many activities that encourages
improvisation, and improvisation makes use of flexibility
of ideas.

d. *originality?* . . . . ③ 2 1 0
"Nature" is one of the many activities that encourages
originality.

e. *redefinition?* . . . . 3 ② 1 0
"What is Music?" is one of several projects that encourages
redefinition.

f. *elaboration?* . . . . 3 ② 1 0
(from "The Creative Person")
"Melody" is one of several activities that encourages
elaboration.

6. *To what extent does this work encourage*
   children to produce musical ideas that
   are unusual and that are appropriate? . . . . ③ 2 1 0
   (from "The Creative Product")
   "Melisma" and "Nature Concert" are two of the many activities
   which encourage this.

7. *To what extent does this work encourage*
   teachers to show:
      a. *respect for unusual questions?* . . . . ③ 2 1 0
   Schafer's unusual requests encourage and demonstrate respect
   for unusual questions.

      b. *confidence in children by:*
         1. *valuing their ideas?* . . . . ③ 2 1 0
   Children are continually called upon to use their ideas;
   e.g., "Melisma" - Schafer instructs participants to draw
   a composition of their own and perform it.
         2. *granting freedom to explore their ideas?* ③ 2 1 0
   Schafer allows this within reasonable limit: e.g., he
   asks the class "to experiment with extended vocalization
   on one note or consonant."
         3. *granting freedom to explore their*
            environment? . . . . ③ 2 1 0
   Schafer quotes Marshall McLuhan: "We are entering a new age of
   education that is programmed for discovery rather than
   instruction." "Nature Concert" is but one example.
         4. *granting periods for non-evaluative*
            practice of ideas? . . . . ③ 2 1 0
            (from "The School")
   Many of Schafer's activities involve experimentation
   which necessitates this.

8. *To what extent does this work present*
   processes that involve:
      a. *open-ended questions?* . . . . ③ 2 1 0
   Schafer writes that his class, which is programmed for
   creativity, begins with a question, and he claims that "the
   secret is in the question asked"; e.g., What is music?
      b. *provocative questions?* . . . . ③ 2 1 0
   "The Sonic Environment" is one of many activities which
   utilizes such questions; e.g., "How does one describe the
   difference between my footsteps and yours?"
      c. *synthesis of ideas?* . . . . ③ 2 1 0
   The end result of "The Sonic Environment" is a chart which
   the class compiled, and it is a synthesis of ideas.

      d. *open-ended learning situations that encourage*
         the discovery method of learning? . . . . . . ③ 2 1 0
   Schafer writes that a class programmed for creation involves
   the learners, i.e., students and eventually teachers, in the
   act of discovery.
      e. *planned and guided experiences using*
         divergent thinking abilities? . . . . ③ 2 1 0
         (from "The School")
   "The Sonic Environment" is one of many activities that
   utilizes these.

9. To what extent does this work encourage
    children to:

    a. learn from their own mistakes? . . . . .③ 2 1 0
    Schafer writes: "I teach my students that their failures are
    more useful than their successes, because a failure provokes
    further thought and self-criticism.
    b. share and work together on ideas? . . . . ③ 2 1 0
    Schafer says that children should work together in groups of
    seven or nine.

10. To what extent does this work encourage
    children to use the following techniques
    when searching for ideas:

    a. brainstorming? . . . . 3 2 1 ⓪

    b. forced relationships? . . . . 3 2 1 ⓪

    c. check lists? . . . . 3 2 1 ⓪
        (from "The School")
    No mention is made of these techniques.

11. To what extent does this work encourage
    independent musical thought in all
    children? . . . . ③ 2 1 0
        (from "Detrimental Effects of a Conforming
               Environment on Creativity")
    Schafer writes: "I lead off a class by asking a question or
    setting a problem. . . . . The class must become an hour of a
    thousand discoveries. . . . ."

12. To what extent does this work stress the
    importance of using the following modes of
    creative expression in music:

    a. composition? . . . . 3 ② 1 0
    Composition is used to a lesser extent than is improvisation.

    b. improvisation? . . . . ③ 2 1 0
    Improvisation is used throughout this work.

    c. analysis? . . . . ③ 2 1 0
        (from "A Study by Peter R. Webster")
    Analysis is one of the three groups of exercises that
    Schafer says is related to the real core of music.

Group B

1. The Playground as Music Teacher: An Introduction to Music Through Games by Madeline Carabo-Cone

WHAT IS THE UNDERLYING PHILOSOPHY OF THIS WORK?

Carabo-Cone's programme is based on the following belief. "If we are in earnest about developing a musical culture as fine as any in the world, then we must realize that such a culture can thrive best in an atmosphere of musical literacy."[1] She also states that "before any fluency at any instrument is possible, the fundamentals of reading and rhythm must be improved."[2] Thus her contention is that the best time to absorb these fundamentals is during early childhood, and the best way is through variations on their favourite games.

She thinks that the use of games to teach music literacy is appropriate for two reasons. Firstly, "motor behavior is the most conspicuous characteristic in childhood."[3] Secondly.

> . . . the child invests the objects around him with life and constructs for himself a private magical world. Encouraged to identify himself with the material to be learned, the child absorbs the meaning of music symbols in the process of dramatizing them.[4]

Carabo-Cone explains that the impressions children gain when playing games are reinforced through associated sounds, physical movement, tactile experience and space relationships through comparisons.

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[1]Madeleine Carabo-Cone, The Playground as Music Teacher: An Introduction to Music Through Games (New York: Harper and Brothers, 1959), p. xiii.

[2]Ibid., p. xiv. [3]Ibid., p. xix. [4]Ibid.

Although these games have been adapted to the musical playing field for music-learning purposes, they retain their intrinsic elements of suspense, excitement, cunning, competition, secrecy, energy-release, muscular activity, and sheer luck.[1]

The purpose of this work is to provide an "outdoor-indoor educational recreation program that can be directed successfully by anyone."[2] Carabo-Cone suggests the supplementary use of records, instruments and other musical materials in order to have a full elementary music programme; yet her work, as it stands, is a fair representation of her sensory-motor approach to music learning.

WHAT PROCESS OF MUSIC EDUCATION DOES THIS WORK ADVOCATE?

The first two chapters equip the reader with the background information needed to lead musical games, e.g., acquaintance with the Grand Staff and the keyboard, with time signatures, with the relationship of whole and half-steps in the scale and with major and chromatic scales. She also includes suggestions for the "creative application" of this information, e.g.:

> Take some music paper, or better still, make your own Grand Staff of eleven lines, erase the sixth one up from the bottom, draw your clefs, and write some notes. To begin with write all quarter notes that get one swing each. Now go to the piano and play these notes.[3]

A second suggestion concerns "creative rhythms", e.g., "Composing a Waltz Tune":

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[1]Ibid., p. xxi. [2]Ibid. [3]Ibid., p. 30.

Cut out eight slips of paper, each three inches long. Make two creases so that you have three sections, each an inch long. . . .

In each of the three sections created by the two creases . . . put a quarter note. On the next one, write a half note on the first section to the left, skip the second section to indicate a continuing hold on that note, and put a quarter in the third section. . . .

Lay out four measures in a row with a match at the end of each one to act as a bar-line. . . . Play your results on the piano using your chart as a guide.[1]
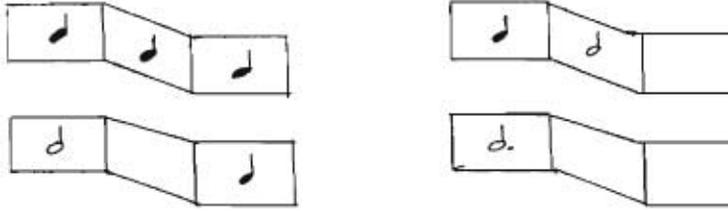
Carabo-Cone divides the more than 100 games, some of which are devised from popular street games, into elementary games (for 5 to 7 year olds) that develop rhythm and reading concepts, intermediate games (for 7 to 8 year olds), and advanced games (for 8 to 10 year olds) that include the use of accidentals and basic chords in various keys. Each game either introduces a new musical concept or "learning goal", or it reintroduces one. Note the "learning goal" as it appears at the conclusion of the first game.

ACQUAINTANCE WITH THE LINES AND SPACES

MUSIC: Singing to the tune of "How Do You Do, My Partner?"
EQUIPMENT: None, other than the playing field.
NUMBER OF CHILDREN: Any number.
GAME: Two children, both on the lowest line, stand side by side, facing the top of the staff. They sing:

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[1]Ibid., pp. 34-35.

How do you do, my partner?
How do you do today?
Will you dance on this bottom line?
I will show you the way.

"How Do You Do, My Partner?"

Holding hands, they side-skip across the staff, staying
on the line.

Two new children come up to the staff and stand side
by side in the first white space. They sing: "How do
you do," etc. except that in the third line of the
verse they sing, "Will you dance in the first space?
I will show you the way."

Each couple goes through the same routine, except
that they go to the next higher line or space. In the
song, they specify which line or space. The lines are
designated: first, second, third, fourth, and fifth
for each staff, starting from the bottom line of first
the bass and then the treble. At Middle C, they sing,
"Will you dance on the Middle C line?" The spaces
above and below Middle C are referred to thus: "Will
you dance on the space below Middle C?" - or "above
Middle C?" A bit awkward fitting that many syllables
into the line, but it makes the children aware of these
spaces. . . .
LEARNING GOAL: Discrimination between lines and spaces;
spatial relationships on the staff through recognition
of first, second, third, fourth, and fifth lines of each
clef as well as recognition of first, second, third, and
fourth spaces in each clef and the space above and below
Middle C.[1]

Further "learning goals" for each of the remaining

elementary games follow in sequence, and there are approximately

forty-two. We shall look only at the first ten and the last

ten.

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[1]Ibid., pp. 57-59.

The first ten "learning goals" for the elementary games are:

1. Space relationships on the staff; personal association of staff line to a corresponding location on the body; ear training, and visual training.[1]

2. Familiarity with the musical alphabet, particularly the progression from G to A.[2]

3. Recognition of symbols, development of coordination, and intense concentration through the multiple interpretation of time-values.[3]

4. This variation has its own learning goal: the measure concept.[4]

5. Discrimination between lines and spaces. Recognition of G clef, G line, F clef, and F line, two important landmarks, as well as the magic Middle C line. This game stimulates alertness in reading up and down the staff as well as across the lines.[5]

6. Familiarity with time-value symbols.[6]

7. Concept that there is more than one B, C, or D on the staff. Complete mastery of the three notes in the section between the bass and treble. Ear training for the interval of an octave, the distance of eight staff degrees from one note to another of the same name.[7]

8. Attention to the area surrounding Middle C. Acquaintance with the upper and lower neighbors of Middle C.[8]

9. Awareness of bar-lines; concentration on the staff-lines.[9]

10. Strengthening the image of the Grand Staff, establishing the landmarks F and G; counting the lines and spaces to develop visual perception and a sense of space relationship; association of sound to staff; comparison of sounds to F and G; suggestion of leger-lines.[10]

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[1]Ibid., p. 60.   [2]Ibid., p. 62.   [3]Ibid., p. 66.

[4]Ibid.   [5]Ibid., p. 69.   [6]Ibid., p. 71.

[7]Ibid., p. 73.   [8]Ibid., p. 74.   [9]Ibid., p. 80.

[10]Ibid., p. 81.

The last ten "learning goals" for the elementary games are:

1. Instrumental application of staff reading. Memory training; transference from the large playing field staff to the music pad.[1]

2. Rhythmic coordination needed for feeling the beat and measuring both the time-values and the measure unit.[2]

3. Familiarity with notes on the staff. Opportunity to create tunes with these notes. Introduction to the unseen lines on either side of the staff (leger-lines) below the bass bottom line and above the top treble line.[3]

4. Personal relationship to the notes and the staff.[4]

5. Familiarity with leger-line concept, signature, and staff structure.[5]

6. Familiarity with octave relationships and the different locations for notes of the same name.[6]

7. Space relationships on the staff understood in terms of one's own body.[7]

8. First hand experience with note placements. Association of pitch with staff location.[8]

9. Recognition of higher and lower tones. Memory training in locating positions on staff.[9]

10. Discrimination between lines and spaces.[10]

To conclude, we present three games, one from each age group. An elementary game is:

1. MAGIC CARPET
Formation: Children march in single line in a circle on the staff.
Game: Certain spaces or lines of the staff are designated "magic carpets." These are not to be stepped on. Music is played (or sung), and whenever it stops abruptly, the children who happen to have stepped on the "magic carpet" lines or spaces are eliminated from the larger circle.

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[1]Ibid., p. 150. [2]Ibid., p. 154. [3]Ibid., p. 156.

[4]Ibid., p. 160. [5]Ibid., p. 164. [6]Ibid., p. 165.

[7]Ibid., p. 168. [8]Ibid., p. 169. [9]Ibid., p. 170.

[10]Ibid., p. 174.

If the playing field staff is large enough, they continue to march around in a smaller circle in the centre of the staff. Otherwise they would be eliminated entirely or they would merely be required to pay a forfeit.

The trick is to step across the "magic carpets." To begin with, use the F, G, and Middle C lines as "magic carpets"; later use other lines and spaces as the forbidden territory.

Learning Goal: Ingraining the staff image. Anything that is forbidden makes a stronger impression than that which is permitted.[1]

An intermediate game is:

2. TAKE A GIANT STEP

Formation: One player becomes the Giant and stands above the top line of the staff. He faces away from the players while telling them what kind of step and how many to take. However, as soon as he has answered the question "May I?" that each player must ask before taking any step at all, Giant may turn around abruptly to check on the player.

Game: All players stand on bottom line G.

THERE IS ONE IMPORTANT RULE TO REMEMBER: THE FIRST STEP IS TAKEN ON THE VERY LINE OR SPACE ON WHICH THE PLAYER IS ALREADY STANDING.

This forms the whole basis for reckoning intervals. For example: if instructed to take one baby step, the player who is stationed on bottom line G at the beginning of the game, will take a tiny, mincing step on that line and will end on that same line. . . .

At all times, the player must ask for the Giant's permission by saying, "May I?" If he begins the move before saying this, or if he takes the wrong kind or wrong number of steps, he forfeits his turn.

Learning Goal: Familiarity with intervals; finding out how they are reckoned and named.[2]

An advanced game is:

3. SHARPS, FLATS, AND NATURALS

"Rise and Shine"

Equipment: A cutout sharp.

Game: All the children squat on the lines and spaces diagonally up the staff. A cutout sharp is passed from child to child. As each child receives the sharp he stands up to show that it raises him up a half step. Anyone who fails to raise himself may be required to

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[1]Ibid., p. 147.   [2]Ibid., p. 193.

leave the game. The last one left on the staff wins.
"Go Down Flat"
Equipment: A cutout flat.
Formation: Children stand on lines and spaces
diagonally up the staff. As soon as the flat comes
into a child's hands, he squats down. Anyone failing
to do so has a point against him.
"Natural Winner"
Equipment: Cutout sharp, flat, and natural.
Game: Pass both sharp and flat symbols along the
line of children, one from each direction. Any child
who receives both at one time becomes a Natural,
earns a point, and wears the Natural symbol. Four
points earn a whole note; first one to gain a whole
note, wins.
Learning Goal: Acting out the required reaction to
a sharp or flat symbol.[1]

Having presented the philosophy and the process of

music education as found in The Playground as Music Teacher:

An Introduction to Music Through Games, we are now in a position

to answer the questions that will determine to what extent this work

supports the importance of creativity in elementary music

education.

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[1]Ibid., pp. 226-227.

EVALUATION FORM

WORK: The Playground as Music Teacher: An Introduction to
Music Through Games

AUTHOR/S: Madeleine Carabo-Cone

PLACE, PUBLISHER & DATE: New York: Harper and Brothers, 1959.

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Each question has one of 4 possible answers as listed
below; each one indicates the extent to which the
work supports the point in question. The relevant
number will be circled for each question, and a brief
explanation will be given to verify the answer.

3. This indicates that the point in question receives
   strong support, either explicitly or implicitly.

2. This indicates that the point in question receives
   moderate support, either explicitly or implicitly.

1. This indicates that the point in question receives
   weak support, either explicitly or implicitly.

0. This indicates that the point in question receives
   no support, either explicitly or implicitly.

1. *To what extent does this work take cognizance of the fact that creative behaviour is thought by some eminent psychoanalysts and psychologists to be innate in each individual? . . . .* 3 2 1 ⓪
   (from "The Creative Mode of Thinking")

   This work takes cognizance of kinesthetic "feedback" produced by body movements and of self involvement to teach music literacy.

2. *To what extent does this work emphasise the presentation of activities or "contingencies" which may result in creative behaviour? . . . .* 3 2 1 ⓪
   (from "The Creative Mode of Thinking")

   The activities are games which result in correct or incorrect behaviour.

3. *To what extent does this work encourage children to use the creative process, i.e., any of the steps that are similar to or the same as the first four steps of S. J. Parnes' creative problem-solving process:*

       a. fact-finding? . . . . 3 2 1 ⓪
   The use of games, as a teaching device, allows for children to follow rules set down in order to play the games.

       b. problem-finding? . . . . 3 2 1 ⓪
   The explanation is the same as that given for 3 a.

       c. idea-finding? . . . . 3 2 1 ⓪
   The explanation is the same as that given for 3 a.

       d. solution-finding? . . . . 3 2 1 ⓪
           (from "The Creative Process")
   The explanation is the same as that given for 3 a.

4. *To what extent does this work encourage
the following capacities in children:*

   a. *curiosity?* . . . . 3 2 1 ⓪
The author writes that the intrinsic elements of the games are
"suspense, excitement, cunning, competition, secrecy, energy-
release, muscular activity, and sheer luck."

   b. *initiative?* .3 2 1 ⓪
The explanation is the same as that given for 4 a.

   c. *critical faculties?* . . . . .3 ② 1 0
Children are called upon to determine right and wrong
answers.

   d. *intuitive ideas?* . . . . 3 ② 1 0
Children are sometimes encouraged to guess the answers.

   e. *aesthetic judgment?* . . . . .3 2 1 ⓪
This is given no consideration.

   f. *wide range of interest beyond music?* . . . . 3 2 1 ⓪
     (from "The Creative Person")
The work deals only with the teaching of music literacy.

5. *To what extent does this work encourage any
of the aptitudes for creative thinking, as
identified by J. P. Guilford, with respect
to music:*

   a. *sensitivity to problems?* . . . . 3 2 1 ⓪
The games do not encourage this.

   b. *fluency of ideas?* . . . . .3 2 1 ⓪
Correct answers are encouraged.

   c. *flexibility of ideas?* . . . . .3 2 1 ⓪
The explanation is the same as that given for 5 b.

   d. *originality?* . . . . 3 2 ① 0
Though not encouraged in the games, one of the suggestions of
"creative application" of information such as time signatures,
is that children "compose a waltz tune."

   e. *redefinition?* . . . . .3 2 ① 0
It is possible that children who give wrong answers may
redefine their answers when told that they are wrong.

   f. *elaboration?* . . . . 3 2 1 ⓪
     (from "The Creative Person")
As the answers that children are requested to make are the
right answers, there is no call for elaboration.

6. To what extent does this work encourage
   children to produce musical ideas that
   are unusual and that are appropriate? . . . . 3 2 1 ⓪
   (from "The Creative Product")
   The ideas called for are correct ideas, not unusual ideas.

7. To what extent does this work encourage
   teachers to show:
   a. respect for unusual questions? . . . . 3 2 1 ⓪
   The teacher is present to teach the games to the children and to
   administer the rules.

   b. confidence in children by:
      1. valuing their ideas? . . . . 3 2 1 ⓪
      Only correct answers are valued.

      2. granting freedom to explore their ideas? . . . 3 2 ① 0
      In a few activities children are told to play
      some results on the piano.

      3. granting freedom to explore their
         environment? . . . . 3 2 1 ⓪
      Children play games that they are taught.

      4. granting periods for non-evaluative
         practice of ideas? . . . . 3 2 1 ⓪
         (from "The School")
      The games result in children being continually told
      that they are right or wrong.

8. To what extent does this work present
   processes that involve:
   a. open-ended questions? . . . . 3 2 1 ⓪
   This work makes use of the process of playing games according
   to the rules of the games.

   b. provocative questions? . . . . 3 2 1 ⓪
   The explanation is the same as that given for 8 a.

   c. synthesis of ideas? . . . . 3 2 1 ⓪
   The explanation is the same as that given for 8 a.

   d. open-ended learning situations that encourage
      the discovery method of learning? . . . . 3 2 1 ⓪
   The explanation is the same as that given for 8 a.

   e. planned and guided experiences using
      divergent thinking abilities? . . . . 3 2 1 ⓪
      (from "The School")
   The explanation is the same as that given for 8 a.

9. *To what extent does this work encourage
children to:*

    a. *learn from their own mistakes?* 3 ②1 0

Games sometimes allow children to learn from their
own mistakes.

    b. *share and work together on ideas?* . . . . .3 2 ① 0
       (from "The School")

Though children are not sharing ideas, they may work together
on some ideas in a few of the games.

10. *To what extent does this work encourage
children to use the following techniques
when searching for ideas:*

    a. *brainstorming?* . . . . 3 2 1 ⓪

    b. *forced relationships?* . . . . .3 2 1 ⓪

    c. *check lists?* . . . . 3 2 1 ⓪
       (from "The School")

No mention is made of these techniques.

11. *To what extent does this work encourage
independent musical thought in all
children?* . . . . 3 2 1 ⓪
    *(from "Detrimental Effects of a Conforming
Environment on Creativity")*

This work encourages children, through a sensory-motor
approach, to assimilate concepts of music literacy.

12. *To what extent does this work stress the
importance of using the following modes of
creative expression in music:*

    a. *composition?* . . . . 3 2 ① 0
One of the few times that composition is used is when
children are asked to "compose a waltz tune."

    b. *improvisation?* . . . . 3 2 1 ⓪
This is given no consideration in this work.

    c. *analysis?* . . . . 3 2 ① 0
      (from "A Study by Peter R. Webster")
Though children are primarily required to memorize, at times
they may analyse what they have learned, to arrive at
the correct answer.

2. <u>Music in the Elementary School</u>, 4th ed. by Robert
   Evans Nye and Vernice Trousdale Nye

WHAT IS THE UNDERLYING PHILOSOPHY OF THIS WORK?

Nye and Nye begin by saying that the general goal of
all music teachers is "to create a learning environment that
will not only develop the talents of the musically gifted but
will develop aesthetic musical responsiveness in all students."[1]
Thereafter, the authors turn to two books by Bennett Reimer,
<u>A Philosophy of Music Education</u> and <u>Toward an Aesthetic Educa-
tion</u> as the basis of their discussion.

Nye and Nye state that Reimer "proposes an
aesthetic approach to teaching music, . . ."[2] According to
the authors, "to have an aesthetic experience, the learner
first has musical perception, and follows this with a musical
reaction."[3] This means that children have the experience of
music, and then study part or all of what was experienced.
Nye and Nye confirm that "musical experience is the end, and
the study of music a means to that end,"[4] and they agree with
Reimer's emphasis on "exploration as the primary avenue to
music study; it is basic to an aesthetic approach or method."[5]
To continue the authors write:

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[1] R. E. Nye and V. T. Nye, <u>Music in the Elementary School</u>,
4th ed. (Englewood Cliffs, New Jersey: Prentice-Hall,
1977), p. 6.

[2] Ibid., quoting Bennett Reimer, <u>A Philosophy of Music
Education</u> (Englewood Cliffs, New Jersey: Prentice-Hall,
1970).

[3] Ibid. [4] Ibid., p. 7. [5] Ibid.

In order for students to perceive music . . . ,
they must be analytical listeners on their level of
development as they participate in all musical activ-
ities. To be an analytical listener a person must be
equipped with certain tools, and these are concepts
of rhythm, dynamics, tempo, melody, harmony, texture,
tone quality and form. Again, these are tools
developed and used by students in their exploration
of music; they are not ends in themselves.[1]

The authors define perception by referring again to

Reimer and his "behaviors such as discriminating, discerning,

discovering, recalling, relating, comparing, anticipating and

distinguishing."[2] And finally from Reimer, Nye and Nye list:

. . . four "means" behaviors that are aesthetic only
to the extent they influence perception and reaction:
producing music (singing, playing, composing, con-
ducting), analyzing music (examining, classifying,
comparing, contrasting, differentiating, and others),
evaluating music (judging, rating, criticizing,
justifying, ranking), and valuing music (liking,
identifying with, admiring, cherishing). The authors
would add degrees of disliking to the valuing list.
Acceptance of the above rationale is not intended to
deny the need for learning about the cultural heritage
and for experiencing music as a socializing influence.[3]

The authors write that in response to statements made

since 1959 concerning music education, i.e., the resolution of

the American Association of School Administrators of 1959,

the declaration of the National Association of Secondary School

Principals of 1962, the declaration of the Yale Symposium of

1963, and the Tanglewood Symposium of 1968:

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[1]Ibid.

[2]Ibid., quoting Bennett Reimer, "Aesthetic Behaviors in
Music," in Toward an Aesthetic Education (Reston, Virginia:
Music Educations National Conference, 1971), p. 76.

[3]Ibid.

. . . there has been brought into being a curriculum
based upon the concepts comprising the structure of
music as an academic discipline - those concerned with
tempo, dynamics, rhythm (duration), pitch (melody,
harmony), texture, tone quality and form.[1]

The materials presented by the authors are based on these

concepts along with the idea that music is "sound based" and

that "musical experiences should deal with broad areas"[2]

rather than with isolated activities like singing or music

reading.

Chapter 1, "History and Philosophy", concludes with:

When music functions as it should in the class-
room, children will enjoy music and have aesthetic
experiences with it. Enjoyment will result from
children's involvement in the processes of
planning, producing, analyzing and evaluating
musical experiences which grow out of realistic
personal and environmental problems that have
significance in their lives.[3]

Concerning the psychological environment, Nye and

Nye hold that time must be given to allow children to "inquire

into the various elements of music."[4] But first, children

. . . need to be taught the cognitive skills of
how to explore, experiment, compare, contrast,
hypothesize, interpret, generalize, analyze,
synthesize, evaluate, and apply acquired know-
ledge to the exploration and solution of new and
related musical problems.[5]

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[1]Ibid.

[2]Ibid.

[3]Ibid.

[4]Ibid., p. 17.

[5]Ibid.

No information is given regarding how these skills should be taught at this point; however, the authors do say that an atmosphere of acceptance and support of the children by their peers and teacher is necessary in order for learning to occur.

The design of any course of study should rest upon the teacher's knowledge of both the subject matter and the development of children, the authors advance, and it should also be individually based as all children are different. Reference is made to Piaget's stages of cognitive development as a guide, with the addendum that "all aspects of development are neither fixed nor necessarily orderly. . . . development is modifiable."[1]

Nye and Nye then proceed to discuss "Inquiry and Problem Solving."

> Some believe that creative inquiry is synonymous with the conceptual approach. When children solve musical problems by creating music of their own, they find a need to learn about tone qualities, repetition, contrast, balance, unity, variety, tension, release, dynamics, tempo, rhythm, melody, harmony, and notation. When they evaluate their compositions, they often find ways to improve and refine them. In these ways they discover a need for knowledge that has immediate application. The process . . . provides the motivation for children to learn more effectively.[2]

The process, to which Nye and Nye are referring, is the creative process, which they believe "is necessary for self-fuilfill-ment."[3] Further the authors believe that "children respond to learning whenever they become personally involved in this process, regardless of aptitude or socioeconomic background,"[4] and a six step problem-solving process is suggested as "an

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[1]Ibid., p. 23. [2]Ibid., p. 28. [3]Ibid. [4]Ibid.

effective way of learning."[1] The steps are:

1. Identifying and stating the problem.
2. Determining types of data sources needed.
3. Collecting data.
4. Processing pertinent data.
5. Making hypotheses and inferences.
6. Forming conclusions and generalizations and applying these to the solutions of new problems.[2]

Though the method of organizing instruction is important, they endorse that "the most single important factor is the teacher. A competent teacher can succeed with any feasible method."[3] The teacher should assist children to think conceptually, i.e.:

> . . . one progresses from the level of perception of objects, events and situations to making associations, to formulating concepts, to grouping two or more concepts to form a generalization, to applying the generalization in solving related problems.[4]

To facilitate the above, Nye and Nye maintain that the teacher must have a clear idea in mind of what the focus of the lesson is to be. The problem, be it a precept, concept or generalization, is then approached through discussion or through the making of questions. Further exploration of the problem should follow in a logical sequence of experiences that results in a "conceptually structured music program."[5] The authors express the belief that "in competent teaching . . . structure, content, and creative processes are combined in a meaningful pattern."[6]

It is on the structure of music, however, that Nye and Nye place emphasis.

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[1]Ibid., p. 29. [2]Ibid. [3]Ibid., p. 8.

[4]Ibid., p. 30. [5]Ibid., p. 33. [6]Ibid.

The current philosophy of learning emphasizes that beneficial and purposeful learning can be attained and used if it is acquired through a program that is organized around the basic structure of a subject. Therefore attention is being directed to the function and use of structure in the teaching and learning of music. Exploration and identification of appropriate learning experiences are involved in these concerns which will make it possible for children to acquire knowledge of the structure of the subject.[1]

Learning, according to Nye and Nye, involves three closely related aspects, and each has a place in the classroom: cognitive, psycho-motor and affective. We shall look at the first two aspects when we discuss their process. As affective learning involving "attitudes, emotions and values, whether good or bad, will be developed in the classroom, . . . teachers must plan for teaching children how to value";[2] thus, Nye and Nye include the following:

Encourage children to make choices and to make them freely.
Help them discover and examine available alternatives when faced with choices.
Help children weigh alternatives thoughtfully, reflecting on the consequences of each.
Encourage children to consider what it is they prize and cherish.
Give them opportunities to make public affirmation of choices.
Encourage them to act, behave, live in accordance with their choices.
Help them to examine repeated behaviors or patterns in their own lives.[3]

Recognizing that there are many attitudes towards music, that values differ, and that there is a place for every facet of music in music education, Nye and Nye write:

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[1]Ibid., p. 32.   [2]Ibid., p. 39.

[3]Ibid., quoting Louis E. Raths, M. Harmin and Sidney B. Simon, Values and Teaching: Working With Values in the Classroom. (Columbus, Ohio: Charles E. Merrill Books, Inc.), p. 39.

An intellectually sound position for a music teacher
to take is one that attempts to judge "good" music
in accordance with how well it performs its function,
and to operate in a climate of openness that admits
the exploration of every type of music to attempt to
find out what it is used for, how it is constructed,
and how good it is in its category.[1]

They believe that music relates to other areas, and
that the informal classroom has "assisted children in learning
relationships of facts and ideas by permitting them to cross
subject boundaries when necessary in seeking solutions to their
problems."[2] They also believe that "music has great value in
communicating to children the dignity and worth of other cult-
ures,"[3] and, for this reason, they encourage the use of African
and Asian music in the classroom.

With eleven of the nineteen general principles presented
by Nye and Nye as guides for teachers "in developing music pro-
grams and lessons"[4], we draw to a close this part of our discussion.

1. The teacher has obvious confidence in the child's
   ability to learn music.
2. The teacher employs a variety of activities and
   materials for individual, small-group and whole-
   class activities.
3. The teacher arranges for music problems to be
   solved by the children.
4. The children have musical experiences that are
   satisfying to them.
5. The children have good models with which to identify.
6. There is meaningful, varied and frequent practice
   that is essential for learning music skills.
7. The children see meaning and relevance in what they
   are doing as they make immediate functional applica-
   tions of these skills and procedures, as they become
   involved in establishing purposes, in the selection
   of appropriate activities and materials, and in
   assessing the degree to which the objectives have
   been realized.

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[1]Ibid., pp. 39-40. [2]Ibid. p. 40. [3]Ibid.

8. Children are taught the skill of asking different types and levels of questions and are encouraged and given opportunity to employ this skill.
9. The teacher is an active guide to learning, a co-learner, and a resource person who shares in class activities.
10. The children develop favorable self-concepts through successful individual, small group, and class music experiences.
11. Learners are free to explore, discover, question and to profit from making mistakes.[1]

WHAT PROCESS OF MUSIC EDUCATION DOES THIS WORK ADVOCATE?

Nye and Nye touch on the idea of individualized instruction. This is their attempt "to actualize the educational principles of accepting all children 'where they are' in musical responsiveness and permitting them to progress as far as they are capable."[2] Individualized instruction necessitates that the teacher analyze children's capabilities and keep a close record of their progress. In other words the teacher is to plan individual learning experiences for children even though the children are in small groups, and the use of behavioural objectives is recommended because "the stated outcome of the activity can be observed and evaluated by both child and teacher."[3] Individualized instruction necessitates an informal classroom where individuals or small groups may move about, throughout the day, learning from each other and receiving help from the teacher who facilitates the learning.

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[1]Ibid., p. 41.   [2]Ibid., p. 43.   [3]Ibid., p. 47.

As most schools utilize classroom procedures, the
processes presented by Nye and Nye relate mainly to general
classroom activities. The reader will recall that the basis
of their process is the structure of music. They explain:

> When children learn the component parts of music in
> relation to a meaningful structure (main ideas),
> musical content is more readily understood and the
> details remembered for longer periods of time. As
> children employ structure they can use it in their
> future research and organization of knowledge, thus
> making it possible for them to transfer knowledge
> from one learning experience to another.[1]

> To understand the structure of music, children

> . . . must learn to process information at the data,
> concept, and generalization levels, since these three
> levels of information comprise the structure. If
> students are to process data and to grow in concept-
> ualization, they must learn to use different levels
> and types of thought processes. In assisting children
> in their development and use of varied levels of
> thought, the teacher assists them in using different
> levels and types of questions.[2]

Further on we shall look at the types of questions about
which they speak.

About the development of cognitive thought processes,
Nye and Nye advance:

> . . . the teacher begins by providing learners with
> data-collecting experiences by means of which concepts
> can be derived. Degrees of expansion and complexities
> of these concepts yield an increasing mental ability
> to interpret and to make generalizations. From there
> the process moves on to a higher level in which learners
> have practice in analyzing and synthesizing data,
> evaluating and judging as required by the experience
> or problem, and then they have an opportunity to make
> application of this knowledge in solving new problems.[3]

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[1]Ibid., p. 33.   [2]Ibid.   [3]Ibid., p. 34.

As the authors advocate that "thinking abilities" be activated, they present a model which deals with "formulating questions and using them to teach cognitive understanding and competencies," i.e., the model of Taba's Cognitive Tasks.

I   CONCEPT FORMATION (collecting and organizing data)
    In general, the sequence by which cognition takes place in the mind of the learner may be guided by Taba's three Cognitive Tasks and the sequenced questions listed under each task below. Concept formation is basic to other cognitive processes and is the necessary foundation for formulating generalizations.
A. Identifying and enumerating through the use of the ear, eye and body various musical characteristics, elements, objects, and events such as pitch, rhythm, instruments and concerts. What did you hear? See? Feel? (Identify. List. Examine. Compare.)
B. Grouping in accordance with common qualities, uses, or other characteristics. For example, types of chords, even and uneven meters, types of phrases, and classifications of instruments. How can we group these most logically? If we don't know, what can we do or where can we go to find out?
C. Discriminating between the features of these and abstracting common characteristics or elements, like the instances of 4/4, 5/4, 6/8 and 7/8 meters being different, yet containing the same note values or possibly using the same tempos. How are they alike? What names should we give to these categories?

II INTERPRETING DATA AND GENERALIZING
    After data have been assembled and ordered, and after an understanding of the relevant concepts has been achieved, it is possible to relate concepts and use them to form generalizations. Notice the types of questions that follow:
A. Examining the same aspect of music in several different compositions.
    Example: What are the outstanding rhythm patterns in each of these songs?
B. Comparing the same aspect of music in several different compositions.
    Example: Contrast these rhythm patterns; how are they the same; how are they different?
C. Generalizing.
    Example: This type of song tends to have a characteristic rhythm pattern.
D. Explaining.
    Example: The characteristic rhythm pattern is the result of each song's relationship to the same national dance.

III APPLICATION OF DATA, CONCEPTS AND GENERALIZATIONS

    Concepts, subconcepts, and generalization can be used to:

A. Compare objects, performances, activities or phenomena.
    Example: How can we use the concept of a stage work in comparing a stage play with an opera? . . .

B. Predict possibilities.
    Example: What do you think would happen if there were no woodwinds in symphony orchestras? . . .

C. Supporting predictions.
    Example: Why do you believe the woodwinds are needed in symphony orchestras? . . .

D. Verifying.
    Example: How can we find out if instrumental music in Asia includes woodwinds?[1]

As a basis for planning and teaching, Nye and Nye suggest that consideration be given to "four distinct levels of objectives." They are:

1. general school objectives (terminal goals)
2. music content objectives
3. instructional objectives (specific objectives for teachers)
4. behavioral objectives (stated in specific and measurable terms as objectives for children.[2]

The behavioural objective, when "well-written", states: "what the students are expected to do, under what conditions they are expected to do it, and to what extent (how well) they are expected to do it,"[3] and these objectives may be cognitive, affective or psychomotor, or a combination of any three. They explain that categories of learning under cognitive objectives are knowledge, comprehension, application, analysis, synthesis and evaluation; the categories of learning under psychomotor objectives

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[1] Ibid., pp. 34-35.   [2] Ibid., p. 59.

[3] Ibid., p. 60.

range from the lowest level of perception to the highest of
originating new skills, and the categories of learning under
affective objectives are receiving, responding, valuing and
organizing, according to the Krathwohl-Bloom taxonomy. Teachers
are encouraged "not to indoctrinate learners, but to
help them acquire information upon which to act and make judg-
ments with increasing independence."[1]

Having presented their "four distinct levels of object-
ives"[2] for music teachers, a short passage devoted to exploratory
objectives then follows. The authors explain that these object-
ives differ from behavioural objectives in that they are open-
ended and focus "upon experiences rather than precise outcomes,"[3]
and that they "free students to adventure into what are to them
uncharted avenues of music learning."[4] When students become
involved in musical experiences based on exploratory objectives,
they are:

> Seeking individual fulfillment through a music
> experience.
> Freely experimenting, exploring, and testing their
> own ideas.
> Disclosing their imagination in creative ways.
> Operating on hypotheses and intuition to create new
> musical sounds, forms and interpretations
> Employing analytical thought processes to seek
> musical meanings and results.[5]

Nye and Nye continue:

> Musical exploration and creativity can take many
> forms: improvisation, movement, composition, conduct-
> ing, interpretation, and experiments with sounds and
> instrumentation. Exploratory objectives should
> encourage students to find new ways that involve

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[1]Ibid., p. 62.   [2]Ibid., p. 59.   [3]Ibid., p. 64.

[4]Ibid.   [5]Ibid.

inductive and intuitive thought processes. The
Manhattanville Music Curriculum Program in Chapter
Eleven provides examples of this.[1]

The content of Nye and Nye's programme is selected from
the structure of musical knowledge, i.e., "the generalizations
and supporting concepts and data . . . arising from the compon-
ents of music: tempo, dynamics, tone quality, rhythm . . .
melody . . ."[2] It is "appropriate for the experiences and
activities through which the musical elements are experienced -
movement, composition, musical performance, and analysis of
music."[3] The authors explain that "a sequential, logical,
cyclical type of curriculum in which the learner proceeds from
the simple to the complex is employed."[4] A learner moves from
simple data, using every appropriate sense, through concepts,
requiring associative thinking, to generalization, based on
experiences. "Teachers do not 'teach' concepts; instead they
plan experiences and guide children so that they may develop
their own."[5]

There are two ways, according to the authors, that
children work "with musical facts, concepts, and generalization:
(1) listening to music, and (2) producing music by performing
and composing it."[6] As children begin the exploration of a
musical problem, Nye and Nye explain that one of the teacher's

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[1]Ibid., p. 64.   [2]Ibid., p. 67.   [3]Ibid., p. 65.
[4]Ibid., p. 67.   [5]Ibid., p. 70.   [6]Ibid., p. 80.

major tasks is to assist them by using a balance of four types

of questions to encourage four types of thinking:

1. Cognitive-memory Questions - "What is meant
   by this term or symbol?"
2. Convergent Questions - "Under what conditions
   are musical terms and symbols used?"
3. Divergent Questions - "What would happen if
   there were no terms or symbols?"
4. Evaluative Questions - "Are these the most
   appropriate terms and symbols needed for the
   best communication of this song's message?"[1]

We turn now to look at the four different approaches

from which Nye and Nye suggest that a teaching strategy may be

developed: movement, improvisation and composition, singing and

playing instruments and analysis.

1. Learning Music by Movement and Rhythm

The authors stress that listening to rhythm and respond-

ing with physical movement is of primary concern. First the

teacher "observes and uses the child's natural tempo."[2] Funda-

mental movements such as running or skipping will naturally arise.

Nye and Nye tell us that "the teacher controls and guides the

learning situation by helping the children relate familiar physical

responses to the music they are hearing."[3] Concepts such as

tempo and dynamics may be introduced after children are able to

relate their steps to the sounds made by the teacher, and one way

of introducing them is to play games. Children will discover in

their own time the relationships between various musical concepts.

The aim is that "by the end of the first grade most children will

have learned to walk, skip, run, and hop in time to music."[4]

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[1]Ibid., p. 81. [2]Ibid., p. 117. [3]Ibid..

[4]Ibid., p. 118.

They also suggest that there should be free rhythmic play when teachers ask questions such as "What did the music tell you to do?"[1], along with action songs, singing games, and dances.

With respect to percussion instruments, Nye and Nye suggest that the very young should be encouraged "to experiment with the sounds . . . of wood, paper, metal, . . ."[2], and to play games involving the identification of concepts like high-low. They also suggest that teachers ask questions to assist the children's exploration such as: "How many ways can you play it?" and "How many different sounds can you make with it?"[3] For those a little older working in groups, they suggest that instruments be introduced, "one or two at a time,"[4] and that the children select instruments to accompany a song.

They explain that "not until the second grade do most children perform either the metric beat or the melody-rhythm of a piece when asked."[5] Concerning notation we read that:

> Notation is brought in to explain what has taken place only after children have first heard and felt the rhythm pattern they are to see. After their experience with it, a picture of it (the notation) helps them visualize the concept.[6]

With regard to the use of musical scores, they write that "since the emphasis today is upon children's growth in creative ability and in musical discrimination, fully written

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[1]Ibid., p. 119. [2]Ibid., p. 129. [3]Ibid., p. 128.

[4]Ibid., p. 130. [5]Ibid., p. 129. [6]Ibid., p. 130.

published scores for percussion instruments are rarely used."[1]
The authors agree that at times a score may be needed; "it is
wrong only when this is continued to the exclusion of
opportunities for children to grow in listening, discriminating,
and in analyzing music in order to create their own scores."[2]
Children between the ages of 9 and 12 should be able to create
their own scores, according to Nye and Nye.

The authors' normal expectations with respect to rhythmic
activities for early childhood are these:

> Rhythmic activities are free and informal; they
> emphasize use of the big muscles in large, free
> motions. The children do imaginative and creative
> play in imitation of men, animals, and things. They
> become able to respond to simple patterns played on
> the drum, piano, tone block, or record player with
> actions such as walking, marching, running, jumping,
> hopping, skipping, galloping, and tiptoeing. Con-
> cepts of high-low, heavy-light, long-short, and
> soft-loud can be acquired. . . . Dramatizations,
> finger plays, and hand movements are done. Children
> learn to use some percussion instruments to tap in
> time with music and for sound effects that add
> interest and variety to musical experiences.[3]

Examples of rhythmic expectations for levels one and
two are:

> Ability to respond to fundamental movements with
> large free motions: walking, running, jumping, hopping,
> skipping, and combinations of these. . . . Ability to
> respond to rhythm with movements such as swinging,
> bending, twisting, swaying, stretching, pushing,
> pulling.
> Creative response to rhythm (rhythmic dramatiza-
> tion).

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[1]Ibid.   [2]Ibid.   [3]Ibid., p. 170.

Ability to do simple dance steps, skills, and formations including galloping, sliding, skipping, bowing, circling, singing games, circle with partner on the right.[1]

One of their suggested rhythmic activities is the following:

DOWN AT THE STATION

English Song
for Kindergarten through Second Grade

Not fast

Down at the sta - tion, ear - ly in the morn - ing,

See the lit - tle puf-fer bil - lies all in a row   See the en - gine driv - er

turn a lit - tle han - dle,   Chug, chug, puff, puff,   Off they go!

SOME SUGGESTED RHYTHMIC ACTIVITIES
Children
Clap the meter, four beats to the measure, as in measure 7; say "Chug, chug, puff, puff."
Clap the word-rhythm as you say the words.
Combine 1 and 2 by selecting appropriate percussion instruments for these rhythms.
Teacher
Select a rhythm pattern such as the note values in the first measure and have this played on a percussion instrument throughout the song. Children can learn it by repeating the words "Down by the station" in the rhythm of the first measure.[2]

Following their presentation of 6 more rhythmic activities, the authors point out that:

A primary problem with music lesson plans is how to guide children toward the learning of music facts and skills and the developing of concepts and generalizations in ways that truly attract children to music.[3]

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[1]Ibid.   [2]Ibid., p. 172.   [3]Ibid., p. 177.

Concerning this problem, they admit that "perhaps we can learn
from the <u>Manhattanville Music Curriculum Program</u> ideas which
help music lessons become interesting, profitable, and fascina-
ting to the learners,"[1] and, furthermore, that "some part of
most lesson plans should reflect aspects of the Manhattanville
exploratory approach."[2]

According to Nye and Nye:

> Learners may imitate, explore, discover, recognize,
> identify, inquire, contrast, differentiate, classify,
> verbalize, recall, and evaluate. They may utilize one
> or more of the following activities to do these things:
> singing, playing instruments, moving, creating, reading,
> dramatizing, impersonating, improvising, composing, and
> discussing. Utilize all the appropriate senses in a
> lesson plan: hearing, seeing, feeling with body
> muscles. Plan so that children listen before they
> attempt to respond with movement or with voices. Avoid
> presenting too much in one lesson.[3]

The authors go on to suggest developmental plans
for tempo, dynamics, beat, divisions of beat, rhythmic patterns
and form. Here is one example of such a plan.

TEMPO

A Developmental Plan

The children discover their natural tempo	The teacher adapts drum or piano accompaniment to the natural tempo of the individual learner.
The children recognize relative fast and slow in songs, drum beats, and in recorded music.	The teacher provides the opportunity for the children to compare two songs, one fast and one slow; and two recordings, one fast and one slow.
The children discover the concept of tempos appropriate for imitating animals or describing activities. The eye aids the ear.	The teacher uses songs and recordings that suggest appropriate rhythms for the movements of animals and man. The teacher

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[1]This is the next work which we shall evaluate.

[2]Ibid.   [3]Ibid.

The children see and identify tempo designations in the musical score and understand them.
The children are able to provide appropriate tempo names for music sung and heard.

draws chart-pictures of tempo vocabulary: a marching soldier - Di Marcia; a turtle - Adagio; a sleeping baby - Largo; a jet liner - Presto; a spinning top slowing down - Rallentando; a rocket taking off - Accelerando, and so on. The teacher selects music which encourages such identification.

"What would happen if the tempo of this song is slowed down?" "Let's try it." "Is the result better, or worse?" "Why do you think so?" "Can you think of ways to vary the tempo that might improve this song?" "What terminology can you use to describe the changes in tempo?"

Behavioral Objective: The children reveal their understanding of concepts of degrees of fast and slow by . . . . . (what specific performance, under what conditions, and to what extent).[1]

Having presented in detail one of the approaches from which a teaching strategy may be developed, according to Nye and Nye, we now look briefly at the remaining three.

2. Learning Music by Improvising and Composing

Once again Nye and Nye turn to the Manhattanville Music Curriculum Program, but with a note of restraint:

What is the sequence of activities that lead learners toward composing music? There is logic in the young child's attempting to imitate what is heard, taking steps to explore the sound-producing possibilities of the environment, evaluating these sounds, then using them to improvise, and finally to compose. Understanding the term improvisation requires some thought, because when an improvisation has been notated, it

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[1]Ibid., p. 178.

becomes a composition. . . . Bach, Beethoven, and Handel
were as renowned in their day for their improvisations
as for their compositions. But children in our class-
rooms are not famous composers, they are only young
people who can be fascinated by working with sounds.[1]

They continue by devoting the next twelve pages of their

text to experiences from the Manhattanville Music Curriculum

Program, a programme, they write, which "places composition in

reach of everyone."[2]

Nye and Nye urge that "careful planning is the rule

when teachers utilize improvisation and composition to achieve

the forming of music concepts,"[3] and they conclude by presenting

their own exercises for both, three of which are the following:

IMPROVISING AND COMPOSING

Accompaniment.	Provide an appropriate per-cussion accompaniment for selected poems and stories.
Beat and divisions of the beat.	Have small groups create a piece by using rhythm patterns derived from names.
Repetition and contrast.	Employing either vocal or instrumental sounds, plan a composition that begins and ends with the same sounds, but has different sounds in the middle. Invent a way to notate it. Tape the result; listen to it; and analyze the different ways in which contrast is achieved.[4]

3. Learning Music by Performing

Under this approach we shall look only briefly at the

first part of the process presented for pitch discrimination as

related to singing.

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[1]Ibid., p. 201.   [2]Ibid.   [3]Ibid., p. 213.

[4]Ibid., p. 214.

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PITCH DISCRIMINATION

Pitch.
Game: Children turn their backs to the teacher, identify the sound producer, and tell which pitch of two sounded is high or low. Later, ask them to match the pitch with their voices *if the pitch is in their normal singing range.*

Vocal imitation.
Ask children to imitate vocally by singing, whistling, or other mouth sounds, the sounds of birds, animals, musical instruments, train whistles, auto horns, and other environmental sounds.

High, low.
Game: The teacher of young children groups simple instruments or other pitch producers according to high and low in pitch. The children (one, two, or three at a time) experiment with them and compare their high and low sounds. Later the teacher mixes the sound producers and the children are asked to group them into those that produce high pitches and those that produce low pitches. . . .

Melodic contour.
Use parts of exemplary songs to discover that pitches can move in three general ways, up, down, or stay the same. Relate melodic contour to tension, climax, and release in melodies of songs.

Improvised question-and-answer.
Use tonal conversations in which the teacher sings questions, comments, or directions to which the children improvise singing replies. They may use any pitch they like.[1]

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[1]Ibid., pp. 287-289.

The process used in the penultimate chapter of this work, "Analysis", is based upon the knowledge which children have acquired as a result of their experiences with various musical concepts in the preceding chapters. The musical elements dealt with here are rhythm and tempo, dynamics, pitch, harmony, texture, form, tonality, tone qualities, and mood, and the musical examples include ethnic and intercultural as well as western music. We bring to a close our presentation of this work with the directions that Nye and Nye give to assist teachers when they plan a lesson that involves analysis at the primary level.

> Plan to develop children's vocabulary of descriptive
> and music terms. Plan questions to assist discovery
> of the outstanding aspects of the music to be
> studied. Do not expect to deal with all the [musical]
> elements . . . in any piece of music; . . .
> Questions should assist children to discover, verify,
> follow a sequence of events, and to examine music
> critically and analytically.[1]

Having presented the philosophy and process of music education as found in Music in the Elementary School, we are now in a position to answer the questions that will determine to what extent this work supports the importance of creativity in elementary music education.

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[1]Ibid., p. 375.

EVALUATION FORM

WORK: <u>Music in the Elementary School</u>, 4th ed.

AUTHOR/S: Robert Evans Nye and Vernice Trousdale Nye

PLACE, PUBLISHER & DATE: Englewood Cliffs: Prentice-Hall, 1977.

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Each question has one of 4 possible answers as listed
below; each one indicates the extent to which the
work supports the point in question. The relevant
number will be circled for each question, and a brief
explanation will be given to verify the answer.

3. This indicates that the point in question receives
    <u>strong support</u>, either explicitly or implicitly.

2. This indicates that the point in question receives
    <u>moderate support</u>, either explicitly or implicitly.

1. This indicates that the point in question receives
    <u>weak support</u>, either explicitly or implicitly.

0. This indicates that the point in question receives
    <u>no support</u>, either explicitly or implicitly.

1. *To what extent does this work take
    cognizance of the fact that creative
    behaviour is thought by some eminent
    psychoanalysts and psychologists to
    be innate in each individual?* . . . . (3) 2 1 0
    (from "The Creative Mode of Thinking")

Nye and Nye believe that the creative process "is necessary
for self-fulfillment."

2. *To what extent does this work emphasise
    the presentation of activities or
    "contingencies" which may result in
    creative behaviour?* 3 (2) 1 0
    (from "The Creative Mode· of Thinking")

Though they discuss "the creative process", they state that their
attention is being directed to the function and use of structure
in the teaching and learning of music, which requires precise
behaviour more than creative behaviour. They do, however,
present ideas from the MMCP which result in creative behaviour,
and at times their process results in creative behaviour.

3. *To what extent does this work
    encourage children to use the creative
    process, i.e., any of the steps that
    are similar to or the same as the
    first four steps of S. J. Parnes'
    creative problem-solving process:*

    a. *fact-finding?* 3 (2) 1 0
A six-step problem-solving process, which includes fact-
finding, problem-finding, idea-finding and solution-finding,
is presented, but its implementation receives little attention.

    b. *problem-finding?* 3 2 (1) 0
The explanation is the same as that given for 3 a,
but·problem-finding receives even less attention than the other
five steps of the problem-solving process.

    c. *idea-finding?* 3 (2) 1 0
The explanation is the same as that given for 3 a.

    d. *solution-finding?* 3 (2) 1 0
        (from "The Creative Process")
The explanation is the same as that given for 3 a.

4. *To what extent does this work encourage
the following capacities in children:*

    a.   *curiosity?* *3 2* (1) *0*
Questions based on Taba's cognitive tasks and their exploratory
objectives encourage curiosity, but the implementation of this capacity
is not discussed in relation to the presentation of musical concepts.

    b.   *initiative?* *3 2* (1) *0*
More emphasis is placed on sequential learning through exploring
and discovering musical concepts than upon encouraging
individual initiative.

    c.   *critical faculties?* . . . . (3) *2 1 0*
Teachers are encouraged to use evaluative type questions and also
warned "not to indoctrinate learners but to help them acquire
information upon which to act and make judgments . . ."

    d.   *intuitive ideas?* *3 2* (1) *0*
Though they write that "exploratory objectives should encourage
students to find new ways that involve inductive and intuitive thought
processes," the latter receives little support in the actual process.

    e.   *aesthetic judgment?* . . . . (3) *2 1 0*
They write that a goal of the music teacher is to "develop aesthetic
musical responsiveness in all students," and to begin with, "a
person must be equipped with . . . concepts of rhythm, dynamics, . . ."

    f.   *wide range of interest beyond music?* *3 2 1* (0)
    (from "The Creative Person")

This work deals only with music and its concepts.

5. *To what extent does this work encourage any
of the aptitudes for creative thinking, as
identified by J. P. Guilford, with respect
to music:*

    a.   *sensitivity to problems?* *3 2* (1) *0*
Though Nye and Nye advocate a creative problem-solving process,
they also emphasise equipping the child with a knowledge of music
concepts, and this takes precedence.

    b.   *fluency of ideas?* *3* (2) *1 0*
Teachers are encouraged to continually question children, and the
divergent type question is one of the four types of questions
suggested.

    c.   *flexibility of ideas?* *3 2* (1) *0*
They encourage composition and, to a lesser extent, improvisation
and the latter involves flexibility of ideas.

    d.   *originality?* *3* (2) *1 0*
They write that, "there is no better way to learn about music
than to compose it."

    e.   *redefinition?* *3 2* (1) *0*
If use is made of the creative process, which they present, then
this may occur.

    f.   *elaboration?* *3 2* (1) *0*
    (from "The Creative Person")
Though this is not specifically mentioned, the exploratory
objectives that Nye and Nye advocate would allow for, but not
necessarily encourage, elaboration.

*6. To what extent does this work encourage
children to produce musical ideas that
are unusual and that are appropriate?* 3 2 ①0
(from "The Creative Product")

Although the authors support the MMCP and suggest that it be used for improvisation and composition, when presenting their ideas, they encourage children to produce sequential, logical musical ideas.

*7. To what extent does this work encourage
teachers to show:*
   a. respect for unusual questions? ③2 1 0

One guide that teachers are given is that learners are free to explore, discover, question, and profit from making mistakes.

   b. confidence in children by:
      1. valuing their ideas? 3②1 0

This is explicitly mentioned when they touch on exploratory objectives in relation to the MMCP, and, as the authors do encourage question formulation, this is implicit to some extent.

      2. granting freedom to explore their ideas? .3②1 0

Though the main concern of this work is to impart the knowledge of the structure of the subject to the learner, it does encourage this in the early stages of concept formation and through improvisation.

      *3. granting freedom to explore their
         environment?* . . . . .3 2 1 ⓪

Children explore musical concepts.

      *4. granting periods for non-evaluative
         practice of ideas?* ③2 1 0
         (from "The School")

The creative problem-solving process incorporates this, and Nye and Nye support the MMCP which also incorporates this.

*8. To what extent does this work present
processes that involve:*
   a. open-ended questions? 3②1 0

The authors suggest that teachers ask a balance of 4 types of questions, one being divergent questions, and these are open-ended.

   b. provocative questions? 3②1 0

Divergent questions may also be provocative questions.

   c. synthesis of ideas? 3 2 ①0

The problem-solving process allows for this, but teachers are not shown how to incorporate this process in teaching the structure of music.

   *d. open-ended learning situations that encourage
      the discovery method of learning?* 3 2①0

Though they advocate objectives which are open-ended, they also advocate behavioural objectives which require precise outcomes. The latter receive the greater emphasis.

   *e. planned and guided experiences using
      divergent thinking abilities?* 3②1 0
      (from "The School")

The authors refer extensively to the MMCP, which does encourage this, but it would appear that the authors consider the ideas of MMCP to be a little beyond what they would suggest.

9. *To what extent does this work encourage*
   children to:

   a. *learn from their own mistakes?* . . . . ③ 2 1 0
   One guide that teachers are given is that learnèrs are free
   to profit from making mistakes.

   b. *share and work together on ideas?* . . . . ③ 2 1 0
   One of the eleven principles that teachers should be aware of is
   that "the children develop favorable self-concepts through
   successful individual small group, and class music experiences."

10. *To what extent does this work encourage*
    children to use the following techniques
    when searching for ideas:

    a. *brainstorming?* . . . . 3 2 1 ⓪

    b. *forced relationships?* . . . . .3 2 1 ⓪

    c. *check lists?* . . . . 3 2 1 ⓪
       (from "The School")
    No mention is made of these techniques.

11. *To what extent does this work encourage*
    independent musical thought in all
    children? . . . . 3 ② 1 0
    (from "Detrimental Effects of a Conforming
        Environment on Creativity")
    Though they do encourage exploration and discovery of aspects of
    the different concepts of music, the main objective is to teach
    the concepts comprising the structure of music.

12. *To what extent does this work stress the*
    importance of using the following modes of
    creative expression in music:

    a. *composition?* . . . . .③ 2 1 0
    This is one of the musical skills which the authors suggest will
    assist children in their understanding of music.

    b. *improvisation?* . . . . 3 ② 1 0
    They discuss improvisation as a way "to achieve the forming of music
    concepts," and present some activities involving improvisation; it is
    not listed, however, as one of the skills that will aid musical understandin

    c. *analysis?* . . . . ③ 2 1 0
       (from "A Study by Peter R. Webster")
    This is one of the activities through which, they say, musical
    elements are discovered, and they use analysis when they
    discuss concepts.

3. Manhattanville Music Curriculum Program:
   Final Report and MMCP Synthesis by Ronald B. Thomas
   MMCP Interaction by A. Biasini, R. Thomas and L. Pogonowski

WHAT IS THE UNDERLYING PHILOSOPHY OF THIS WORK?

The philosophy of the MMCP is an effort to create an alternative for music education in response to what was found to be the general situation in music education during their 1965 exploratory study.

> . . . except for the very rare instances, music education was a strait-jacket where everyone was expected to do, to think, be, respond, hear, learn, accept, reject and act in the same way. . . . There was little if any allowance for individual differences in perception or projection of musical thought. In spite of the fact that the vitality of music is derived from the uniqueness of thought of the creative musician, music education had become a monolithic system to program people to uniformity of perception.[1]

Two alternative programmes are presented as a result of the conviction that:

> . . . the course of music education could well influence the future of music in society. Should it focus on creating conditions which allow for personal judgment and creative thought, it could lead to the emergence of a new cultural era. Should it continue to pursue its supportive and subservient roles, it could lead to a further alienation between society and the arts.[2]

These programmes are "Synthesis", the spiral curriculum for children from 8 years and upwards, and "Interaction", a pre-cycle programme for kindergarten children from 4 to 8 years of age. We shall look first at the underlying philosophy of "Synthesis."

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[1] Ronald B. Thomas, MMCP: Final Report (Purchase, New York: Manhattanville College of the Sacred Heart: Washington, D.C.: United States Office of Education, Bureau of Research, ERIC document, ED 045 865, 1970), p. ix.

[2] Ibid. p. 56.

MMCP Synthesis

This programme clarifies at the outset its position
concerning the nature of the music. We read: "There are
three fundamental characteristics of music which transcend
the differences of specific styles, sound sources or other
idiomatic factors and give a meaning and a coherence to the
total art."[1] They are

1. . . . music is an agent for the projection and
   clarification of thought. It is a medium of
   expression . . . which serves a need not met by
   any other communication process. Through a
   distinctly unique and forceful language of
   sound, music conveys ideas and feelings in a
   way that is not matched by words or pictures.
   In this sense music becomes a way of knowing
   and experiencing. Thoughts are expressed,
   transmitted, received and clarified on an
   extremely personal and intimate level. This
   affects both the mind and the emotions. But
   it is in the indefinable ability of music to
   address the spirit of man that its greatest
   value as a communication process lies. . . .
   Knowing has assumed a proportion that goes
   beyond just rational consideration. . . .
2. . . . music is a continuing art, always sensitive
   to and interpreting the present. It is neither a
   static medium nor a completed monument of the
   past. . . .
3. The third characteristic is suggested by the
   first two, but relates music more explicitly
   to the intrinsic needs of man. Music is a
   vehicle for man in his constant search for
   individual creative fulfillment. . . . The
   result has been that this search has produced
   radical changes.[2]

In other words, "Synthesis" claims that:

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[1] Ronald B. Thomas, MMCP: Final Report, Appendix A,
MMCP Synthesis: A Structure for Music Education (Purchase, New
York: Manhattanville College of the Sacred Heart: Washington, D.C.:
United States Office of Education, Bureau of Research, ERIC
document, ED 045 865, 1970), p. 1.

[2] Ibid., pp. 1-2.

. . . these three fundamental qualities, the
expressiveness, the continuing and current nature,
and the vitality of the creative search are the
basic characteristics of music. They must be
the most immediate responsibility of the study,
underlying every classroom experience and evident
through every educational strategy. For without
this depth of perspective the learning of data,
skills and techniques has limited purpose, and the
full potential value of music to man is obscured.[1]

From each of these fundamental characteristics of music,
"Synthesis" derives characterising musical behaviours. The
behaviour derived from "the expressiveness" of music is that "a
musician is a producer . . . actively engaged" in producing
music "on a level of personal thought." The behaviour derived
from "the continuing and current nature" of music is that a
musician must be "familiar with and participate in the music of
the latter part of the twentieth century." The musician also
contributes "to the continual development of musical thought and
practice." The behaviour derived from the "creative search" is
that a musician is a "risk taker" and has and uses a "creative
imagination. He is far more a developer of thought than a
subservient follower of systems."[2]

Creative (in music), according to "Synthesis", refers

. . . to activities in which the student uses aural
imagination, aural insight, and aural judgment to
fashion sounds into music. The term does not apply
to skill-drills in notational formulae or activities
where the imagination is focussed on other than aural
expression.[3]

The musician, according to "Synthesis", is

. . . far more concerned with musical meaning than
musical mechanics; . . . he is inquisitive about

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[1]Ibid. [2]Ibid., p. 6. [3]Ibid., p. 38.

and cognizant of changing musical ideas; . . . his
participation in music is generated by his own
sensitivity and sense of fulfillment; . . . he is
constantly reaching beyond the level of his previous
experience; and . . . he uses music. He does not
simply stand back and observe it with reverence; he
uses it as a measure of creating, explaining and in
his own way, achieving.[1]

That the curriculum has artistic, personal, and social
relevance for students is of import in "Synthesis." To meet the
criterion of artistic relevance, "Synthesis" strives for consist-
ency between its position concerning the fundamental nature of
music and its programme. To meet the criterion of personal
relevance, the planners asked:

How do students regard their needs, and how must the
learning program be designed to help them to satisfy
these needs? What are the learning characteristics of
students, and what process for learning best utilizes
these characteristics? Does the student find intrinsic
meaning in his involvement?[2]

To meet the criterion of social relevance, "Synthesis"
demands that learning must "be in focus with the time . . .
further this curriculum reflects the concern that the learner
remains sensitive to the viability of music in a changing
society."[3] "Synthesis" contends that

. . . it is possible to plan the learning experience
on the basis of the nature of music and characteristic
musical behavioral objectives rather than on the
accrued habits and artificial structures of the educa-
tional system.[4]

We turn now to look at the four behavioural objectives
found in "Synthesis", with the realization that these divisions
are synthetic. These objectives are:

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[1]Ibid., pp. x-xi.   [2]Ibid., p. ix.   [3]Ibid.

[4]Ibid., p. 8.

1. <u>Cognitive Objective</u>

As the curriculum is developed on a spiral of five

musical concepts: "melody, rhythm, texture, dynamics and form,"

the student's musical growth is related to his assimilation

of these concepts into his expanding framework of reference.

"Synthesis" proposes that "this growth can be readily assessed

in an operational way since the nature of the learning process

within the MMCP program is based on creative output."[1]

2. <u>Attitudinal Objectives</u>

These fall into two categories.

The first concerns the attitudes of the student
about himself in relationship to the art such as
confidence, excitement, belief in the worth and
validity of his own creative potential, uncovering
and expanding the sense of inquisitiveness and sense
of personal security in intuitive thinking.[2]

The second concerns the student's feelings towards music.

It is essential that the student becomes fully
conscious of music as a personal medium, that he
understands music as being in tune with reality and
the essence of life as he knows it; and that he
regards music as a way of gaining more insight into
life.[3]

The entire process of learning, according to "Synthesis", "hinges

on the learner's belief in himself as a creative and productive

musician."[4] It is suggested that one way of assessing a student's

attitudes is for the teacher to ask: "Does the student exercise

his own creative and judicial potential, has he an open and

inquisitive mind, does he grope for new information and new

experience, etc.?"[5]

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[1]Ibid.   [2]Ibid.   [3]Ibid.

[4]Ibid.   [5]Ibid., p. 9.

3. Skill Objectives

Three skills are listed in this order: aural, dexterous, and translative (referring to the teaching of notation). The conviction is that "the development of these skills in isolation from other goals (cognitive, attitudinal, and aesthetic objectives) must be considered irrelevant experience."[1]

4. Aesthetic Objectives

"These cannot be taught; it is rather an intimate response that may grow from the nature of personal experience."[2]

"Synthesis" explains that

. . . no one can predict all the outcomes or even the most important of any experience. At best the preparation of behavioral objectives can help in assuring that the curriculum has meaning and movement, that both the teacher and the student will have direction and recognize progress. Some of the progress will be in terms of stated objectives. Much of it will be in areas not covered by the objectives but related to the total experience. For the student the unplanned discoveries may be the most significant learning.[3]

Turning next to the principles upon which "Synthesis" is based, we read the following:

1. The focus is on discovery which the MMCP believes to be "the most productive and exciting means for learning."[4] Differentiation is made between discovery and observation in "Synthesis." To explain what is meant by discovery, we read:

. . . discovery means first hand experience, intrinsic involvement, while observation implies recognition of

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[1]Ibid., p. 82.   [2]Ibid.   [3]Ibid., p. 11.

[4]Ibid., p. 16.

factors which, while they may evoke a personal
response, are basically external . . . to discover
the nature of interaction in musical sounds and
experience the power to create meaning with these
sounds is a far cry from an observation, even an
analytical observation, of the creative efforts of
others. While both discovery and observation are
vital in any learning program, the MMCP curriculum
is formed to assure that the process of personal
discovery is the foremost means of learning. All
subsequent observations can then be made within a
frame of reference shaped by experimental knowledge.[1]

The explanation continues:

When considering "discovery" in music education,
the term "creative" is naturally implied, for
true discovery of the nature of music usually
demands involvement in creative activity.
Creative activities are those in which the student
is involved in some form of composition or has the
responsibility of choice in combining or shaping
musical sounds. In such activities he will make
personal judgments of many musical factors in
order to fashion a meaningful and expressive work.
Through active experiments with sounds and structure
the student can discover for himself those concepts
of organisation and interaction which are funda-
mental to musical knowledge. Discovery is a totally
personal experience which evolves from the proof of
one's own hypothesis. Observation experiences which
are for recognition of structural factors and tech-
niques are educationally valid only when they are
used to amplify discovery experiences.[2]

2. The focus is on two types of concepts. The first is

inherent concepts

. . . which pertain primarily to the basic
characteristics of the materials of music. Also
included are fundamental and natural tendencies
which override the limitations of one style, period
or culture. For example broad ideas relative to
the musical significance of sounds being organized
in time are intrinsic to all music. Other basic
concepts are those of intensity and density.[3]

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[1]Ibid., p. 16. [2]Ibid. [3]Ibid., p. 17.

The second is idiomatic concepts "which deal with period practices, i.e., with the organizational schemes which have been devised by composers at one time or another."[1] "Synthesis" propounds that conceptual understanding is imperative for intrinsic involvement in music.

3. The focus is on the development of skills, i.e., aural, dexterous, and translative. Two relevant factors which must receive attention are pointed out:

> First, conceptual understanding can develop much faster than dexterous or translative skills. . . . Second, there is ample evidence which indicates that skill development does not necessarily lead to musical insight, . . . Conversely, in experimental work the MMCP team has observed that creative exploration with primary focus on conceptual understanding has had a most interesting effect on the development of some skills. Translative skills in particular appear to be assimilated easily by the student without excessive drills when the musical concepts and frames of references, the reason for translation, are established first.[2]

"Synthesis" expresses the belief that

> . . . essential to the development of musicality is the totality of experience in the musical process, and the most logical place to begin the study of music is with music of our time. It is relevant both artistically and educationally.[3]

The kind of educational environment suggested in this programme is determined by the position taken on the nature of the art and the nature of the study.

> The interpretation of substance demands a learning atmosphere in which a student has an unusual amount of both freedom to think and responsibility to act. The nature of the study requires classroom conditions in which creative exploration can thrive.[4]

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[1]Ibid. [2]Ibid., p. 19. [3]Ibid., p. 20.

[4]Ibid., p. 23.

The environment motivates intrinsic involvement, personal

growth and musical insight. The features of such an environment

are:

1. Students may chose (within boundaries)
    activities which excite them.
2. Students plan their own time to meet their own
    needs.
3. Individual and small group learning dominate.
4. Students judge and discover for themselves. The
    teacher is not the main judge.
5. More than half of the teacher's time is
    available to meet students' needs.
6. Music and life and life and music are integrated.
7. Simultaneous and divergent happenings occur.
8. Students help students.
9. Planning is based on a long time block - not
    day to day activities.
10. Students gain respect as musicians and as
    creative individuals.[1]

The role of the teacher is to be

. . . a guide, a creator of problems, a resource
person, a stimulator for creative thinking, and
an astute musician . . . sensitive to the creative
insights of students.[2]

"Synthesis" claims that "the creative classroom can

only function where the teacher as well as the students are

involved in creative discovery."[3]

The following questions, taken from the Preface of

"Synthesis", provide insight into the philosophy behind this

major curriculum of the MMCP project. The reader is asked:

Have you ever considered:

. . . that if all the works and theory from 1780
to 1880 were suddenly lost to the world, music
would still exist.
. . . that the purpose of education is to open minds
and to provide the substance and enthusiasm for

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[1]Ibid., p. 24. [2]Ibid. [3]Ibid.

continued personal discovery and growth.
. . . that notation is only a coding device, a
storage and retrieval thing. It's a system for
translating musical ideas for future recall not
for acquiring or developing musical sensitivity
or sensibility.
. . . that a composition is merely a statement of
musical thought, and everyone has musical thoughts.
. . . that in improvisation a musician employs
instant musical judgement.
. . . that the logic of discovery is far more
exciting than the logic of the discovered.
. . . that music is a viable art and "treasured
works" are but isolated moments in a vast history
that is still being made today.
. . . that discovery may be guided but never dictated
and creativity cannot be inflicted on students.
. . . that music is sound, not symbols, diagrams,
formulae, idiomatic practices or skills.
. . . that educators hold three totally opposing
views about music, the curatorial view, the social
and functional view, and the view of music as a
continuing art and a way of knowing.[1]

"Synthesis" provides a flexible guide to musical

learning experiences based upon the student's perspective

rather than a set pattern of concepts based upon the teacher's

perspective. We turn now to look at the underlying philosophy

of "Interaction."

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[1]Ibid., pp. iii-iv.

MMCP Interaction

"Interaction", the precycle programme devised for children from 4 to 8 years of age, is based on the rationale that "every human being, to a greater or lesser extent, is capable of creativity."[1] The contention is, however, that "in many cases creativity is stifled by the myriad forces of conformity."[2] The creative activities in "Interaction" attempt to reverse this process by creating a counter-atmosphere which is non-inhibiting and by developing "techniques and methods of working which release rather than inhibit the creative impulses."[3] It is stated that "in order to become intricately involved in music to derive meaning from it, the child must be encouraged, assisted and allowed to create it."[4] Furthermore, it is necessary to provide children with the opportunity to explore and to experiment on their own, because children are very good at teaching themselves.

> The child's exploration and experimentation lead to self-identification and awareness of individual limitations and strengths. Once the learner has an opportunity to discover himself in these terms, the teacher is in a position to assist him further in the creative process.[5]

The end result of children's encounters with music in "Interaction" is that "their unique perceptions, values and attitudes lead to self-knowledge and a self-identification

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[1] Ronald B. Thomas, MMCP: Final Report, Appendix B., MMCP Interaction: Early Childhood Music Curriculum by A. Biasini, R. B. Thomas and L. Pogonowski (Purchase, New York: Manhattanville College of the Sacred Heart: Washington, D.C.: United States Office of Education, Bureau of Research, ERIC document, ED 045 865, 1970), p.1.

[2] Ibid. [3] Ibid. [4] Ibid., p. 2. [5] Ibid., p. 3.

with their own creative abilities."[1] The basis of the

programme is that:

> . . . the study must provide the student with the
> fullest experience in music as dictated by the
> nature of the art. He must become involved in the
> total process, composing, performing, conducting,
> listening with sensitive awareness and evaluating.
> His participation in these activities must always
> be in the spirit of a musician, not an imitator.
> The study must deal with the inherent concepts of
> the art and be so formulated that the student
> discovers for himself the nature of interaction
> and relationship in the elements that bring meaning
> to music. Finally, the materials of instruction
> must be drawn from the total spectrum of the art
> with primary emphasis on the materials of the
> music of today. For the strongest bond between the
> musical art and the student is sensitivity to
> contemporary life.[2]

The four goals of "Interaction" are:

1. The Creative Process
   The principle goal is the experience itself,
   the involvement of a child as a creative active
   musician. The child learns by taking part in
   diverse encounters. He is not taught. He
   learns by experience. . . .
2. Aural Sensitivity
   Because sound is the language of music the
   emphasis is on the exploration of sounds, their
   nature and their expressive potential in a
   learning program conceived of and designed in
   terms of process. The following types of think-
   ing are encouraged:
   a. analytical thinking because it is essential
      that the child learns through experience
      not only to discriminate but to perceive
      the manner in which sounds are arranged;
   b. judicial thinking as the child is expected
      to determine whether the sounds are used
      effectively;
   c. creative thinking as it encourages the child to
      consider alternative arrangements of the
      sounds under consideration.

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[1]Ibid.   [2]Ibid., p. 6.

3. Musical Concepts

   Through a sensitivity to sounds, it is possible
   for the child to participate in the discovery of
   the basic concepts of sound manipulation and
   organization. . . . These concepts must be
   discovered in the process of exploring the inter-
   action and expressive possibilities of sounds. . . .
   Musical understanding implies the ability to
   comprehend meaning from the total effect of these
   combined sounds.

4. Skill Development

   These include basic performance skills, conducting,
   skills of aural discrimination (pitches, durations,
   timbres, dynamics, the relationships of combined
   sounds, and the recognitive tasks associated with
   extended listening), translative skills. Experience
   shows that children can assimilate translative
   skills easily when the musical concepts and the
   reason for translation are established. Imposing
   notational systems upon young children too soon will
   interfere with this development process.[1]

"Interaction" is based upon the belief that the

education of the young child is nurtured, on the one hand, by

experimentation with materials found in the environment and on

the other hand, through interaction with other persons.

> The nature of pupil involvement in creative
> open-ended music experiences revealed certain
> psychological and social factors related to the
> production of music and to increased understanding
> of it. Thus, developmental factors were identified
> and formulated into an operational schema known as
> the Developmental Phases of Musical Exploration.[2]

We turn now to consider these Developmental Phases.

WHAT PROCESS OF MUSIC EDUCATION DOES THIS WORK ADVOCATE?

MMCP Interaction

Designed to be used by classroom teachers, this process

of musical exploration is presented in five developmental

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[1]Ibid., pp. 7-8.   [2]Ibid., p. 10.

phases, i.e., "five distinct phases of the creative process in music for young children."[1] They are free exploration, guided exploration, exploratory improvisation, guided improvisation and reapplication. We look at the main points from this operational framework as presented in "Interaction."

Phase I – Free Exploration
Encounters in free exploration . . . provide the child with opportunities to discover and explore a wide variety of sound sources without predetermined goals. The child's explorations are motivated largely by his natural curiosity to probe and to experience the unknown. . . .

Further, experience has shown that the creative impulse reveals itself most freely in an atmosphere of acceptance, i.e., one in which the learner is free to explore all the possibilities of a given situation. . . .

Skill objectives are concerned with:
1. exploring a variety of sound sources in order to discover a wide variety of sounds.
2. exploring a wide variety of ways of producing sounds on a single sound source.

Cognitive objectives are concerned with:
1. developing awareness of a wide variety of sounds by identifying the sounds deliberately produced by themselves and other children.
2. recognizing the differences and similarities in sounds and identifying them operationally in ways which relate to personal experiences, and by describing general physical characteristics of the sounds.
3. identifying a wide variety of sound sources.

Attitudinal objectives are concerned with:
1. developing an openness to experience so that the child maintains an excitement for discovery.
2. sharing discoveries of new sounds and sound-producing techniques with the class.
3. engaging freely in exploratory activities initiated by the child and the teacher. . . .

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[1]Americole Biasini, R. Thomas and L. Pogonowski, MMCP Interaction: Early Childhood Music Curriculum 2nd ed., (Bardonia, New York: Media Materials), n.d., p. 13.

The function of the teacher . . . is to encourage the involvement of the child in sound-producing activities. . . . and

. . . it is important that the teacher develop within the child an openness to new experiences and an interest in interpreting meaning in this experience. . . .

. . . , there is need for evaluation. . . . Assessment reveals vital information about the musical development of the child and guides the teacher in designing new encounters tailored to the child's expressed and implied needs. Skill objectives, for the most part, can be assessed by observing the exploratory behavior of the child and considering the following sample questions: How are the sounds produced? Are the sound sources within the technical grasp and kinesthetic capabilities of the child? . . .

Cognitive gains . . . can be assessed largely by considering questions which relate directly to the cognitive objectives, i.e., to what extent can the pupil identify sound sources in his environment from the sounds they produce? . . .

Objectives in the attitudinal domain can be assessed by raising the following sample questions: Does the child engage freely in exploratory experiences? Does the child share his discoveries with the class when it seems appropriate?

Phase II - Guided Exploration

As an extension of free exploration, the encounters and materials in guided exploration are designed to encourage the child to investigate sound sources in greater breadth and depth. . . .

The objectives . . . for guided exploration deal with an extension of those previously described for free exploration.

Skill objectives are concerned with:
1. exploring given sound sources in new ways for additional sounds and sound producing techniques.
2. exploring given sound sources with a focus on qualitative factors.

Cognitive objectives are concerned with:
1. identifying impressions initiated by newly discovered sounds.
2. classifying sounds according to their acoustical parameters, i.e., timbre, volume, duration and pitch.

Attitudinal objectives are concerned with:
1. listening and responding to the sound discoveries offered by the teacher and other pupils.

2. recognizing and considering the efforts of other
   students in the class.

The function of the teacher. . . . is to identify
as nearly as possible the individual exploratory needs
of every child. . . . A major responsibility of the
teacher is to continually encourage the child to
identify the outcomes of his exploratory efforts in
ways which are compatible with individual learning
style. . . .

As in free exploration, assessment of the skill
objectives in guided exploration can be made by
observing the exploration of the child . . .

Cognitive objectives in this phase can be dealt
with largely by considering questions which relate
to the perception and classification of sounds. . . .

Attitudinal objectives in guided exploration
relate to the child's reactions to the sounds them-
selves and to his sensitivity toward the efforts of
others. . . .

Phase III - Exploratory Improvisation

The next step in the creative process in music
is the discovery of new relationships of sounds and
the structuring of these relationships into a variety
of expressive combinations and patterns. . . .
Children delight in testing newly found relationships
of sounds by organizing them into a variety of freely
structured patterns. . . . As they gain in knowledge
and control they begin to develop a personal idiom
or style which lends itself eventually to group
improvisation. . . .

. . . children become increasingly sensitive to the
sounds of other students and begin to relate to them.
Group improvisational characteristics begin to take
shape and often evoke heightened emotional responses.

Skill objectives are concerned with:
1. repeating one's own musical ideas and imitating
   the sounds and musical ideas generated by others.
2. developing greater technical control for
   repetition and imitation of sounds and musical
   ideas.
Cognitive objectives are concerned with:
1. organizing sounds into a variety of schemes.
2. the child adapting his manner of sound organiza-
   tion to meet his growing musical ideas.
3. identifying musical ideas according to their
   basic characteristics.

Attitudinal objectives are concerned with:
1. becoming increasingly aware of one's own
   ability to create interesting sounds and shape
   musical ideas.
2. exhibiting sensitivity to the creative efforts
   and products of others by copying, imitating
   and experimenting with sounds produced by other
   students and the teacher.

The first task of the teacher is to assist the
child in discovering and assimilating new relationships
of sounds. . . .
     The next responsibility of the teacher is to assist
the child in discovering varied arrangements of these
relationships into larger structures which he feels
are expressive and meaningful.

Evaluation of the skill objectives in exploratory
improvisation can be made by considering questions
which relate directly to the operations expected of
the child on the one hand, and by considering questions
which allow for a variety of outcomes on the other. . . .
     Questions such as those following will assist in
evaluating cognitive outcomes: How does the child
organize his sounds? How does he adapt musical ideas
(his own and others') to his own manner of sound
organization? . . .
     Attitudinal objectives can be assessed by questioning
the extent to which the child becomes aware and sen-
sitive to the musical sounds and ideas of others.

Phase IV - Planned Improvisation
     In planned improvisation the child is provided with
opportunities to experiment in the organization of his
musical ideas in a variety of ways. By establishing
certain parameters for himself or by following those
proposed by the teacher, the child directs himself to
this creative task. He draws on his own inventory of
sounds and ideas to make musical judgments. At the
same time the urge to produce and hear his own musical
thoughts motivates him to further develop and refine
performance skills. . . .

Skill objectives are concerned with:
1. gaining and refining performance and memory
   skills as demanded by the music.
2. employing these skills effectively in order
   to achieve satisfying performances.
Cognitive objectives are concerned with:
1. organizing groups of sounds into expressive
   and meaningful musical ideas.
2. identifying the ways in which sounds are
   arranged in planned improvisations.
3. determining whether the arrangements of sounds
   are used appropriately in the planned improvisation.

4. determining how the musical ideas heard in the planned improvisation can be created in other ways and what they suggest for other improvisations.

Attitudinal objectives are concerned with:
1. the children seeing themselves as creative persons.
2. working cooperatively with others in planning, performing, and assessing improvisations.

The teacher can facilitate the attainment of these objectives by providing suggestions and support as required by the child's creative involvement. . . .

The teacher must reassure the child that he has a sense of aural logic, a musical sense. . . .

Assessment of the skill, cognitive and attitudinal objectives in this phase of the DPME can be made by focusing attention directly on the operations identified in each objective.

Phase V - Reapplication

Sounds can be made in a variety of ways on many different objects. Often these sounds can be fascinating and fun to find and produce. The expressive implications of sounds may vary considerably when they are heard in various sequences and vertical combinations. Children soon learn that they can manipulate and organize the materials of music in ways that infer many different moods and feelings. A new sense of being is discovered; they can create, feel, think, evaluate, reject, interpret, control, express, reason, fashion sounds to their will. . . .

Skill objectives are concerned with:
1. broadening the range of performance capabilities by applying known techniques to new sound sources and situations.

Cognitive objectives are concerned with:
1. broadening the scope of expressive possibilities of basic musical ideas acquired through the first four phases.
2. extending musical frames of reference by listening to reference recordings of a broad spectrum of music.

Attitudinal objectives are concerned with:
1. developing a sense of confidence in one's own judgment.
2. developing an openness of new ideas, musical procedures, and decisions.
3. finding personal satisfaction on a plane beyond analysis of mechanics, techniques, or even concepts.

The teacher can assist in the reapplication of the child's musical ideas by varying and intensifying the encounters. This may be accomplished by changing the extent of creative demands, by allowing the child to frame part or all of the encounter and by encouraging him to organize his musical ideas in ways he has not previously tried.[1]

Having looked at the five developmental phases, here is an example of the first two phases as they appear in a learning experience from "Interaction."

ALTERNATE SERIES: METAL ENCOUNTERS

Phase I - Free Exploration

Objective: To explore a wide variety of sounds using metal sound sources.

Procedure: 1. Place a variety of metal objects, such as old kitchen utensils, large nails, horseshoes, pipes of varying sizes and lengths, metal bars, keys on a key ring, pans, pan lids, tea trays, empty coffee cans, etc., in a place designated as the sound materials center.
2. Encourage pupils to select and explore the objects for sounds. This may be done on an individual basis during the course of the school day, or pupils may select metal objects and share sounds in groups.
3. After adequate time for initial sound explorations, the following questions may serve to stimulate discussions of the sounds:
Were any sounds alike? If so, how were they alike?
Why were some sounds different? Could the differences be described?
Pupils will identify the differences and similarities in sounds in many different ways, including the physical techniques involved in performing them, relating sounds to personal experiences, and their acoustical characteristics, i.e., timbre, pitch, duration, volume.
4. Suggest that pupils find other metal objects, metal toys, pie plates, paint cans, etc., to add to the sound materials center.
5. All new objects should be explored for the variety of sounds they can produce.

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[1]Ibid., pp. 13-25.

Phase II - Guided Exploration

Objective: To explore a wide variety of metallic sounds and sound-producing techniques.

Procedure: 1. Invite pupils, as a class or in small groups, to find two very different or contrasting sounds with the metal objects they have selected from the sound materials center.

2. Allow an appropriate amount of time for exploration.

3. After individual pupils perform their sounds, other group members or the entire class should attempt to imitate the two contrasting sounds on other metal objects.

4. Discussion during and after performance and imitations may deal with the following: How was the sound made? Did the beater make a difference?
Can the sound be made in any other way?
Are any imitations exactly the same?

Note: A few minutes of exploration may be desirable before volunteers are ready to imitate a performed sound.

5. Pupils should be given two or three minutes of exploration time to investigate each of the following questions posed by the teacher:
What kind of sounds can you find that remind you of a clock ticking; water dripping; a baby walking; a father's heavy footsteps; a ball bouncing; teeth clattering; a horse galloping; a snake crawling?

6. After each question and a period (two or three minutes) of pupil exploration, volunteers can be invited to perform their sounds.

7. After all sounds have been performed and taped, listen to the tape and try to identify the sounds, i.e., clock ticking, snake crawling, etc.[1]

To conclude, we touch briefly upon the process which

is presented in "Synthesis."

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[1] Ibid., pp. 93-94.

MMCP Synthesis

This curriculum is both concept and process orientated. The primary goals are concept understanding and a sense of aural logic. The core of the programme is a spiral-type curriculum that considers the elements of music in gradually advanced levels called cycles.

> The information of the spiral is action-orientated.
> The structure has been conceived more as an
> instrument for progressive, creative operation
> than as a standard for passive observation or
> response.[1]

Sample strategies are suggested for teaching music at 16 levels (cycles). Each cycle deals with five musical concepts at increasingly advanced levels: timbre, dynamics, pitch, form and rhythm. The concepts are treated as open principles, not established regulations. The responsibility to interpret is that of the student; the responsibility for guiding the exploration falls on the teacher and the curriculum. Each concept is explored inductively, deductively, and intuitively. An example of the curriculum concept-spiral appears on the following page.

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[1] Ronald B. Thomas, MMCP Synthesis, p. 31.

MMCP Curriculum Concept Spiral

4. DYNAMICS
SHAPING WITH DYNAMICS

4. TIMBRE
COMBINING TIMBRES

4. PITCH
PENTATONIC GROUPINGS

CYCLE 4

4. FORM
IMITATION AND MOTIVE

4. RHYTHM
TWO EQUAL SOUNDS OR RESTS WITHIN ONE PULSE

3. DYNAMICS
FORTISSIMO PIANISSIMO MEZZO/PIANO

3. TIMBRE
CHOIR GROUPINGS BLEND

3. PITCH
USE OF THREE NOTES F, A, G, AND OCTAVE

CYCLE 3

3. FORM
OSTINATO

3. RHYTHM
SOUNDS AND RESTS WHICH SUSTAIN THROUGH PULSE

2. DYNAMICS
CRESCENDO DIMINUENDO

2. TIMBRE
CONTRAST

2. PITCH
DEFINITE PITCH RANDOM SELECTION

CYCLE 2

2. FORM
ELEMENTS OF DESIGN REPETITION

2. RHYTHM
SOUNDS AND RESTS CONCURRENT WITH PULSE

1. DYNAMICS
FORTE, PIANO, MEZZO/FORTE

1. TIMBRE
EXPRESSIVENESS THROUGH THEORY CHOICE

1. PITCH
INDEFINITE PITCH

CYCLE 1

1. FORM
OVERALL AURAL PLAN

1. RHYTHM
PULSE – TEMPO

PRE CYCLE

[1]Ibid., p. 39.

Students compose, conduct, perform and evaluate music. Built into the programme is the strategy whereby they learn from their mistakes and are encouraged to approach problems from a different perspective, if their first attempt at problem-solving is unsuccessful.

Having presented the philosophy and process of music education as found in the Manhattanville Music Curriculum Program: Final Report, Synthesis and Interaction, we are now in a position to answer the questions that will determine to what extent this work supports the importance of creativity in elementary music education.

EVALUATION FORM

WORK: 1. Manhattanville Music Curriculum Program: Final Report
and Synthesis by Ronald B. Thomas
2. MMCP Interaction by A. Biasini, R. B. Thomas and
AUTHOR/S: L. Pogonowski

PLACE, PUBLISHER & DATE:

1 and 2. Purchase, New York: Manhattanville College of the
Sacred Heart, 1970. Microfiche, ED 045 865.
2. 2nd ed. Bardonia, New York: Media Materials, n.d.

Each question has one of 4 possible answers as listed
below; each one indicates the extent to which the
work supports the point in question. The relevant
number will be circled for each question, and a brief
explanation will be given to verify the answer.

3. This indicates that the point in question receives
strong support, either explicitly or implicitly.

2. This indicates that the point in question receives
moderate support, either explicitly or implicitly.

1. This indicates that the point in question receives
weak support, either explicitly or implicitly.

0. This indicates that the point in question receives
no support, either explicitly or implicitly.

1. *To what extent does this work take*
    cognizance of the fact that creative
    behaviour is thought by some eminent
    psychoanalysts and psychologists to
    be innate in each individual? . . . . ③ 2 1 0
    (from "The Creative Mode of Thinking")

The rationale behind "Interaction" is that "every human being,
to a greater or lesser extent, is capable of creativity."
Furthermore, that "music is a vehicle for man in
his constant search for individual creative fulfillment."

2. *To what extent does this work emphasise*
    the presentation of activities or
    "contingencies" which may result in
    creative behaviour? . . . . ③ 2 1 0
    (from "The Creative Mode· of Thinking")

The creative activities in "Interaction" are an attempt to create
an atmosphere which is non-inhibiting by developing techniques and
methods of working which release rather than inhibit the creative
impulse.

3. *To what extent does this work*
    encourage children to use the creative
    process, i.e., any of the steps that
    are similar to or the same as the
    first four steps of S. J. Parnes'
    creative problem-solving process:

    a. *fact-finding?* . . . . ③ 2 1 0
    "Free exploration", the first of the five developmental stages
    of "Interaction", provides for this.

    b. *problem-finding?* . . . . 3 2 1 ⓪
    Problems are rather presented to the children.

    c. *idea-finding?* . . . . ③ 2 1 0
    Cognitive objectives in each of the developmental phases of
    "Interaction" require idea-finding.

    d. *solution-finding?* . . . . ③ 2 1 0
        (from "The Creative Process")
    About creative activities the authors write: "In such activities
    he will make personal judgments of many musical factors in
    order to fashion a meaningful and expressive work."

4. *To what extent does this work encourage*
the following capacities in children:

a. *curiosity?* . . . . ③ 2 1 0
The first of two attitudinal objectives in "Synthesis" includes
"expanding the sense of inquisitiveness and sense of security
in intuitive thinking."

b. *initiative?* . . . . ③ 2 1 0
The first of two attitudinal objectives includes concern for "the
attitudes of the student about himself in relationship to the art",
and this includes belief in the worth and validity of his ability.

c. *critical faculties?* . . . . ③ 2 1 0
The development of analytical and judicial thinking are specifically
referred to as part of one of the four goals of "Interaction."

d. *intuitive ideas?* . . . . ③ 2 1 0
The explanation is the same as that given for 4 a.

e. *aesthetic judgment?* . . . . ③ 2 1 0
One of the four behavioural objectives is aesthetic objectives.
"These can not be taught," they write. "It is an intimate response
that must grow from the nature of personal experience."

f. *wide range of interest beyond music?* . . . . . . 3 ② 1 0
   (from "The Creative Person")
In "Synthesis" the development of curricular substance and process
is related not only to artistic relevance, but to personal
and social relevance.

5. *To what extent does this work encourage any*
   of the aptitudes for creative thinking, as
   identified by J. P. Guilford, with respect
   to music:

a. *sensitivity to problems?* . . . . ③ 2 1 0
Children are encouraged to approach problems from a different
perspective, if their first attempt at problem solving
is unsuccessful.

b. *fluency of ideas?* . . . . ③ 2 1 0
Numerous activities encourage this, e.g., "Metal Encounters" opens
with: "Place a variety of metal objects . . . in a place. . . .
Encourage the pupils to select and explore the objects for sounds."

c. *flexibility of ideas?* . . . . ③ 2 1 0
The explanation is the same as that given for 5 b.

d. *originality?* . . . . ③ 2 1 0
A fundamental characteristic of music, according to MMCP, is that
it is a medium of expression; as a result, originality is
encouraged.

e. *redefinition?* . . . . ③ 2 1 0
As children continually experience free exploration and
improvisation in "Interaction", they must also experience
redefinition of ideas.

f. *elaboration?* . . . . ③ 2 1 0
   (from "The Creative Person")
The stage of "Free Improvisation" in "Interaction" encourages
elaboration.

6. *To what extent does this work encourage
    children to produce musical ideas that
    are unusual and that are appropriate?* . . . . 3 ② 1 0
    (from "The Creative Product")

"Metal Encounters" from "Interaction" is one of several examples.

7. *To what extent does this work encourage
    teachers to show:*
    a. *respect for unusual questions?* . . . . ③ 2 1 0

"Interaction" attempts to establish an atmosphere where children
are free to ask any questions.

    b. *confidence in children by:*
        1. *valuing their ideas?* . . . . ③ 2 1 0

The end result of children's encounters with music in "Interaction"
is that "their unique perceptions, values, and attitudes lead to self-
knowledge and self identification with their own creative abilities."
        2. *granting freedom to explore their ideas?* ③ 2 1 0
The MMCP believes that it is "necessary to provide a child with the
opportunity to explore and experiment on his own."

        3. *granting freedom to explore their
            environment?* . . . . 3 2 1 ⓪
This is not taken into consideration in this work.

        4. *granting periods for non-evaluative
            practice of ideas?* . . . . ③ 2 1 0
            (from "The School")

In "Interaction" the authors write: "the child learns by taking part
in diverse encounters. He is not taught."

8. *To what extent does this work present
    processes that involve:*
    a. *open-ended questions?* . . . . ③ 2 1 0
In "Interaction's" first developmental phase, the function of the
teacher is "to cultivate an air of expectancy", and "Metal Encounters"
uses such questions.
    b. *provocative questions?* . . . . ③ 2 1 0
"Metal Encounters", phase two, provides examples of such.

    c. *synthesis of ideas?* . . . . ③ 2 1 0
The authors write that "creative activities are those in which the
student is involved in some form of composition or has the respon-
sibility of choice in combining or shaping musical sounds."

    d. *open-ended learning situations that encourage
        the discovery method of learning?* . . . . . . ③ 2 1 0
In "Interaction" the third developmental phase, "Free Improvisation",
involves open-ended learning situations that encourage the
discovery method of learning.
    e. *planned and guided experiences using
        divergent thinking abilities?* . . . . ③ 2 1 0
        (from "The School")
In "Interaction" the second and fourth developmental phases
involve this.

9. *To what extent does this work encourage*
    children to:

    a. *learn from their own mistakes?* . . . . (3) 2 1 0

This is central to the philosophy of the MMCP.

    b. *share and work together on ideas?* . . . . (3) 2 1 0

Two features of "Synthesis" are that individual and small-group-
learning dominate, and that students help students solve
problems.

10. *To what extent does this work encourage*
    children to use the following techniques
    when searching for ideas:

    a. *brainstorming?* 3 2 1 (0)

    b. *forced relationships?* 3 2 1 (0)

    c. *check lists?* 3 2 1 (0)
        (from "The School")

No mention is made of these techniques.

11. *To what extent does this work encourage*
    independent musical thought in all
    children? . . . . (3) 2 1 0
    (from "Detrimental Effects of a Conforming
        Environment on Creativity")

About music education the authors write: "Should it focus on creating
conditions which allow for personal judgment and creative thought,
it could lead to the emergence of a new cultural era."

12. *To what extent does this work stress the*
    importance of using the following modes of
    creative expression in music:

    a. *composition?* . . . . (3) 2 1 0

Students are continually writing their own compositions.

    b. *improvisation?* . . . . (3) 2 1 0

Half of the process of "Interaction" involves improvisation.

    c. *analysis?* . . . . (3) 2 1 0
        (from "A Study by Peter R. Webster")

Analysis is used as a means of pursuing "creative and
judicial involvement in music."

Group C

1. TEACHING MUSIC CREATIVELY IN THE ELEMENTARY SCHOOL by
Irving Cheyette and Herbert Cheyette

WHAT IS THE UNDERLYING PHILOSOPHY OF THIS WORK?

I. Cheyette, Director of Music Education of State University

at Buffalo, and H. Cheyette of Columbia Broadcasting System,

Inc., begin by saying:

> Written communication consists of symbols, which,
> to have meaning, presuppose an awareness of sensory
> images and intellectual concepts. The child, to
> enjoy and use music, must become musically literate.
> However, learning music notation . . . must
> be integrally related to experience . . .[1]

Thus, we are made aware in the first chapter, "Developing Music

Literacy", that a focal point of this work is the teaching of

notation. They write:

> . . . most music, being recorded only in printed
> music notation, requires interpretation by human
> performers. The desire of the child to create
> and share his creation enables the teacher to
> point out the need for its preservation.[2]

Furthermore, Cheyette and Cheyette propound that:

> Children must realize that notation is the composer's
> alphabet for conveying musical ideas, and that
> learning to read it is a prerequisite for communica-
> ting music ideas.[3]

They do explain, however, that "in succeeding chapters,

notation and terminology are introduced only as they are needed

to enhance and enrich the child's direct sensory musical

experience."[4]

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[1] I. Cheyette and H. Cheyette, Teaching Music Creatively in
the Elementary School (New York: McGraw-Hill, 1969), p. 1.

[2] Ibid., p. 2. [3] Ibid., p. 5. [4] Ibid., p. 21.

Although ten "creative activities" are listed for 5 - 8

year-olds and ten "creative skills" are listed for 10 - 12 year-

olds in the second chapter, it is not until Chapter Nine that

the subject of creativity receives significant attention.

Cheyette and Cheyette begin by saying:

> Creativity is not taught, only guided. A child
> is prompted to sing original tunes to himself, to
> build mud pies, to create patterns of design, to
> move rhythmically to organized sound, to create
> rhythms and games, or simply to build blocks, by
> a drive instinctive, yet distinctively human.[1]

In the same paragraph they continue:

> The aborigine beating rhythms on a tree trunk and
> Stravinsky composing a symphony manifest the same
> demiurge, the same need to creatively communicate.
> Although both seek to organize the medium of sound
> into an expressive pattern of tone, rhythm, and
> dynamics, Stravinsky has the advantage of three
> thousand years of evolving musical techniques.[2]

The authors next quote from well-known writers in the

field of creativity: H. O. Rugg and Ann Schumaker.

> The creative impulse is within the child himself. No
> educational discovery of our generation has had such
> far-reaching implications. It has a two-fold
> significance; first that every child is born with the
> power to create; second, that the task of the school
> is to surround the child with an environment which
> draws out his creative power.[3]

Further about the creative impulse, the words of James Mursell

and Mabelle Glenn are quoted: "Music education should be plan-

ned, not in terms of technique and drill, but in terms of self-

expression, emotional release, and the creative impulse."[4]

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[1]Ibid., p. 216.   [2]Ibid.

[3]Ibid., p. 217, quoting H. O. Rugg and Ann Schumaker, The
Child Centered School (New York: Harcourt, Brace and World,
1928), p. 228.

[4]Ibid., quoting James Mursell and Mabelle Glenn, The Psychology
of School Music Teaching (Morristown, New Jersey: Silver Burdette
Co., 1938), p. 21.

Cheyette and Cheyette then write, "Creativity cannot
be summoned by announcing: 'We are now going to become creative',
. . . it must be inspired."[1] They agree with Foster McMurray
who says: "The teacher must stimulate the child to synthesize
his experience, while educating him to judge that synthesis."[2]
Cheyette and Cheyette continue:

> Musically, the creative synthetic process [a phrase
> unique to these authors] can be fostered by demon-
> strating the manipulation of basic musical elements,
> by stimulating the child's sensory apparatus and
> imagination, and by relating the written symbols
> that represent music to the child's musical
> experience. Although technical requirements should
> not be allowed to impede expression, the child must
> be convinced that technical competence will enhance
> his satisfaction and that such competence can be
> acquired by diligent and logical application.[3]

The authors next quote from another well-known writer
in the field of creative studies, Harold H. Anderson, concerning
the creative process.

> Creativity must be thought of as a process of
> planning, experiencing, acting by the person who
> is creating the product. . . . It is rarely that
> from the product, one can infer or imagine the process,
> the struggle, the imagination, frustrations, endur-
> ance that went into the product. The reports of
> creative persons rather consistently imply that the
> process that produces a novel product is based on
> wide and deep knowledge and experience, in addition
> to skills, persistence and hard work. Creativity
> as process is important not because the product of
> each moment is such a gem but because the process
> is the essence of life itself.[4]

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[1]Ibid.

[2]Ibid., quoting Foster McMurray, "Pragmatism," in Basic
Concepts in Music Education (Chicago, Illinois: National Society
for the Study of Education, 1958), pp. 51-52.

[3]Ibid., pp. 217-218.

[4]Ibid., p. 218 quoting Harold H. Anderson, "Creativity and
Education," in College and University Bulletin XIII:14 (May 1,
1961, special issue), N.E.A. Washington, D.C.

Following this, the authors suggest, "the process of composition" as a means of teaching musical literacy.

> To create a musical composition requires mastery
> of the skill, insight, and information of a music-
> ally literate person. Thus the process of composition
> provides a means of challenging the class to acquire
> and synthesize the skills and information detailed in
> the preceding chapters.[1] [These chapters concern
> developing concepts of melody, rhythm, chord-skips,
> scales, and harmony.]

As Cheyette and Cheyette proceed with their discussion, it emerges that they are attempting to link the terms "creative process" and/or "creative challenge", i.e., composing and per- forming music, according to the authors, to the teaching of notation.

> The musically literate individual recognizes
> music because he not only *hears* but listens, and
> reads music because he is able to translate visual
> symbols into sounds. Therefore, the creative
> challenge cannot be confined to composing music,
> but must also include communicating music by
> notation. The learning of notation is thus
> integrated into the creative process and gains
> meaning for the child by reason of that process.
> As Mursell has emphasized, teaching music notation
> is important, but equally so is making such teaching
> part of a larger musical context.[2]

The authors complete their introductory remarks in the chapter "Developing the Innate Creativity of Children" with a final quotation, not about creativity, but about the teaching of notation from the leading music educator of the 40's and 50's, James Mursell. Here is the first part.

> The standard notation, in spite of its many anomalies,
> is our best and most adequate means of symbolizing

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[1]Ibid. [2]Ibid., p. 219.

musical concepts. The familiar "sol-fa syllables,"
with "movable do," constitute another symbolic
device, and a very useful one, for it represents key
relationships and tonality trends with unique clarity
and directness. These are working conceptual tools
for coping with and grasping the expressive organiza-
tion of the ordered world of sound. . . . It is
altogether necessary that these symbols be learned.
Otherwise, musical development is bound to remain at
a low level, and musical apprehensions to be vague,
crude, relatively incoherent.[1]

Following their introduction, ideas are presented for

"inspiring creative activity" such as "orally creating simple

rhymes and one-sentence melodies to be interpreted, dramatized,

and rhythmically orchestrated . . ." The authors explain that

through such experiences "the student should gradually achieve

the capacity to satisfy the complex creative demands summarized

at the close of this chapter."[2]

To understand what they mean by "complex creative

demands", the reader turns to the summary, only to find that,

again, they are linking creativity with the teaching of notation

through the process of composition.

The scientist must comprehend mathematics in the
context of experiment, the musician, notation
in the context of composition.
Enacting the process of composition in the
classroom and then discovering a means of conveying
that composition's pitch, rhythm, meter, mode, . . .
engages the child in an attempt to manipulate the
diverse musical concepts discussed in earlier
chapters.[3]

Their discussion moves on to the "structures of musical

form", and in connection with listening skills, they write:

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[1]Ibid., quoting James L. Mursell, "Growth Processes in Music
Education," in Basic Concepts in Music Education, op.cit., p. 153.

[2]Ibid.   [3]Ibid., p. 259.

Because music is an art that occurs in time, musical form must by definition consist of repetition of an aural sequence in various guises. Since the beginning of the twentieth century, . . . the trend of modern serious composition has been to change the traditional nature of the repeated aural sequence and the basis on which such repetition occurs. The abandonment of traditional concepts of melody, key, and pitch has deprived the audience of its accustomed cues to recognition, and assault its accustomed criteria of sensibility.[1]

Cheyette and Cheyette then proceed to divide the compositions written since the First World War into four major schools: "ethnocentric", e.g., Bartok and Ives; "electrocentric", e.g., Varèse; "equicentric", e.g., Schoenberg and Berg; and finally, "eccentric." Concerning the latter, which includes Cage and Stockhausen, they write:

The merely eccentric composers elevate aesthetic anarchy to doctrine. Dignified by the pseudo-academic description of "aleatory music", they create "chance noise."[2]

In the final chapter of this work, the authors call for the improvement of "the aesthetic level of popular music and other such aural sedatives." In their words:

. . . a major purpose of music education in a democratic society must be to help each member of the common audience develop, within the limits of his capacity, the ability to choose music wisely. Choice presupposes judgment, and judgment necessitates philosophy, a standard of taste.[3]

The writers urge the development of a catholic musical taste, and they agree that:

The child's choice of music will result from (1) his attitude toward music; (2) his standards or ideals

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[1]Ibid., p. 273.　[2]Ibid.　[3]Ibid., p. 342.

developed from previous experience with music;
(3) his knowledge of musicological, sociological
and biographical data associated with music;
(4) his skill and ability as a performer or creator
of music; (5) his associative and conceptual imagi-
nation and (6) his emotional, mental and muscular
agility.[1]

Cheyette and Cheyette claim that one's attitude to
music is the most important factor in "developing genuine
discrimination."[2] The teacher's function is "to order the
sequence of experience from which the child's standard of beauty
will be derived."[3] The end result will be the educated
listener, i.e.:

> . . . a gourmand of sound, acquainted with the
> technique of music, the chronology of musical
> style, and the biographical data of composers
> and performers. He can employ all facets of his
> knowledge and experience to stimulate his senses
> and nourish his mind.[4]

The authors contend that musical learning occurs "only
if melodic, rhythmic and harmonic imagery can be remembered."[5]
They refer to Schoen's suggestion that "the musical audience
may be divided into 'internal' and 'external' listeners."[6] To
explain the "internal" listener:

> The internal listener is able to analyze and dis-
> tinguish elements of tone, melodic line, harmonic
> structure, musical form, rhythmic interest. He
> can . . . translate sound into a mental image of
> the score, and the sight of music notation into
> imagined sound. . . . Three types of imagery are
> involved: aural, visual, and kinesthetic.[7]

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[1]Ibid., p. 348-349 quoting Charles Leonhard and Robert House,
Foundations and Principles of Music Education (New York:
McGraw-Hill Book Co., 1959), pp. 104-141.

[2]Ibid. [3]Ibid. [4]Ibid., p. 350. [5]Ibid., p. 352.

[6]Ibid., quoting Max Schoen, The Psychology of Music (New
York: The Ronald Press Co., 1940), pp. 114-126.

[7]Ibid., p. 352.

They maintain that the "external" listener's imagination, rather

his or her intellect, is stimulated by music, "evoking asso-

ciation rather than analysis,"[1] and conclude: "Generally, all

listening begins with an external or emotional response, and

becomes more rationally analytical as the listener becomes

musically educated."[2]

The final pages of this work contain a long quotation

from the Yale Seminar, and the authors have italicized those

points which relate to points they have made and wish to

emphasise.

> The development of musicality is the primary aim of
> music education from kindergarten through the
> twelfth grade. Musicality is universally understood
> by musicians, but it is a quality difficult to define.
> The analogous quality with respect to language would
> be verbal ability. Essentially it is the capacity to
> express accurately through pitch and time the *mental
> image* of a musical idea. Conversely it is the
> *capacity to grasp in its completeness and detail a
> musical idea heard*. It can be assumed that a degree
> of musicality is a natural attribute of everyone. . . .
> Since in most people this ability is only approximate,
> its cultivation is a continuous effort throughout a
> person's musical education. However, a basic
> musicality should be developed before the teaching
> of skills of reading, notation or composing is
> attempted. For all of these skills become mechanical
> and meaningless without it. As the *teaching of read-
> ing and writing music progresses*, corresponding pro-
> gress should be expected in the ability to express and
> grasp musical ideas. With the growth of this capacity,
> greater attention can be given to the musical ideas
> themselves.[3]

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[1]Ibid., p. 353.   [2]Ibid.

[3]Ibid., pp. 360-361 quoting Claude V. Palisca, Music in Our
Schools; A Search for Improvement. Report of the Yale Seminar
on Music Education, U.S. Department of Health, Education and
Welfare, Washington, D.C., 1964.

Their work ends by emphasising the importance of training.

> The child's cultural development, like his physical development, undergoes phylogenetic transformation. Like primitive man, he is sensible to "Sounds and sweet airs that give delight and hurt not," but unless trained he matures into a Caliban rebuking in his popular music his educators.[1]

It is unfortunate that the authors manifest a cultural bias in their effort to promote the importance of musical training, i.e., the teaching of musical literacy. We are reminded of their words from Chapter Nine when they referred to Stravinsky as having the advantage over the aborigine "of three thousand years of evolving musical technique."[2] Statements such as these are problematic and should not appear.

Cheyette and Cheyette conclude:

> Today the music teacher is encouraged to provide music of aesthetic value from which by analysis and experiment the child may gradually glean symbolic knowledge. This requires that the ear be tantalized before the voice and eye can be trained.[3]

WHAT PROCESS OF MUSIC EDUCATION DOES THIS WORK ADVOCATE?

Five consecutive chapters deal with the development of five different musical concepts, and we shall look, in detail, at the processes suggested for the development of the concept of melody. We shall then look, in less detail, at the processes suggested for the development of the remaining concepts: rhythm,

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[1] Ibid., p. 361.   [2] Ibid., p. 216.

[3] Ibid., p. 361.

chord skips, scales, and harmony as well as those which accompany

the chapters, "Developing Listening Skills" and "Developing the

Innate Creativity of Children."

Developing Concepts of Melody

This chapter opens by stressing the importance of music

literacy. Cheyette and Cheyette begin:

> In the primary grades, a principal objective of
> music education is to develop aesthetic sensitivity
> to music by creating musical literacy, the ability
> to comprehend music symbols. Such symbols will
> convey meaning to the child only if he has exper-
> ienced the materials represented.[1]

A lengthy quotation by Zanzig concerning the innate creative

potential of children then follows; its conclusion, however,

emphasises music literacy.

> Still another strand of activity must be mentioned
> as interestingly interwoven in the whole fabric of
> musical experiences. It is one that probably is
> entirely new to most if not all of the children when
> it is introduced. It is the beginning of SEEING music
> in a line of notes, getting ready to READ MUSIC.[2]

The first subheading under melody is "Teaching A New

Song," and the methods they suggest are the use of rote singing

and the question and answer technique. They urge that the first

classroom musical experience should be focused on tone as it is

"the most conspicuous sensuous quality of music,"[3] and stress the

importance of developing pitch consciousness.

The next subheading is "Demonstrating Tonal Relations by

Sign Language."[4] Cheyette and Cheyette maintain that the easiest

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[1] Ibid., p. 32.

[2] Ibid., p. 33, quoting Augustine D. Zanzig, "Education
Through Music, mimeographed form, Public Schools of Brookline,
Massachusetts, 1955, pp. 1-3.

[3] Ibid., p. 35.   [4] Ibid., p. 37.

interval for a child to grasp aurally is the octave, and that

hand signals should be used when learning the octave and new

notes on the scale. The procedures which the authors suggest

are the following:

> As each child's musical signature[1] is created,
> both teacher and class should sing and demonstrate
> the hand signals. . . .
> Once the class is familiar with the sign
> language for each child's signature, ask the children
> to guess signatures . . .
> Later, merely sing . . . the tone pattern
> representing the child's name. When the class
> identifies the signature, the named child must give
> the appropriate signs. Divide the class into two
> teams. . . . The teams should alternate, first a
> child on one side signalling, then a child on the
> other.[2]

Once the song and the hand signals are mastered, the authors

suggest adding numbers and then sol-fa syllables. A scale

ladder on which "the class will enjoy plotting melodic inter-

vals"[3] is also suggested.

Cheyette and Cheyette turn next to "Introducing the

Meaning of Scale" and write:

> A simple way to explain the meaning of a musical
> scale is to compare it to the units that measure
> weight and distance, intervals being a unit of
> measurement of music, as pounds are of weight, and
> feet are of distance.[4]

Drawings of scale ladders and games using musical speech are

suggested, and visual aids for measuring pitch intervals are

illustrated such as figure illustrations for songs, e.g.,

" 'Twinkle, Twinkle Little Star' may be represented by placing

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[1]Example: John-ny: do-me, 1-3.

[2]Ibid., pp. 37-39. [3]Ibid., p. 42. [4]Ibid.

various colored small stars for quarter notes, . . . "[1] In

addition, they say:

> Children enjoy learning the scale by numbers
> in foreign languages. Moreover, the difficulties
> of learning several words for the same pitch will
> emphasise to them the value of a universal musical
> syllabary that enables anyone anywhere to find the
> same intervals given the same keynote.[2]

"Staff Notation" now follows:

> After much singing using sign language, scale
> ladders, stairs and melody graphs, the class should
> be ready to transfer the scale ladder to the music
> staff, which is the notation system of musicians
> the world over.[3]

To introduce staff notation they begin by saying that

the staff "may be simply explained as an extension of the

fingers."[4] The teacher is to "place the back of the left hand

against the chalkboard with fingers parallel to the floor.

Draw a straight line from each finger."[5] The next step is to

"ask the children to imagine a music staff by holding their

left palm in front of them parallel to their body with fingers

spread."[6] After the children relate familiar songs to their

hand staff, the authors ask the children to draw the hand staff

into their music notebooks, . . ."[7] This eventually leads to

having "individuals describe tonal patterns on their fingers

within a given key tonality for the class to identify by singing

the pitch names."[8]

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[1]Ibid., p. 47. [2]Ibid., p. 45. [3]Ibid., p. 48.

[4]Ibid. [5]Ibid. [6]Ibid., p. 49.

[7]Ibid. [8]Ibid.

This chapter ends, as it began, by presenting procedures

for teaching a song, now, however, in summary form:

    I.   Synthesis: presentation of a song for enjoyment.
        A.   Focus listening through questions about the
            song text.
        B.   Sing as beautifully as possible or play a
            recording of the song.
        C.   Question about musical elements.
   II.   Analysis: learning through focused listening. . . .
  III.   Synthesis: heightened enjoyment in singing and
        listening. Develop
        A.   Information about musical elements.
        B.   Skills in singing, playing, listening.
        C.   Improved performance through critical
            evaluation of class activity.[1]

Developing Concepts of Rhythm

In the first few paragraphs the authors speak about the

importance of developing "the child's ability to express himself

rhythmically,"[2] and they give six suggestions which encourage

"free expression." The first three are:

> 1. Dramatize by interpretive dance and movement
> ballet plots such as the *Nutcracker Suite*, . . .
> 2. Interpret through movement the moods of
> lullabies, marches, gallops. Show the children
> how to imitate familiar moving objects: a falling
> leaf, . . .
> 3. Swing to the pulse of music in duple and triple
> meter and their compounds . . .[3]

The major portion of this chapter, however, is devoted to the

teaching of rhythmic elements.

They deal initially with "Sensing $\frac{2}{4}$ Meter" and this is

sub-divided into sections such as "Syllabic Rhythm", "Sensing

Pulse Silently", and "Drum Talk." Here is the method suggested

for "Drum Talk", a method not unlike those suggested for the

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[1]Ibid., pp. 51-52.   [2]Ibid., p. 54.   [3]Ibid.

other sub-divisions in this chapter.

    1. Divide the class into two teams.
    2. Establish a walking tempo with the drum, while
counting two-beat measures.
    3. Ask the children to listen carefully to the
following four-measure phrase on the drum:

$$\tiny \textrm{(drum rhythm notation)} \quad ^2_\bullet = {}^2_4 \; \downarrow\downarrow \mid \downarrow\downarrow\downarrow\downarrow \mid \downarrow\downarrow \mid \downarrow \parallel$$

    4. See if the class can repeat the phrase, clapping
the rhythm while tapping the left toe on the strong
beat.
    5. Ask a child on Team One to describe the components
of the phrase, using the words "walk," "run," and
"hold," . . .
    6. Ask the same child to demonstrate his interpre-
tation of the drum rhythm by performing the appro-
priate steps as the proper tempo. If he interprets
accurately, his team scores a point.
    7. After his interpretation, the child must tap a
different rhythm of four measures, using similar
phrases, which a member of Team Two must describe
and perform as in steps 5 and 6.
    8. Try to include rests in the game . . .
    9. Symbolize the drum patterns with duration lines
and then by notation. . . .[1]

This chapter ends with a summary of five points the
children should have assimilated; e.g., "The number of beats in
a measure depends upon the speed of tempo of the music."[2]

Developing Concepts of Chord Skips

The learning sequence that the authors propose is from
ear to voice to eye, and they explain that "chord intervals
must be heard and sung before being read." Their procedure is:

    1. Teach a song that incorporates the chord intervals
        to be learned.
    2. Focus attention on the chords used in the song's
        accompaniment.
    3. Teach visual and vocal recognition of the chords by
        means of visual aids and musical games.[3]

Both primary and secondary chords are used.

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[1]Ibid., p. 63.   [2]Ibid., p. 86.   [3]Ibid., p. 88.

Developing Concepts of Scales

This chapter deals with "learning to recognize types of scales in order to lend intellectual interest to listening and stimulate further research about the structure of music."[1] The pentatonic, major, minor and exotic scales as well as modes are dealt with through the use of songs and the keyboard, and their own devices called scale finders and ladders. Primarily children are shown and told what to do, e.g., "Ask the class to count the number of half steps . . ."[2]

Developing Concepts of Harmony

Concerning the introduction of harmonic concepts to children, Cheyette and Cheyette write:

> To help the child develop independence in carrying
> a part, the teacher can employ canons, rounds, chants,
> partner song combinations, . . . as well as imitations
> of instrumental sounds. Countermelodic, descant,
> and harmonic intervals can also be translated from
> sign language to numbers, syllables, and ultimately
> to music notation.[3]

This chapter consists of ideas "for accomplishing all of these."[4]

Developing Listening Skills

An example of the procedure suggested by the authors comes from their "sample listening lesson" used for a third grade lesson plan to illustrate theme and variation from Haydn's Surprise Symphony.

1. Play the Andante movement.
2. Can the class explain the reason the symphony is nicknamed "Surprise"?
3. Locate Austria and the city of Vienna on the map of Europe.

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[1]Ibid., p. 135.   [2]Ibid., p. 112.   [3]Ibid., p. 140.
[4]Ibid.

4. Discuss Franz Joseph Haydn, born in 1732, the same year as George Washington.

5. Demonstrate the use of folk themes derived from his farm boyhood . . .

6. Teach the class to sing the opening theme of the Andante on a neutral syllable "loo" from a previously prepared theme chart.

7. Play the recording again and ask the children to raise their hands every time they hear the theme, . . .[1]

Developing the Innate Creativity of Children

The following is the "list of procedures to be used in a Creative Music Lesson" from Cheyette and Cheyette.

1. Choose subject.
2. Select mood words.
3. Create first line.
4. Choose new words to rhyme with last word of first line.
5. Analyze metric pulse of first line.
6. Ask the class to read the verse, accenting the words that create poetic metre.
7. Place a vertical line in front of accented words to separate into metric measures.
8. Ask the class to read the poem aloud after completing the entire verse. Inflections should be charted on the board, perhaps in coloured chalk.
9. Extract and chart verse rhythm.
10. Discuss mood, and analyse the modality that best fits the mood of the particular poem.
11. Create the tune in the mode selected, following the expressive inflection chart.
12. Draw the scale ladder on the board with numbers, syllables, and pitch names.
13. Analyze the melody in terms of numbers related to the scale ladder.
14. Relate the scale ladder to the keyboard symbolizing the half and whole step.
15. Develop notation; derive the music staff from the fingers of the left hand and draw it on the chalkboard.
16. Place the melody on the music staff, adding terminology indicating tempo dynamics, expression; harmonize and score for rhythm and melody instruments.

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[1] Ibid., p. 276.

17. Introduce additional songs concerning the same subject, adding scoring for rhythm and melody instruments; dramatize.
18. Tape-record performance for evaluation.
19. Present recorded music inspired by the same experience.[1]

Other activities are also suggested, such as discovering sound sources, e.g., scraped objects or blown objects; employing sound painting to accompany a story; and improvising irregular rhythms based on children's names. We conclude our presentation of the processes found in this work with the first five of thirteen steps for "Improvising Irregular Rhythms in a Chance (Aleatory) Arrangement":

1. Write a list of children's names on the board

2. Above each name indicate the pulse beat by a vertical line as the name is pronounced.
3. Under each name indicate the duration value of the sound, divided according to the pulse beat.
4. Beside each name notate its rhythm.
5. After each child has pronounced his name, ask him to clap his names as he taps the pulse beat.[2]

Having presented the philosophy and process of music education as found in Teaching Music Creatively in the Elementary School, we are now in a position to answer the questions that will determine to what extent this work supports the importance of creativity in elementary music education.

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[1]Ibid., p. 234.   [2]Ibid., pp. 237-238.

EVALUATION FORM

WORK: Teaching Music Creatively in the Elementary School

AUTHOR/S: Irving Cheyette and Herbert Cheyette

PLACE, PUBLISHER & DATE: New York: McGraw-Hill, 1969.

- -

Each question has one of 4 possible answers as listed
below; each one indicates the extent to which the
work supports the point in question. The relevant
number will be circled for each question, and a brief
explanation will be given to verify the answer.

3. This indicates that the point in question receives
   strong support, either explicitly or implicitly.

2. This indicates that the point in question receives
   moderate support, either explicitly or implicitly.

1. This indicates that the point in question receives
   weak support, either explicitly or implicitly.

0. This indicates that the point in question receives
   no support, either explicitly or implicitly.

1. *To what extent does this work take
    cognizance of the fact that creative
    behaviour is thought by some eminent
    psychoanalysts and psychologists to
    be innate in each individual?* 3 2 ①0
    (from "The Creative Mode of Thinking")

Though the authors quote H. O. Rugg and Ann Schumaker as
saying that "the creative impulse is within the child
himself," support for this is not found in the process
which they present.

2. *To what extent does this work emphasise
    the presentation of activities or
    "contingencies" which may result in
    creative behaviour?* 3 2 ①0
    (from "The Creative Mode of Thinking")

Though the authors quote James Mursell and Mabelle Glenn as saying
that "music education should be planned in terms of self-expression,
emotional release, and the creative impulse," few of the activities
presented result in creative behaviour.

3. *To what extent does this work
    encourage children to use the creative
    process, i.e., any of the steps that
    are similar to or the same as the
    first four steps of S. J. Parnes'
    creative problem-solving process:*

        a. fact-finding? 3 2 ①0
This occurs in only one of the twelve chapters of the work,
"Developing the Innate Creativity of Children."

        b. problem-finding? . . . . 3 2 1 ⓪
The authors speak of the "creative synthetic process", and say
that it can be fostered by ". . . relating written symbols that
represent music to the child's musical experience."

        c. idea-finding? 3 2 ①0
The explanation is the same as that given for 3 a.

        d. solution-finding? 3 2 ①0
            (from "The Creative Process")

The explanation is the same as that given for 3 a.

4. *To what extent does this work encourage
the following capacities in children:*

    a. *curiosity?* . . . . 3 2 ① 0
This is spoken about primarily in only two of the twelve chapters,
i.e., "Developing a Classroom Orchestra" and "Developing the
Innate Creativity of Children."

    b. *initiative?* . . . . .3 2 ① 0
The explanation is the same as that given for 4 a.

    c. *critical faculties?* . . . . .3 2 ① 0
Besides some "critical skills" mentioned in Chapter I, discussing
outside music listening and developing recognition of musical instru-
ments, this is mentioned again only in Chapters 10 and 11.

    d. *intuitive ideas?* . . . . 3 2 ① 0
The explanation is the same as that given for 4 a.

    e. *aesthetic judgment?* . . . . ③ 2 1 0
The teacher's function is "to order the sequence of
experience from which the child's standard of beauty will be
derived", and the end result will be the educated listener.

    f. *wide range of interest beyond music?* . . . . . . 3 2 ① 0
      (from "The Creative Person")
Though it is suggested that music should be related to other
subject matter, this does not occur in the activities which are
presented, with the exception of a few activities in Chapter 9.

5. *To what extent does this work encourage any
of the aptitudes for creative thinking, as
identified by J. P. Guilford, with respect
to music:*

    a. *sensitivity to problems?* . . . . 3 2 1 ⓪
This work is concerned with the teaching of music literacy to
children in a manner which does not encourage the aptitudes
for creative thinking.

    b. *fluency of ideas?* . . . . .3 2 1 ⓪
The explanation is the same as that given for 5 a.

    c. *flexibility of ideas?* . . . . .3 2 1 ⓪
The explanation is the same as that given for 5 a.

    d. *originality?* . . . . 3 2 ① 0
When children are involved in the creative song project,
they make use of original ideas.

    e. *redefinition?* . . . . .3 2 1 ⓪
The explanation is the same as that given for 5 a.

    f. *elaboration?* . . . . 3 2 1 ⓪
      (from "The Creative Person")
The explanation is the same as that given for 5 a.

6. To what extent does this work encourage
   children to produce musical ideas that
   are unusual and that are appropriate? . . . . 3 2 1 ⓪
   (from "The Creative Product")

It encourages the development of musical concepts.

7. To what extent does this work encourage
   teachers to show:
   .a. respect for unusual questions? . . . . 3 2 ① 0
Only in the chapter "Developing Innate Creative Behavior" is this
encouraged; otherwise, this work encourages the development of
musical concepts by demonstration and by asking direct questions.

   b. confidence in children by:
      1. valuing their ideas? . . . . 3 2 ① 0
One of the few examples is when the authors urge that young children
interpret rhythm by song, dance, speech and percussive instruments
before they learn its symbolic representation.

      2. granting freedom to explore their ideas? . 3 2 ① 0
When working with scales, children are invited to experiment,
"creating different scales on black keys of the piano."

      3. granting freedom to explore their
         environment? . . . . .3 2 1 ⓪
This is not taken into consideration in this work.

      4. granting periods for non-evaluative
         practice of ideas? . . . . 3 2 1 ⓪
         (from "The School")
As the aim of this work is to teach children musical concepts,
by implication, the response to this question is 0.

8. To what extent does this work present
   processes that involve:
   a. open-ended questions? . . . . 3 2 1 ⓪

This work advocates primarily that teachers teach, help,
explain, show and ask.

   b. provocative questions? . . . . 3 2 1 ⓪
The questions asked are mainly questions that require direct
answers from the children: e.g., "Analyse each rhythm."

   c. synthesis of ideas? . . . . 3 2 ① 0
This may occur when children compose their own songs, an
activity which occurs infrequently.

   d. open-ended learning situations that encourage
      the discovery method of learning? . . . . . . 3 2 ① 0
Only in a short section of Chapter 9, "Creative Activities
Employing Sound Painting", do they encourage this.

   e. planned and guided experiences using
      divergent thinking abilities? . . . . 3 2 1 ⓪
      (from "The School")
The planned and guided experiences require children to imitate,
observe, understand, do, compete or play games.

9. *To what extent does this work encourage*
   children to:

    a. *learn from their own mistakes?* . . . . 3 2 1 ⓪
This is neither explicitly nor implicitly encouraged.

    b. *share and work together on ideas?* . . . . .3 2 ① 0
Although the authors say at the outset that "cooperating with others
when making music in and out of school should be a source of
increasing pleasure," few of the activities presented involve
the sharing of ideas.

10. *To what extent does this work encourage*
    children to use the following techniques
    when searching for ideas:

    a. *brainstorming?* . . . . 3 2 1 ⓪

    b. *forced relationships?* . . . . .3 2 1 ⓪

    c. *check lists?* . . . . 3 2 1 ⓪
      (from "The School")
No mention is made of these techniques.

11. *To what extent does this work encourage*
    independent musical thought in all
    children? . . . . 3 2 1 ⓪
    (from "Detrimental Effects of a Conforming
          Environment on Creativity")

The aim of this work, to enhance music literacy, does not allow
for the encouragement of independent music thought in
children.

12. *To what extent does this work stress the*
    importance of using the following modes of
    creative expression in music:

    a. *composition?* . . . . .3 ② 1 0
Children are encouraged to compose their own four-line songs.

    b. *improvisation?* . . . . 3 2 ① 0
Only a three line definition of improvisation is mentioned along
with two recommended recordings, but the authors do encourage
improvisation through movement.

    c. *analysis?* . . . . 3 ② 1 0
      (from "A Study by Peter R. Webster")
Analysis is mentioned in connection with listening skills and in
the "list of procedures to be used in the creative music lesson",
but it is not listed as one of the four "critical skills."

2. <u>The Study of Music in the Elementary School:</u>
   <u>A Conceptual Approach</u>
   Charles L. Gary, ed.
   MENC Elementary Music Study Commission

WHAT IS THE UNDERLYING PHILOSOPHY OF THIS WORK?

The editor, Charles L. Gary, claims that in the past, too much emphasis was placed on the development of musical skills and too little emphasis was given to the enjoyment of music, but he contends that "in the twentieth century the order was reversed and the emphasis was placed on the thrills - the joy of music."[1] Gary continues:

> Neither of these aspects placed much emphasis on developing "understanding" of the great art of music. Yet a student's knowledge of a subject is incomplete unless there is intellectual apprehension to accompany emotional responses and technical proficiency. The conceptual approach to music which is set forth in this publication is employed in the belief that if teachers and students alike understand what it is that is to be learned from the experiences with music, the benefits will be more appreciated and longer lasting.[2]

The Elementary Music Study Commission explains that:

> It is important for the teacher of any subject to understand the nature, meaning, and structure of the subject to be taught. For this reason the publication is concerned . . . with the process through which children may develop musical concepts and may grow in musical understanding, skill, and appreciation (judgments of value).[3]

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[1] Charles L. Gary, ed., <u>The Study of Music in the Elementary School: A Conceptual Approach</u> (Washington, D.C., Music Educators National Conference, 1967), p. vii.

[2] Ibid.   [3] Ibid., p. 1.

The commission maintains that:

Children are intuitive and they respond to music intuitively. They are physical beings and they respond to music physically. Children are creatures of feeling who respond to music at the level of feeling. They have minds, also, and they respond to music intellectually at their own level of mental development. Children are creatures of spirit and music can touch their spiritual natures so deeply that they are never again the same.[1]

A major obligation of education is seen to be:

The development of a sense of beauty and of positive responsiveness to it . . . At this particular time in history it is of special importance to nurture in a child a sense of mystery and of wonder that can come from an experience in which his entire being is permeated with beauty.[2]

Two quotations follow which lend support to their conceptual approach to music education. The first comes from "An Essay on Quality in Public Education". This essay states that "today's children learn . . . much superficially but may know little in depth," and that the urgent task of the element- ary school is to establish "high standards of achievement and judgment, promoting curiosity and helping children to preserve their sense of wonder in a world where science often seems to make the impossible obsolete."[3]

The second quotation is from "Growth Processes in Education" by James Mursell, and it reads:

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[1]Ibid. [2]Ibid.

[3]Ibid, quoting The Educational Policies Commission of the National Education Association of the United States and The American Association of School Administrators, "An Essay on Quality in Public Education" (Washington, D.C.: The Commission, 1959), p. 8.

. . . music will not yield its richest pleasures
if it is treated merely as happy play and if the
fact that it is an organized art is ignored as a
matter of policy. Musical growth turns upon a
progressive and continuously developing realiza-
tion of what music actually is. Therefore at
least a dawning realization should come from the
earliest years.[1]

The commission continues by saying that "it is

important to preserve the integrity of music as an art when

music becomes a subject matter to be studied in the classroom."[2]

It is suggested that in order to do this, we should:

. . . reassess our purposes, improve the quality
of experiences through which children may achieve
them, make certain that the nature of learning
activities is consistent with the nature of the
content to be learned, and evaluate the terminology
we use in our classrooms to make certain that it is
authentic.[3]

As "music is the subject matter of music education,"

the Elementary Music Study Commission contends that instruction

. . . must be consistent with the nature, structure
and meaning of the subject matter to which it
relates. This publication, therefore, will investi-
gate the nature and structure of music. This sub-
ject matter will be organized conceptually; i.e., it
will be stated in terms of concepts to be developed.[4]

By concept, they mean "that which remains in the mind

following a given learning experience."[5] In addition, they

explain that "the concept must also be capable of being

developed by the learner."[6]

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[1]Ibid, quoting James L. Mursell, "Growth Processes in Music
Education," Basic Concepts in Music Education, 57th Yearbook,
Part I, National Society for the Study of Education (Chicago:
University of Chicago Press, 1958), p. 157.

[2]Ibid., p. 2.   [3]Ibid., pp. 1-2.   [4]Ibid., p. 2.

[5]Ibid.   [6]Ibid.

The following steps are perceived in order to develop concepts:

1. Children listen to music. "Prerequisite to the development of any musical concept is direct experience with tone." The tone is perceived aurally, but it must also "reach the mind and become a part of the conscious thought of the learner."[1]

2. Children perform music either vocally or instrumentally.

3. Children analyse what they perceive, initially employing non-technical ways, e.g., they may discover that a song has only 3 phrases, two of which are identical.

4. Children discuss music at their own level, with guidance from the teacher, "so they are consciously aware of the meaning of these experiences and of what they have learned."[2]

These activities may be used

> . . . to clarify and make valid the child's mental image of a song and its structure. At all levels of conceptual development, the child's mental image of a song and its structure is reinforced by observation and the study of music notation.[3]

The importance of children discovering for themselves what is in music is also stressed. We read: "Too often information is simply poured into the minds of children, thereby depriving them of the exciting experience of discovering it for themselves."[4] The proposal is made, therefore, that:

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[1]Ibid.   [2]Ibid., p. 3.   [3]Ibid.

[4]Ibid.

Many phases of music education will be
taught best as methods of inquiry - of investi-
gation into the nature and structure of music
rather than as a "rhetoric of conclusion" about
it.[1]

They believe that "through the processes of conceptual

development", children can

. . . grow in their understanding of everything there
is in music that makes it what it is *except* for the
mysterious and magical processes by which it becomes
more than the sum of its parts and through which it
communicates in a language that evokes responses
more intuitive than intellectual.[2]

Because they are endeavouring to develop certain

concepts in the minds of pupils, they admit that materials

presented "point to learnings that are intellectually orien-

tated" and they add: "The authors believe that they are also

worthy as music."[3]

The committee draws upon quotations once again to

support their approach to music education. Asahel D. Woodruff,

Dean of the College of Education at the University of Utah, is

quoted as saying:

The whole system is too haphazard and indefinite.
Too much final determination of what is to be
studied is left to the individual teacher. Under
this system it is impossible to be sure we have
identified significant concepts, and avoided
spending time on the relatively insignificant ones.[4]

The importance of listening to "masterpieces" of music

literature is emphasised.

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[1]Ibid., pp. 3-4.   [2]Ibid., p. 4.   [3]Ibid., p. 9.

[4]Ibid., quoting Asahel D. Woodruff, Basic Concepts of
Teaching (San Francisco: Chandler Publishing Co., 1961), p. 102.

> The child who is able to think musically has a
> mind that is already permeated with musical
> sounds which greatly enhance his potentiality
> for emotional involvement with those sounds
> when he hears them in a masterpiece of musical
> literature. Through this sense of self-identi-
> fication with music of lasting value, he can
> grow in his sense of values, for he will have
> experienced deep within himself a rare and
> wondrous beauty through which he may live for
> a time in a world of the spirit.[1]

Behind the listening, which underlies the perceptual

experience as a foundation for conceptual development, is

> . . . the fact that the very concepts developed,
> through the types of experiences with music
> literature suggested . . . may themselves be of
> enormous value in developing an understanding of
> that same literature in particular and of music
> literature in general.[2]

The commission propounds that a basic obligation of education

is to pass on "the treasures of the art of music as found in

its literature – both of the past and of the present – . . . .

a part of the total cultural heritage."[3] Music educators are

encouraged "to provide their children with many opportunities

to hear masterpieces of music literature per se,"[4] e.g., music

by R. Strauss, Wagner, Weber, Beethoven, Brahms, Faure and

Tchaikovsky.

Gifted children, that is the top 2% of the class in

either intellectual or musical giftedness, the commission

claims, are, by definition, "capable of greater creativity,

initiative, and intellectual effort and achievement than is

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[1]Ibid.   [2]Ibid., p. 157.   [3]Ibid.

[4]Ibid.

the average pupil."[1] This work urges that the school should contribute towards the development of gifted children through performances, directed listening activities, and through reading, analysing and discussing music. These children should be expected:

> . . . to study form in depth . . . to penetrate more deeply than others into the historical and theoretical aspects of music, an outgrowth of which may be significant creative activity.[2]

The gifted child will perform more accurately, will understand more quickly than others what he or she is doing, and

> . . . will be ready to use precise symbols of musical notation sooner than others. He should be encouraged to assert initiative and leadership, assisting the teacher in a variety of ways during the course of the music lesson.[3]

Various activities are suggested for gifted children in the elementary schools; five for kindergarten or grades 1 or 2 are:

1. Sing descants or other solo parts.
2. Use the autoharp to harmonize songs by ear.
3. Experiment with a number of instruments to discover how to make various kinds of sounds with each of them and explain to the teacher and to other pupils how these instruments should be played.
4. Create original poetry and music for it.
5. Gradually develop a musical dictionary or a file box of musical terms.[4]

This work concludes with a "Scope and sequence chart of conceptual learning related to the elements of music" upon which is written:

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[1]Ibid., p. 167.   [2]Ibid.   [3]Ibid.

[4]Ibid., p. 168.

The conceptual learnings outlined on the . . . chart require aural perception which, in turn, is developed through listening, kinesthetic rhythmic responses, singing and playing of instruments. Within a carefully planned musical environment, children will be stimulated through these activities to

Imitate	Differentiate
Explore	Verbalize
Discover	Memorize
Recognize	Recall
Identify	Evaluate

These processes are essential in the development and clarification of musical concepts.[1]

WHAT PROCESS OF MUSIC EDUCATION DOES THIS WORK ADVOCATE?

The method used is that of presenting activities organized, not in terms of grade levels, but rather in terms of beginning experiences, continuing experiences and advanced experiences. A separate section is devoted to each constituent element of music, i.e., rhythm, melody, harmony, form and forms in music, tempo, dynamics, and tone colour. The commission emphasises that these concepts are interrelated; therefore, experiences should and do overlap.

For each section, the perceptual experiences which are considered to be prerequisites to conceptual development are set out first. The material is then organized into (a) concepts to be developed, (b) activities for pupils, and (c) materials that are suggested for use. Teachers are encouraged to choose and extend these materials to fit their own situation. "Creative

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[1]Ibid., chart on the back cover of the text.

teachers will exercise imagination and ingenuity to provide those
experiences and contacts with literature of music best suited to
their needs."[1]

As the procedure for the development of the different
concepts is similar, we shall consider only the development of
one concept in detail, i.e., the concept of melody, and we shall
then look at the listening programme process.

Conceptual development of melody

Children should experience the following preliminary
perceptual experiences:

1. Experiment with producing a tone with the voice.
   They need to learn to listen with concentration
   to tones and practice matching the pitches as
   accurately as possible. They can compare vocal
   tone to a tone made on a pitch producing instrument,
   discover that some pitches are higher or lower than
   others, and practice reproducing with the voice the
   sounds of higher or lower pitches. They should
   identify verbally which tones are higher and which
   are lower, and visualize these pitch relationships
   by using bodily movement including hand design,
   blank notation and staff notation.

2. Experiment with longer and shorter tones with the
   voice and with other pitch media in which the tone
   can be sustained. The object should be to discover
   that tones may be longer or shorter than others and
   to identify verbally which tones are longer or shorter
   as well as higher or lower. The children should
   visualize these relationships of duration by using
   bodily movement, including hand design, blank nota-
   tion, and staff notation.[2]

The concepts relating to melody along with "experiences
that may lead to the development of the concept" and musical
examples are presented as follows:

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[1]Ibid., p. 10. [2]Ibid., p. 52.

CONCEPTUAL DEVELOPMENT IN MELODY

Concepts	Experiences that may lead to the development of the concept	Musical Examples
1. **Melody is a linear arrangement of tones.** 1.1 **Melody is made up of a series of tones moving in a single (horizontal) line.**	From experiences with individual tones, the teacher will lead the children into the discovery that a succession of tones may result in melody, some tones of which may be higher, some tones lower, some tones shorter, and some tones longer. The children will identify the lower and higher sounds in familiar songs, or through listening experiences, by the use of appropriate bodily movements, and pitch producing instruments (matching instrument and voice and playing tonal patterns on an instrument). The terms higher and lower will be verbalized and forms of blank notation will be used to visualize higher and lower patterns. Experiences with blank notation might be coordinated with bodily movement (hand designs and other movements), flannel board, chalk board, or charts. All of these will demonstrate that melody is represented horizontally and will lead to visualization of musical notation.	**Songs** "Hop Up My Ladies" "Have You Heard the Wind," *The Magic of Music 2* "Alouette" "The Quail's Call," *Making Music Your Own 3* "Solvejg's Song," Edvard Grieg "The First Primrose," Edvard Grieg "Christmas is Coming" "Wait for the Wagon" "Swinging," *Growing with Music 1* **Recordings** The recording of "The Viennese Musical Clock" from *Háry János Suite* of Zoltán Kodály can be used to demonstrate highs and lows and short notes followed by a long note. © Theodore Presser Company. Used by permission. "Traumerei" from *Scenes from Childhood* by Robert Schumann shows melodic contour and demonstrates the idea of high and low.
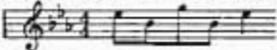
CONCEPTUAL DEVELOPMENT IN MELODY

Concepts	Experiences that may lead to the development of the concept	Musical Examples
1.1 Melody is made up of a series of tones moving in a single (horizontal) line (continued).		Ravel used a high theme to represent Beauty and a low theme for the Beast in "Beauty and the Beast" from the *Mother Goose Suite*.
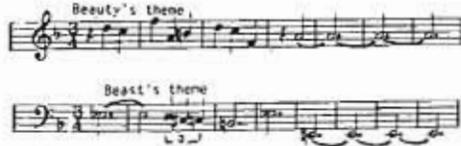
Later when the Beast becomes a handsome prince his melody is played five octaves higher by the violin.

The introductory theme of the first movement of Mozart's *Haffner Symphony* is built of octave leaps from low to high and from high to low. This characteristic leap can be followed throughout the movement as a listening experience.

The subject of J. S. Bach's *Fugue in C Major* ("Fanfare") is another well-known melodic idea employing the octave leap. Stravinsky's *Greeting Prelude* will demonstrate the effects created by changing the relative positions of the notes of a familiar melody.

Children will continue their singing, playing, and listening experiences which deal with melodic direction in order to identify melodies which are predominantly ascending or descending. Their activities will include the use of appropriate bodily movements and playing of pitch producing instruments. The instruments will be used for matching sung tones and for playing tonal patterns. Verbalization of the terms ascending and descending will be encouraged in relation to recorded compositions.

Songs

"Away in the Manger," *Discovering Music Together 2*
"White Coral Bells"
"Adam's Sons," *This Is Music 1*
"Dance in the Circle," *Exploring Music 1*
"A Bath," *Birchard, Kindergarten Book*
"Sliding," *Music Through the Day*

CONCEPTUAL DEVELOPMENT IN MELODY

Concepts	Experiences that may lead to the development of the concept	Musical Examples
1.1 Melody is made up of a series of tones moving in a single (horizontal) line (continued).	Children should have experience with blank notation on flannel boards, chalk boards, or charts, and by describing melodies with hand movements. After considerable experience in singing and listening, children will be able to distinguish aurally higher and lower pitches. They will also recognize ascending and descending portions of melodies. As their understanding of these concepts increases they will be led to visualize melodies in musical notation.	"Mary at the Kitchen Door," *This Is Music for Kindergarten and Nursery School* "El Alabado," *Music in Our Country* "My Tree House," *Sharing Music* Recordings From *The Red Pony* by Aaron Copland. © 1951 Boosey & Hawkes Inc. Copyright assigned to Aaron Copland. Reprinted by permission of Aaron Copland and Boosey & Hawkes Inc., sole licensees. Prelude from *Irmelin* by Frederick Delius. © 1938 Hawkes & Son (London) Ltd. Reprinted by permission of Boosey & Hawkes Inc. "The Little Shepherd," *The Children's Corner Suite*, Claude Debussy

Having an idea in mind of the manner in which the
material is presented, we move on to present the remainder of
the concepts which relate specifically to melody and some of
the experiences and suggested musical examples which accompany
each concept.

Concept 1.2 - "Tones in a melody repeat or change."[1]
Experiences that may lead to the development of this concept
give children opportunities to:

1. Isolate and study a specific pattern in order to
    discover the repeated tones.
2. Identify repeated tones by letter, syllable, or
    number name.
3. Play the repeated tones on a melodic instrument.
4. Relate the repeated tone pattern to the other
    elements of the melody which precede or follow it.[2]

Concept 1.3 - "When tones in a melody change they may
go up or down in a regular succession of half-steps, steps, or
by leaps."[3] Experiences that may lead to the development of
this concept involve the children in discovering the direction
of melodic movement. They are asked to play what they hear by
ear and to show the direction in which the melody moves.

> They should be led to relate this pattern in blank
> notation . . . to the appropriate music symbols on
> the staff and to become familiar with the appearance
> of a scalewise pattern which is imparted by the
> space-line and line-space relationship.[4]

The commission claims that children will gradually relate scale
patterns to tonal centres, whole-steps and half-steps, written
scale patterns and chordwise patterns. Some of the suggested

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[1]Ibid., p. 55.   [2]Ibid., pp. 55-56.

[3]Ibid., p. 56.   [4]Ibid.

recordings that relate to these devices are "The Swan" from
Carnival of Animals by Saint-Saens, the second movement of
Symphony No. 6 by Tchaikovsky and the fifth movement of Symphony
No. 6 by Beethoven.

Concept 2 - "Musical notation is a set of visual
symbols that show the relationships that can exist among tones."[1]
Experiences that may lead to the development of this concept,
involve the singing of songs from books with musical notation
so that children can visualize pitch. The commission emphasises
that the development of the ability to interpret musical nota-
tion should be a major concern of any form of music education.

> One of the promising ways of helping children
> develop this concept of musical notation as the
> symbol system for musical tones is through the
> encouragement of creative activity. Children need
> opportunities (even reasons) to create melodies and
> to learn some of the techniques for notating them.[2]

Concept 3.1 - "The rhythm of a melody is determined by
the relatively longer and shorter time values of its tones."[3]
Experiences that may lead to the development of this concept
are the same as those which appear under Rhythm 1.2.

> 1. Listen to music chosen because of the prominence of
> both its pulse (beat) and patterns of rhythm as heard
> in the melody and accompaniment.
>
> 2. Interpret this music through body movement.
>
> 3. Identify those movements that relate to the pulse
> and those that relate to the longer and shorter sounds
> of the rhythm patterns.
>
> 4. Differentiate between pulse and rhythm pattern
> through repeated body movement.

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[1]Ibid., p. 58.   [2]Ibid., p. 59.

[3]Ibid.

5. Use correctly the terms pulse and rhythm pattern.

6. Further clarify the meaning of these two terms by playing percussion instruments if appropriate.[1]

Concept 3.2 - "The character of a melody is changed when its rhythm is changed."[2] Experiences that may lead to the development of this concept are those that concentrate on rhythm, e.g., changing the rhythmic patterns of songs, identifying songs solely from their rhythms, or comparing various rhythmic patterns.

Concept 4 - "The structure of some melodies is harmonic."[3] Experiences that may lead to the development of this concept are those that encourage children to:

1. Observe such chordal sections of melodies.

2. Experiment with using outlined chords to harmonize the melodies.[4]

Songs and the Andante of Haydn's Surprise Symphony are musical examples suggested to illustrate this concept.

Concept 5 - "Two or more lines of melody may move together simultaneously thereby creating a polyphonic (contrapuntal) texture."[5] Experiences that may lead to the development of this concept involve the singing of rounds, descants, and partner songs and the use of creative movement to demonstrate canons. Suggested recordings are Little Fugue in g minor by J. S. Bach and the The Cat's Fugue by Domenico Scarlatti. The commission predicts that children will discover the texture of polyphonic music as they listen to recordings

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[1]Ibid., p. 13.   [2]Ibid., p. 60.   [3]Ibid.

[4]Ibid.   [5]Ibid., p. 61.

and sing suggested songs.

Concept 6 - "When tones are arranged in a particular scalewise fashion, distinctive melodic and harmonic idioms may result."[1] Experiences that may lead to the development of this concept give the children opportunities to:

1. Study the tonal relationships that characterize major, minor, modal, pentatonic, chromatic, and whole tone scales through singing, listening, and playing.

2. Develop the ability to identify by ear and/or observation of the notation the particular scale used in a melody.

3. Write these scales on charts or chalkboards.

4. Create and notate melodies based upon major, minor, modal, pentatonic, and wholetone scales.[2]

Numerous songs and recordings using these scales are suggested.

Concept 7 - "When a melody includes all of the 12 tones of a chromatic scale, in other than consecutive order, before any one of the tones is repeated, the melody is unrelated to any tonal center."[3] Experiences that may lead to the development of this concept are those that lead the children to create their own tone row using melodic bells. The commission suggests that children experiment with rhythm and eventually write their music on staff notation.

The other concepts, which we have mentioned, are dealt with in like manner; hence, we move on to consider listening.

Listening

Before the members of the commission present their

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[1]Ibid., p. 62. [2]Ibid. [3]Ibid., p. 65.

suggested procedure for listening to music, they declare that

they wish to

> . . . address their professional colleagues directly
> to encourage them to provide their children with
> many opportunities to hear masterpieces of music
> literature per se. There is much music which is too
> difficult to perform, but there is none too good for
> them to hear.[1]

Following this, they postulate that teachers must first

thoroughly study the piece of music chosen for the music

listening session, and then concentrate on creating an

appropriate mood for listening in the classroom. Before playing

the record for the first time, children's listening should be

directed to several specific points, e.g., themes or the effects

of rhythms, and then a guided discussion should follow the first

hearing.

> Following a summary of the discussion, pertinent
> authoritative information is presented in order to
> provide the class with all the facts necessary to
> their enjoyment of the music. Then the recording
> is replayed.[2]

> The commission stresses

> . . . that extra-musical factors [in programme music]
> are less important than purely musical considerations,
> but to the extent that they influence the composer in
> determining the nature of his music, to that extent
> they become a significant part of the total learning
> experience.[3]

It is suggested that absolute or "pure" music is pre-

sented after children have experienced programme music. The

teacher is guided to direct the children's listening to "themes,

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[1]Ibid., p. 157.   [2]Ibid., p. 159.

[3]Ibid.

their nature and structure and the inter-relationships that exist among them, even if that relationship is only an alternating one as in the case of a rondo form."[1] The commission claims that:

> . . . in this type of listening experience, there should be enough repetition so that important musical characteristics are not only recognized but are learned so effectively that they will be remembered.[2]

To conclude this discussion of listening, we are advised:

> In general, it is desirable to begin with good music of recent or contemporary periods and gradually proceed to that of the earlier classic styles. In general, it is desirable to begin with program music (so-called descriptive music that suggests a scene or story) and gradually proceed to so-called absolute or "pure" music.[3]

Having presented the philosophy and the process of music education as found in The Study of Music in the Elementary School, we are now in a position to answer the questions that will determine whether this work supports the importance of creativity in elementary music education.

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[1]Ibid.   [2]Ibid., p. 160.   [3]Ibid.

EVALUATION FORM

WORK: The Study of Music in the Elementary School:
a Conceptual Approach

AUTHOR/S: Charles L. Gary, editor

PLACE, PUBLISHER & DATE: Washington, D. C.: Music
Educators National Conference, 1967.

- -

Each question has one of 4 possible answers as listed
below; each one indicates the extent to which the
work supports the point in question. The relevant
number will be circled for each question, and a brief
explanation will be given to verify the answer.

3. This indicates that the point in question receives
strong support, either explicitly or implicitly.

2. This indicates that the point in question receives
moderate support, either explicitly or implicitly.

1. This indicates that the point in question receives
weak support, either explicitly or implicitly.

0. This indicates that the point in question receives
no support, either explicitly or implicitly.

1. *To what extent does this work take
    cognizance of the fact that creative
    behaviour is thought by some eminent
    psychoanalysts and psychologists to
    be innate in each individual?* . . . . 3 ② 1 0
    (from "The Creative Mode of Thinking")
Initially this work states that all children are intuitive,
physical, feeling and intellectual beings. Later, when
speaking about gifted children, they say that gifted
children are "capable of greater creativity . . . than
is the average pupil."

2. *To what extent does this work emphasise
    the presentation of activities or
    "contingencies" which may result in
    creative behaviour?* . . . . 3 ② 1 0
    (from "The Creative Mode· of Thinking")

The emphasis of this work is placed on the development of
musical concepts in the minds of children, and creative
activities are a means to that end.

3. *To what extent does this work
    encourage children to use the creative
    process, i.e., any of the steps that
    are similar to or the same as the
    first four steps of S. J. Parnes'
    creative problem-solving process:*

        a. fact-finding? . . . . 3 ② 1 0
Children are encouraged to discover facts by experimenting
with different ideas.

        b. problem-finding? . . . . 3 2 1 ⓪
Children are presented with experiences that lead them
in certain directions.

        c. idea-finding? . . . . 3 2 ① 0
Though all children are encouraged to experiment and to discover
facts relating to musical concepts, it is only in Ch. VI that the
gifted children (2%) are encouraged to discover ideas.·

        d. solution-finding? . . . . 3 ② 1 0
            (from "The Creative Process")
Children are encouraged to find solutions to problems that arise,
e.g., they are asked to play what they hear by ear and to
show the direction in which the melody moves.

4. *To what extent does this work encourage*
   the following capacities in children:

   a. *curiosity?* . . . . 3 2 ① 0
   In their philosophical discussion, they say that the urgent task
   of elementary education is to promote curiosity, but the process
   which is presented caters very little for this.

   b. *initiative?* . . . . .3 2 ① 0
   Though children are told to experiment with different concepts,
   this concerns gifted children more than average children.

   c. *critical faculties?* . . . . .3 ② 1 0
   One of the ten activities which the writers state that a carefully
   planned musical environment will stimulate the child to do, is
   to evaluate music.

   d. *intuitive ideas?* . . . . 3 ② 1 0
   They maintain that children are intuitive, and some activities
   which involve discovery make intuitive responses possible.

   e. *aesthetic judgment?* . . . . ③ 2 1 0
   They write: "The major obligation of music education is the develop-
   ment of a sense of beauty and of positive response to it," and this
   is related to "masterpieces of musical literature."

   f. *wide range of interest beyond music?* . . . . . . 3 2 1 ⓪
      (from "The Creative Person")

This work deals with music and its concepts.

5. *To what extent does this work encourage any*
   of the aptitudes for creative thinking, as
   identified by J. P. Guilford, with respect
   to music:

   a. *sensitivity to problems?* . . . . 3 2 1 ⓪
   The emphasis is placed on experiencing and discovering
   musical concepts.

   b. *fluency of ideas?* . . . . 3 2 ① 0
   This is encouraged to some extent in the gifted children,
   i.e., 2% of the children.

   c. *flexibility of ideas?* . . . . .3 2 ① 0
   The explanation is the same as that given for 5 b.

   d. *originality?* . . . . 3 ② 1 0
   All children are encouraged to create their own melodies and move-
   ment patterns, e.g., Concept 2 – melody, and gifted children have
   an even greater opportunity for originality.

   e. *redefinition?* .3 2 ① 0
   This may be encouraged in gifted children by implication.

   f. *elaboration?* . . . . 3 2 ① 0
      (from "The Creative Person")
   This may be encouraged in gifted children by implication.

6. *To what extent does this work encourage
   children to produce musical ideas that
   are unusual and that are appropriate?* . . . . 3 2 ① 0
   (from "The Creative Product")

Though this may occur in Chapter 6, "The Musical Education of the
Gifted", in general, children are encouraged to produce simple
musical ideas of a more conventional nature.

7. *To what extent does this work encourage
   teachers to show:*
   a. *respect for unusual questions?* . . . . 3 2 1 ⓪

Emphasis is not given to the asking of questions by the children.

   b. *confidence in children by:*
      1. *valuing their ideas?* . . . . 3 ② 1 0

The work states that children should express their own ideas, and
some opportunities are provided when this does occur.

      2. *granting freedom to explore their ideas?* . 3 ② 1 0

The gifted children (2%) are given more freedom to explore their
ideas, but the suggestion is made that all children experiment with
with ideas.

      3. *granting freedom to explore their
         environment?* . . . . 3 2 1 ⓪

All exploration relates only to music.

      4. *granting periods for non-evaluative
         practice of ideas?* . . . . 3 ② 1 0
         (from "The School")

This occurs when children experiment with ideas.

8. *To what extent does this work present
   processes that involve:*
   a. *open-ended questions?* . . . . 3 2 ① 0

Though we do not encounter such questions in this work, the desire
is expressed that creative teachers will utilize the materials,
which implies that open-ended questions could be used.

   b. *provocative questions?* . . . . 3 2 ① 0

The explanation is the same as that given for 8 a.

   c. *synthesis of ideas?* . . . . 3 2 ① 0

One example of this is found in Melody - Concept 5. The writers
predict that the children are ready to discover the texture of
polyphonic music as they listen to recordings and sing songs.

   d. *open-ended learning situations that encourage
      the discovery method of learning?* . . . . . . 3 2 ① 0

Although this work stresses the importance of children discovering
for themselves what is in music, the presentations are seldom
open-ended.

   e. *planned and guided experiences using
      divergent thinking abilities?* . . . . 3 ② 1 0
      (from "The School")

There are some examples, one being the preliminary perceptual
experiences suggested for the conceptual development of melody.

9. To what extent does this work encourage
    children to:

        a. learn from their own mistakes? 3 ②1 0
    Children are encouraged to discover ideas inherent in concepts,
    "so that they are aware of the meaning of their experiences and
    of what they have learned."
        b. share and work together on ideas? 3 2 ①0
    Though they claim that children should discuss music to be aware of what
    they have learned, the authors also confess that the materials pre-
    sented are "intellectually orientated", and do not lend themselves
    to sharing.

10. To what extent does this work encourage
    children to use the following techniques
    when searching for ideas:

        a. brainstorming? . . . . 3 2 1 ⓪

        b. forced relationships? . . . . .3 2 1 ⓪

        c. check lists? . . . . 3 2 1 ⓪
            (from "The School")
    No mention is made of these techniques.

11. To what extent does this work encourage
    independent musical thought in all
    children? 3 2 ①0
        (from "Detrimental Effects of a Conforming
               Environment on Creativity")
    This applies only to the gifted children; for the others,
    the work encourages growth in musical understanding,
    skill and appreciation.

12. To what extent does this work stress the
    importance of using the following modes of
    creative expression in music:

        a. composition? 3 ②1 0
    Referring to Melody - Concept 2 - this work suggests that "a promising
    way of helping children develop the concept of musical notation
    is through creative activity, i.e., to create melodies."
        b. improvisation? 3 ②1 0
    Though children are not instructed to improvise, they are instructed
    to experiment, and this involves improvisation.

        c. analysis? ③2 1 0
            (from "A Study by Peter R. Webster")
    This is one of the four steps that is considered to be necessary
    in order to develop musical concepts, according to this work.

3. SOUND AND SILENCE: CLASSROOM PROJECTS IN CREATIVE MUSIC
   by John Paynter and Peter Aston

WHAT IS THE UNDERLYING PHILOSOPHY OF THIS WORK?

The authors set forth their philosophy by answering
three questions. Their first question is: Why teach music?
Though they recognize the necessity of having music specialists
for instrumental teaching and other clearly defined skills,
Paynter and Aston argue that the general music teacher's first
duty is "the education of the whole person. He makes a contri-
bution to this 'total education' through the medium of the
subject."[1] Further, the writers believe that music education
must serve all pupils, not only the gifted. Paynter and Aston
approach music as being part of the "wide field of human
experience"[2] rather than as a set of disciplines and techniques
unrelated to anything else. Music education is seen as a part
of a liberal education, i.e., an education that "makes us alive
to what is happening around us and aware of our potential as
human beings."[3]

Paynter and Aston contend that "young people deserve
a truly liberal education alive with the excitement of discov-
ery," and they maintain that "this excitement is a first step:
the details, disciplines and skills will follow. Without a
sense of adventure true education is impossible."[4]

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[1]John Paynter and Peter Aston, Sound and Silence: Classroom
Projects in Creative Music (London: Cambridge University Press,
1970), p. 2.

[2]Ibid., p. 3.   [3]Ibid.   [4]Ibid.

The second question is: What contribution can music make? Paynter and Aston refer to the importance of the pleasure one receives by listening to and performing music, but they postulate that

> . . . it is as a *creative* art that music is beginning to play an increasingly important role in education. Like all the arts, music springs from a profound response to life itself. It is a language, and, as a vehicle for expression, it is available in some degree to everyone. If a child is to grow in awareness of himself and his world, he will need to be articulate. The very processes of becoming articulate deepen our perception.[1]

The authors agree that we need the professional artists because they are not only entertainers, but also visionaries and commentators on life and particularly the life of our time. At the same time, however, Paynter and Aston emphasise that:

> . . . we must also cultivate the artist within ourselves, for each one of us has something of that child-like innocence which is the characteristic of the artistic mind, which draws fresh inspiration from familiar things and expresses feelings in words, action, visual symbols or music. We must not stifle this innocent eye or ear; our understanding of the professional artists' work may depend considerably on our ability to participate, even a little, in their activities.[2]

They continue:

> When, in school, we involve children in the creative use of language or the materials of visual art, we are encouraging them to think like poets and artists. The majority of subjects taught in school today begin with children's natural interests, and knowledge is acquired as much through feelings as from information. In this

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[1]Ibid.   [2]Ibid., p. 4.

context the arts in education take on a new
importance. They are accepted as ways of saying
what we feel. We all have the capacity to perceive,
reflect and express. We all have the capacity to
create.[1]

In the light of the new ideas concerning art education,

i.e., that "the materials of music are as available for creative

exploration as the materials of any other art,"[2] the authors

ponder why music educators ignore the insights provided

by art educators. In this regard, they quote from the Plowden

Committee's report on primary school education in England

which states that this committee "had found the planning of

music as a creative subject lagging behind work in language and

the visual arts and crafts."[3] The argument is put forward that

music can be approached in the same way as creative art, dance

or writing, i.e.:

> . . . children are using a variety of materials such
> as language for the expression, not of second-hand
> experience, but of things that are close to them and
> real to them. What is more, the language they use is
> a living language; that is, it embodies in essence
> many of the techniques and attitudes of contemporary
> art and literature.[4]

The task of the teacher is to assist the young people

who "are prepared to follow many paths and search in many

directions."[5] More specifically, the teacher's function is to

help children "evaluate what they are doing with sounds. . . .

The teacher helps those making the music to refine their

materials and leads them toward . . . coherence [of expression]."[6]

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[1]Ibid. [2]Ibid., pp. 4-5. [3]Ibid., p. 5.

[4]Ibid., p. 6. [5]Ibid. [6]Ibid., pp. 13-14.

The teacher is not present to judge the child's work, the authors write.

> The only judgments worth making will be those we want the children to make for themselves in the process of composition: Does this piece hang together? . . . Does it say what I want it to say? Is there anything in it which should be rejected because it destroys the wholeness of the music?[1]

The authors suggest that there are two reasons why creative activities in music education have not been encouraged. The first is that the sole function of music is often considered to be entertainment. "This may have led us to emphasise re-creative rather than creative activities in school music."[2] The second is the belief that creative work denies "the more musical child the essential academic teaching he needs for . . . public examinations and for the acquisition of performing skills."[3] Paynter and Aston postulate, however, that "the first step must be the understanding of the medium and its potential. We can only discover this through creative experiment."[4]

The third question which the authors consider is: What is creative music?

> First of all, it is a way of saying things which are personal to the individual. It also implies the freedom to explore chosen materials. As far as possible this work should not be controlled by a teacher. His role is to set off trains of thought and help the pupil develop his own critical powers and perceptions. The processes of composition in any art are selection and rejection, evaluating and confirming the material at each stage. It is essentially an experimental situation.[5]

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[1]Ibid.　[2]Ibid., p. 6.　[3]Ibid., pp. 6-7.

[4]Ibid., p. 7.　[5]Ibid.

By creative experiments they mean situations which allow
children "to discover what materials can do"[1], i.e., what kind
of sound it is; what can it do; how can it be shaped. Paynter
and Aston contend that "the true 'rudiments' of music are to
be found in an exploration of its materials - sound and
silence."[2]

Finally, the writers urge that music must no longer be
considered in isolation: "it has for so long been regarded as a
highly specialized subject. In fact it needs the other arts as
much as they need it."[3]

WHAT PROCESS OF MUSIC EDUCATION DOES THIS WORK ADVOCATE?

Sound and Silence consists of thirty-six projects.
Paynter and Aston carefully state at the outset that they want
to avoid "at all costs" giving the impression that these pro-
jects constitute a "method" of teaching music; rather, they are
offering suggestions which "represent our attitude to the place
of music in education."[4] The projects are a means through which
the teacher can "release the natural creativity in those they
teach, . . ."[5] They explain

> The principal 'method' behind the creative
> activities in this book is what is normally termed
> 'empirical composition'. This means going directly
> to our materials - the various instruments or
> musical ideas - and experimenting with them by
> improvisation until we have fashioned a piece of
> music. The process is one of selection and

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[1]Ibid.   [2]Ibid., p. 8.   [3]Ibid., p. 19.

[4]Ibid., p. 23.   [5]Ibid.

rejection, evaluating as we go along and confirming
the details mentally . . . It is an experimental,
trial-and-error process.[1]

It is obvious to the authors that pupils need the "opportunity
to work at first-hand with the materials of music,"[2] if they
are expected to create music at all. These projects are
designed to provide such opportunities. Paynter and Aston say
that they have tried not to assume that the children have a
knowledge of notation. Though they recognize that such know-
ledge is of value in a few projects, it is by no means
essential.

Each project, with the exception of the last, is set
out in four parts - A, B, C and D. Part A serves as an introduc-
tion to the project. This entails discussions of what will
take place, what kinds of sounds will be used, and what line of
thought will be taken. The authors explain that the discussion
may centre around "purely musical materials" or that the start-
ing point may be "in the natural world or in an experience of
some other art," and they emphasise the importance of lively
"adventuresome conversation"[3] at this point between pupil and
teacher. Part B suggests creative work in the form of an
assignment or a series of events for a class, small group or
individuals. Children may experiment with materials through
improvisation. They select, reject and evaluate their work
initially and continue to do so throughout the project. Part C

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[1]Ibid., p. 12.   [2]Ibid., p. 13.   [3]Ibid.

furnishes examples of recordings of relevant works relating to
the project, and part D supplies follow-up material. Let us
see how these ideas are carried out in Project 1: "What does
Music say?"

Section A begins with the idea that participants listen
to the third section of Messiaen's Et Expecto Resurrectionem
to demonstrate the composer's way of using his material. A
discussion then ensues about music and feeling, music and
sound, planning musical materials, and music versus noise.
Gradually the group settles upon a discussion of the values of
placing limitations on oneself before experimenting with
sounds, and eventually upon the suggestion that they discover
some of their own "techniques with a simple instrument, say a
cymbal."[1]

Section B continues by offering suggestions concerning
different ways one may play the cymbal. Students then experi-
ment with these effects and others. When they have found a wide
enough repertoire of sounds and are able to control them, they
are ready to make a piece based on cymbal sounds. The trial
and error process is used, and the teacher continually circulates
assisting the children, asking them questions and making
suggestions. When the children are satisfied, the piece is
recorded. Other suggestions are made such as experimenting with
cymbals of different sizes and then making another piece for one
player using various cymbals and one stick.

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[1]Ibid., p. 27.

Section C includes an explanation and an example of a
piece called <u>Music for Cymbals</u>, which is the result of a group
improvisation of four players.

Section D includes suggested recordings that have "the
more unusual cymbal effects", e.g., <u>Concerto for Orchestra</u> by
Roberto Gerhard which uses a cymbal played with a bow. These
recordings should further stimulate the class, Paynter and
Aston write.

Project 11, "Patterns in Nature", is introduced as
follows:

> In this project we try to follow an idea through
> from something looked at to something heard, and
> begin by finding our inspiration close at hand, in
> the immediate environment.[1]

The children are then given these instructions:

> Go out and find one natural object which you like.
> Don't choose too hastily. Have a good look around
> but bring back one thing only. It could be a leaf,
> or a stone, a shell or a piece of wood. Make up your
> mind what there is about it you especially like.
> Examine the patterns on it carefully. We are going
> to copy these patterns on paper. . . .
> *Work* the pattern; develop it all over the paper.
> Fill the paper to the edges, letting whatever it is
> about the pattern that attracts you go where it wants
> to go and develop as it seems to want to develop.[2]

The authors suggest that the word, pattern, may be
misleading, and that rhythm may be a better word. They explain:

> Rhythm carries an idea along. Rhythm is movement. . . .
> When we have been thinking of pattern on the object,
> it is this quality of movement onwards which we have
> really been focusing upon. Take a section of this;
> transfer it to your paper, creating more rhythm with

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[1]Ibid., p. 87.   [2]Ibid.

dark, light, spotty movement – whatever the natural object suggests to you.[1]

Paynter and Aston next pose these questions.

> Now that you have worked it thoroughly, does your visual rhythm suggest an organisation of sounds and silences? Is there an immediate impression of the kind of sound? Which instruments will you choose? Does it also suggest a way of using these sounds? Are there wisps of sounds, delicate lines weaving here and there or fanning out from a central point? Are there strong firm lines moving on ponderously?[2]

Finally, the authors relate these activities to music by saying:

> Just as you filled your paper with an idea from the object, take an idea from your paper and fill a space of time with an organization of sounds and silences based on the same qualities. . . . You need not stick slavishly to what you have on your paper: you are not trying to translate what is seen into something heard but you should be following-through an idea which you began to work on in visual terms and now extend into musical terms. Listen to the sounds. Judge carefully . . . Remember the effects you like. Reject those you don't like . . . When you have finished you may want to find some way of writing your pieces down. There are many ways of doing this and they need not involve the use of traditional musical notation. You could invent your own.[3]

The project ends with suggested books, paintings and music that may be useful both before and after the assignments, e.g., reproductions of paintings by Paul Klee.

Of the thirty-six projects suggested, Paynter and Aston explain that numbers two to twenty-four inclusive may be used in any order. These projects explore topics such as "Music and Mystery", "Pictures in Music", "Music and Drama", "Movement and

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[1]Ibid., pp. 88-89.   [2]Ibid., p. 89.

[3]Ibid., pp. 89-90.

Music", "Short Sounds and Long Sounds" and "Patterns in

Nature." We now look briefly at the first, "Music and Mystery."

Part A is a discussion of the idea that primitive art

and music are very closely related to life. The authors point

out that the music and art of primitive peoples often expressed

thoughts and feelings about "formulated rituals of life and

religion, with fears and fancies and delights." Paynter and

Aston explain:

> Primitive arts are vital because they spring directly
> from the perception of things close to people. Only
> in relatively recent times have we come to think of
> music as something to be listened to or as something
> able to exist by itself.[1]

This leads to the purpose of this project: "to

make use of words, old words with a flavour of mystery and

ritual about them."[2] The authors suggest that the following

musical resources be used:

> rhythms derived from pulse beat and sounds derived
> from breathing . . . add one or two large
> cymbals and gongs if they are available, and also a
> hand drum or two (Indian drums or bongos).[3]

Part B is the following exercise:

> Chose at least six different notes from the
> harmonic series on the fundamental note C: hold them
> as a sustained (or very slowly repeated) chord through-
> out the piece. Play those notes very quietly on any
> instrument(s) which will give the pitches required, or
> sing the notes (to Ah or as a quiet hum). If you wish
> to sustain the chord without a breath, wind instruments
> or string instruments will be essential, unless you use
> voices or piano recorded on a tape-loop . . .

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[1]Ibid., p. 39. [2]Ibid. [3]Ibid.

Using the harmonic series chord as a background
(very quietly indeed) add breathing sounds and low-
pitched sighs, moans or not too definite Ahs and Oos.
Some quiet sounds on cymbals or gongs may be added at
a slow pulse beat. A gong struck and lowered slowly
into a trough of water while it is still vibrating
will produce a mysterious sound which you might like
to use here. Let these sounds move to a very slow
pulse.[1]

Part C suggests that the choice of words be appropriate

to the age-range with which one is working, and that the piece

of music which results should grow out of the words, i.e., if

the words express mystery, then the music should also do so.

Part D suggests that, having completed their pieces,

the children may be interested to hear the first and last

sections of Life Cycle by Wilfrid Mellers.

Having presented numerous projects that deal with

melody and rhythm, projects no. 25 through 33 are concerned with

western harmonic ideas and are meant to follow in progression:

"Heterophony (1) and (2)", "Discovering Harmony", "Building a

Chord", "The Primary Triad, Major and Minor Modes", "Passing

Notes and Auxiliary Notes (1) and (2)" and "The Secondary

Triads and Suspensions."

The final project, "Theatre Piece", is conceived with

the idea of relating music to words and actions. Initially the

children are encouraged to examine the scores or see perform-

ances of works such as Britten's Noye's Fludde or The Little

Sweep. Then they are asked to make one of three suggested

"Theatre Pieces."

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[1]Ibid., pp. 40-41.

(i)   Make a *Theatre Piece* based in some way on
      the following account of a visit by a party
      of tourists to the city of York some time
      during the early eighteenth century. The
      text is taken from Daniel Defoe's *A Tour
      through the whole Island of Great Britain* . . . .

(ii) Make a *Theatre Piece* on the subject of CREATION.
      You could use one of the two accounts in
      Genesis either as it stands, or expanded by
      bringing together poems and writings on creation
      and evolution from many sources, old and new . . . .

(iii) Make a *Theatre Piece* (perhaps for performance
      in a church) based on one of the following subjects:

      (1) Joseph and his Brothers
      (2) Abraham and Isaac
      (3) Job . . .[1]

Having presented the philosophy and the process of

music education as found in Sound and Silence: Classroom Projects

in Creative Music, we are now in a position to answer the questions

that will determine to what extent this work supports the import-

ance of creativity in elementary music education.

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[1]Ibid., pp. 337-340.

EVALUATION FORM

WORK: Sound and Silence: Classroom Projects in Creative Music

AUTHOR/S: John Paynter and Peter Aston

PLACE, PUBLISHER & DATE: London: Cambridge University Press,
1970.

- -

Each question has one of 4 possible answers as listed
below; each one indicates the extent to which the
work supports the point in question. The relevant
number will be circled for each question, and a brief
explanation will be given to verify the answer.

3. This indicates that the point in question receives
   strong support, either explicitly or implicitly.

2. This indicates that the point in question receives
   moderate support, either explicitly or implicitly.

1. This indicates that the point in question receives
   weak support, either explicitly or implicitly.

0. This indicates that the point in question receives
   no support, either explicitly or implicitly.

1. *To what extent does this work take*
    cognizance of the fact that creative
    behaviour is thought by some eminent
    psychoanalysts and psychologists to
    be innate in each individual? . . . . ③ 2 1 0
    (from "The Creative Mode of Thinking")

The authors write: "We all have the capacity to perceive, reflect,
and express . . . to create." They maintain that music "as a
creative art is beginning to play an increasingly important role
in education . . . , and is available in some degree to everyone."

2. *To what extent does this work emphasise*
    the presentation of activities or
    "contingencies" which may result·in
    creative behaviour? . . . . ③ 2 1 0
    (from "The Creative Mode· of Thinking")

The projects are intended as a means through which teachers
can "release the natural creativity in those they teach,
and thus develop their creative abilities."

3. *To what extent does this work*
    encourage children to use the creative
    process, i.e., any of the steps that
    are similar to or the same as the
    first four steps of S. J. Parnes'
    creative problem-solving process:

        a. fact-finding? . . . . ③ 2 1 0
To make a "Theatre Piece" is one example of many suggested
activities requiring the above.

        b. problem-finding? . . . . 3 2 1 ⓪
This is not given consideration in this work.

        c. idea-finding? . . . . ③ 2 1 0
Students are often encouraged to experiment and find ideas,
e.g., "Music and Mystery."

        d. solution-finding? . . . . ③ 2 1 ·0
            (from "The Creative Process")
Many situations in this work necessitate solution-finding,
e.g., students are asked how they might create a cymbal
piece.

4. *To what extent does this work encourage*
   the following capacities in children:

   a. *curiosity?* . . . . ③ 2 1 0
   The authors write that children only discover the medium of music and
   its potential by being encouraged to discover "what kind of sound it
   is; what it can do; . . ." Many activities encourage this.

   b. *initiative?* . . . . ③ 2 1 0
   They write that "children are prepared to follow many paths and
   search in many directions", and their projects encourage this,
   e.g., "Theatre Piece."

   c. *critical faculties?* . . . . ③ 2 1 0
   The writers maintain that part of the role of the teacher is to
   "help the pupil develop his own critical powers and perception",
   e.g., "What does Music say?"

   d. *intuitive ideas?* . . . . ③ 2 1 0
   They advocate an education that is "alive with the excitement of
   discovery", and their activities support this idea.

   e. *aesthetic judgment?* . . . . ③ 2 1 0
   From the authors: "The only judgments worth making will be
   those we want the children to make for themselves in the process
   of composition."

   f. *wide range of interest beyond music?* . . . . . . 3 ② 1 0
      (from "The Creative Person")

Music, they write, "needs the other arts as much as they need it."

5. *To what extent does this work encourage any*
   of the aptitudes for creative thinking, as
   identified by J. P. Guilford, with respect
   to music:

   a. *sensitivity to problems?* . . . . ③ 2 1 0
   To successfully complete "Theatre Piece", children must be
   sensitive to problems, and other projects require the same quality.

   b. *fluency of ideas?* . . . . ③ 2 1 0
   "What does Music say?" is one of many projects which encourages
   this.

   c. *flexibility of ideas?* . . . . ③ 2 1 0
   "Patterns in Nature" is one of many projects which encourages this.

   d. *originality?* . . . . ③ 2 1 0
   "Theatre Piece" is one of many projects which encourages this.

   e. *redefinition?* . . . . 3 ② 1 0
   One example from projects which encourage this is section B of
   "What does Music say?", when children discover that cymbals may be
   played in many ways, whereas before, they considered only one way.

   f. *elaboration?* . . . . ③ 2 1 0
      (from "The Creative Person")
   "Theatre Piece" is one of many projects that encourages this.

6. *To what extent does this work encourage*
   children to produce musical ideas that
   are unusual and that are appropriate? . . . . ③ 2 1 0
   (from "The Creative Product")

"Patterns in Nature" is one of many activities which encourages
the above.

7. *To what extent does this work encourage*
   teachers to show:
       a. respect for unusual questions? . . . . ③ 2 1 0

Paynter and Aston believe that teachers should assist young people
who are "prepared to follow many paths and search in many
directions."

    b. confidence in children by:
        1. valuing their ideas? . . . . ③ 2 1 0

Part of the teacher's role is to help children "evaluate what
they are doing with sound . . ."

        2. granting freedom to explore their ideas? ③ 2 1 0
One reply given by the authors to the question, "What is creative
music?" is that "it implies the freedom to explore chosen materials";
e.g., "Patterns in Nature."

        3. granting freedom to explore their
           environment? . . . . 3 ② 1 0
"Patterns in Nature" is one of several examples.

        4. granting periods for non-evaluative
           practice of ideas? . . . . ③ 2 1 0
           (from "The School")

Experimentation and discovery are encouraged throughout the work.

8. *To what extent does this work present*
   processes that involve:
       a. open-ended questions? . . . . ③ 2 1 0
"Patterns in Nature" is one of the many projects that utilizes
such questions.

    b. provocative questions? . . . . ③ 2 1 0
The explanation is the same as that given for 8 a.

    c. synthesis of ideas? . . . . ③ 2 1 0
The explanation is the same as that given for 8 a.

    d. open-ended learning situations that encourage
       the discovery method of learning? . . . . . ③ 2 1 0
The authors believe that "young people deserve an . . . education
alive with the excitement of discovery", and their projects
incorporate this idea.
    e. planned and guided experiences using
       divergent thinking abilities? . . . . ③ 2 1 0
       (from "The School")
The projects are based on this idea.

9. *To what extent does this work encourage children to:*

    a. *learn from their own mistakes?* . . . . ③ 2 1 0

The authors say that a primary function of the teacher is to help children evaluate what they are doing with sound.

    b. *share and work together on ideas?* . . . . ③ 2 1 0

For most of the projects, the children do share and work together on ideas.

10. *To what extent does this work encourage children to use the following techniques when searching for ideas:*

    a. *brainstorming?* . . . . 3 2 1 ⓪

    b. *forced relationships?* . . . . 3 2 1 ⓪

    c. *check lists?* . . . . 3 2 1 ⓪
        (from "The School")

No mention is made of these techniques.

11. *To what extent does this work encourage independent musical thought in all children?* . . . . ③ 2 1 0
        (from "Detrimental Effects of a Conforming Environment on Creativity")

This is a basic tenet of this work, as is evident from the replies given to questions such as, "Why teach music?" or "What is creative music?"

12. *To what extent does this work stress the importance of using the following modes of creative expression in music:*

    a. *composition?* . . . . 3 ② 1 0

To conclude "Patterns in Nature", they write: "When you have finished you may want to find some way of writing your piece down. There are ways of doing this."

    b. *improvisation?* . . . . ③ 2 1 0

They write: "The principal 'method' behind the creative activities in this book is . . . going directly to our materials and experimenting with them by improvisation until we have fashioned a piece of music."

    c. *analysis?* . . . . ③ 2 1 0
        (from "A Study by Peter R. Webster")

Paynter and Aston maintain that the teacher is there to help children evaluate what they are doing, and this involves analysis.

Group D

1. School Music Method by Reginald Hunt

WHAT IS THE UNDERLYING PHILOSOPHY OF THIS WORK?

The background to Hunt's method is scant. He views
infant music as being "entirely a recreational subject . . .
and generally allied to movement."[1] He considers the first
essential to be that "children should hear simple music and
learn to respond to it in any way they can."[2] Work is divided
into aural training, class singing and appreciation, according
to Hunt, and it is non-technical in the infant school (i.e.,
5 - 6 years).

He views primary school music as the place where "formal
teaching begins," i.e., the teaching of notation and voice
training. There is a tendency to discourage all formal train-
ing in voice, Hunt points out; however, "there must be some
formal attempt to ensure breath control and a good tune,"[3] when
teaching songs to the children. He believes that "the teacher's
aim must always be to pass beyond the stage at which everything
is taught by ear, . . ."[4] Teachers must aim to improve child-
ren's ability to read music even though there are difficulties
involved, he explains, and "the form of music lessons should be
as varied as possible: . . ."[5]

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[1] R. Hunt, School Music Method (London: Edwin Ashdown, 1957;
4th reprint, London: Lowe and Brydone, 1968), p. 7.

[2] Ibid., p. 64.   [3] Ibid., p. 10.   [4] Ibid., p. 41.

[5] Ibid., p. 60.

Hunt expects that "music appreciation" must embrace all kinds of music activity, i.e., singing, reading of new music and aural training, not only the activity of passively listening to music. "Every music lesson . . . is intended to enlarge the knowledge and deepen the understanding of the art, that is, to help the student to appreciate it."[1] But looking at the specific part of the lesson that is usually termed "music appreciation", Hunt says that these are the aims:

(a) To bring about intelligent listening - especially as regards music shape or "form":

(b) To encourage satisfactory reactions or responses to musical stimuli:

(c) To help towards the acquisition or formation of musical taste, able to discriminate between good, bad and indifferent:

(d) To foster the ability to enjoy or get the best out of music, whether by listening or by actual performance:

(e) To store the youthful mind with good music, in the hope that there will be less room or inclination to accommodate the bad:

(f) To promote good neighbourliness. A taste for good music should result in a much more selective (that is, a limited and reasonable) use of sound-disseminating inventions such as the gramophone and radio.[2]

WHAT PROCESS OF MUSIC EDUCATION DOES THIS WORK ADVOCATE?

The reader is supplied with a scheme of work for children in the elementary school. For most of the age groups, i.e., 4-5, 6-7, 7-9 and 9-10, methods that deal with rhythm and stepping, with pitch and melody, with class singing and with

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[1]Ibid., p. 58.   [2]Ibid.

percussion band are included. Music appreciation and creative work are introduced only to children from the age of 7. We shall look at the methods that Hunt uses for each of the above, and he begins be combining pitch and rhythm.

1. Pitch and Rhythm

The children are first "taught to recognize high and low, ascending and descending passages, and to imitate short melodic passages sung by the teacher."[1] They are then presented with the home note - doh. The teacher plays a simple tune, excluding the final doh, and the children fill in the home note. Doh - soh, the interval of a fifth, is introduced next, and the children sing it, use hand signals for it, and move it. Placing the interval on the staff should be delayed till age 7, says Hunt. To the fifth is then added doh¹. Beginning on E, Hunt writes: ". . . try to obtain from the class that the two E's sounded together are like 'one big note'."[2] He then writes that these notes should be placed on the staff, and the teacher should explain the use of the figure 1 placed at the top right hand side of the high doh, i.e., doh¹.

Teachers are further instructed to play various dohs or to sing them and then to ask the class to pitch soh in each case. Fifths should be shown on the board, e.g.,

| Lines | Spaces | Lines | Spaces |

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[1]Ibid., p. 64. [2]Ibid., p. 27.

Explain also that, counting d as number 1, d[1] is
number 8. Top doh is said to be an "octave", or
eight notes above doh. Refer to an "octagon" –
an 8-sided figure, which will probably be known
to the children.[1]

Hand signs are suggested as aids to fix the character of solfa

notes in the mind.

Turning to rhythm, children are encouraged first to

dramatize march time, moving like elephants, giants or

soldiers, dance time moving like fairies or children, and rock-

ing rhythm moving like the wind swaying the flowers. They are

also encouraged to imitate rhythmic patterns clapped by the

teacher.

Crotchets are introduced as a "walking" or a "marching

note", and, he says, they should be written on the board in

both positions, i.e., ♩ or ♩. Following the crotchet is a

short explanation of a bar, of accents, of a tie, and of a

minim. Simple exercises based on the materials of pitch and

rhythm, which we have seen, follow. With reference to these

first exercises in rhythm in $\frac{2}{4}$ time, Hunt declares:

It is too early to explain time signatures. All
that need be said at this time is that the figure 4
under the 2 refers to crotchets and that the use of
the number will be explained later.[2]

Reverting back to pitch, Hunt introduces a third

syllable – me. The teacher is instructed first to play the

interval of a fifth and "see if any child can sense the hollow

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[1]Ibid., p. 27.   [2]Ibid., p. 29.

empty effect. If not, play the interval again, then insert
the third, drawing attention to the pleasant filling-in
effect."[1] Further instruction is to show the new sound on the
STAFF MODULATOR, e.g.,
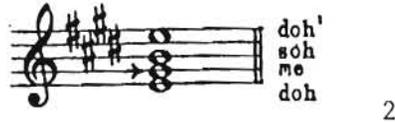
Then he says, "Give the new note its name, me. Show it on what
is called the SOLFA MODULATOR, ..."

[Staff Modulator]   [Solfa Modulator]
This should normally give the notes only,
and omit all solfa indications
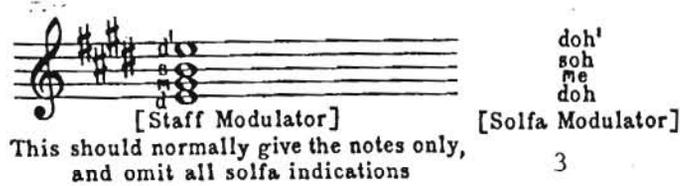
Three well-known melodies which make use of the new note should
then be sung or played. Hunt choses the following tunes
because they are "calm, smooth, or peaceful tunes and should
suggest to the class the calm, peaceful character of ME."[4]
The tunes are:

(a) "Drink to me only"

(b) "Sandon" Hymn Tune

(c) "Eventide" Hymn Tune

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[1]Ibid., pp. 29-30. [2]Ibid., p. 30. [3]Ibid.

[4]Ibid. [5]Ibid.

More exercises from a sight reader on d m s d^1, which "should

be of three kinds", are suggested. They are:

    (a) Pointed on the solfa modulator by the teacher;
    (b) Pointed on the staff modulator by the teacher;
    (c) "Horizontal" solfa exercises such as the following:-

        d m s m d m s   d^1 m s m d^1 d
        (written on the blackboard)[1]

Reverting again back to rhythm, Hunt introduces the $\frac{4}{}$

time which is represented as an extension of the walk or march

previously introduced in $\frac{2}{4}$ time. He decides that "this is

the place to introduce the long note, or semibreve which equals

four crotchets tied together."[2]

With respect to the time signature, he maintains that

"once the semibreve has been introduced, the explanation of

the lower figure used in time signatures may be made at any

time."[3] He notes that from the following diagram "it will be

understood why the under figure 4 refers to crotchets and the

under figure 2 to minims, and 1 to semibreves."[4]

1 semibreve $\cdots\cdots\frac{x}{1}$ means x semibreves

= 2 minims $\cdots\frac{x}{2}$ means x minims

= 4 crotchets $\cdots\frac{x}{4}$ means x crotchets

to a bar

He adds:

    A reference to vulgar fractions may be helpful to
    children: - The numerator tells "how many": how many
    beats to the bar: denominator tells "what sort": what
    sort of note is each beat.[5]

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[1]Ibid.   [2]Ibid., p. 31.   [3]Ibid.

[4]Ibid.   [5]Ibid.

Along with an explanation of rhythm, Hunt proposes to
help children "towards the understanding of simple rhythmic
patterns by stepping to them."[1] At 5 years of age, children
are encouraged to move freely to music having a definite dance
rhythm. "Each child moves as he feels, and there is no attempt
to teach steps.[2] Next a march, written entirely in crotchets,
is introduced. Hunt thinks that "the crotchet is the easiest
to step because it is the walking note."[3] For the 6 and 7 year
olds, "the class can begin to step simple patterns containing
crotchets and quavers."[4] Later on, though he does not say when,
the minim is introduced for stepping, even though he realizes
that it is "more difficult." Finally, Hunt writes that "the
semibreve is even more difficult, and the dotted minim not
much easier than the semibreve."[5] Nevertheless, he gives an
exercise with both of the difficult notes.

Taa	taa	taa -a		Taa	aa	aa	taa
Step	step	step-bend		Step	bend	bend	step
Taa	aa	taa	taa	Taa	aa	aa	aa
Step	bend	step	step	Step	bend	bend	bend	6

He draws his remarks about stepping to music to a close
by admitting that:

> Really QUAVERS are much easier than semibreves,
> dotted minims or minims. . . . Many teachers prefer
> to introduce quavers before the longer notes, because
> the running step comes so naturally to young children.[7]

Reverting again to pitch, Hunt presents the notes ray,
fah, te and lah in this order, and he uses the same method

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[1]Ibid., p. 37. [2]Ibid., p. 64. [3]Ibid., p. 37.

[4]Ibid., p. 65. [5]Ibid., p. 37. [6]Ibid. [7]Ibid.

which he used when he presented doh, soh and me: i.e., the
teacher explains and shows, and the children practice what they
are shown. All of this information is gleaned by children up
to the age of 9. From 9 - 10 years of age, the children deal
with the scale, tones and semitones, and the introduction of
tonic, dominant and subdominant. Doh now becomes a moveable
doh. Music dictation is also suggested. From 10 - 11 years
of age, children are introduced to

(a) The meaning of KEY. Introduction of Key C.
(b) "Fe" without modulation, and with modulation. Key G.
(c) "Ta" without modulation, and with modulation. Key F.
(d) Dictation of well-known tunes by the Somervell method.
(e) Reading from graduated books in keys C, G and F in
    2/4, 3/4, 4/4, and 6/8 time. Quavers only in two-
    groups (2/4 and other simple times) and in three-
    groups in 6/8.[1]

The melodic minor scale should not be formally intro-
duced, according to Hunt, until the age of 12.

Until then the efforts to understand the major
scales up to three or four sharps and flats will
have kept the children fully occupied.[2]

The same methods of explaining, showing and questioning are used,
and the harmonic minor scale is introduced. Hunt concludes that
there are other scales that "the teacher may wish to remind the
children about. They are the chromatic scale, the whole-tone
scale and the pentatonic scale."[3]

Returning to rhythm once again, Hunt proposes that
children of 9 - 10 years of age are ready for three new ideas:

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[1]Ibid., p. 71.   [2]Ibid., p. 51.   [3]Ibid., p. 54.

first, "introduction of the crotchet, minim and semibreve rests, and music which starts on a weak beat"; secondly, "the dotted crotchet and quaver, with rhythm-name and shorthand sign"; thirdly, "introduction of 6/8 time."[1] From 10 - 11 years of age they are ready for a revision of all previously learned rhythmical activities and for the "introduction of the quaver rest."[2]

2. Class Singing

From 5 - 6 years of age, Hunt suggests that children sing nursery rhymes using songs pitched no higher that E[1] and no lower than D above middle C. From 6 - 7 years of age, children begin simple breathing exercises. "Nursery rhymes, simple folk-songs, national songs, and songs specially written for children should be learned by imitation."[3] He recommends song books with both notation and the tonic solfa. For children from 7 - 9 years of age, he suggests that suitable songs are national songs, nursery rhymes, and "songs specially composed for young children, such as Brahms 'Sandman' . . . . and 'Wiegenlied'."[4] The method Hunt suggests for teaching unison songs is applied to the following Irish folk song, "When through life unblest we rove."

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[1]Ibid., pp. 69-70.   [2]Ibid., p. 71.   [3]Ibid., p. 66.
[4]Ibid., p. 69.

The Form of " When through life unblest we rove "

1

1. Play the tune straight through while the class follow in their books.
2. Play it again after asking the children to notice where the tune repeats itself. . . .
3. Reckoning 2 bars to a phrase, play the first 4 bars with a slight pause between the phrases "a" and "b".
4. Play bars 5-8, with a slight pause between phrases "c" and "d".
5. The children are now asked to read the solfa syllables, without time values, phrase by phrase.
   This should be done twice or at most three times.
6. . . . they should next read off the rhythm names from staff notation on a monotone.
7. The next step is to sing the solfa syllables in the correct rhythm, the children following the note values in their books.
8. Direct attention to the words, noting the dotted crotchet on "When", etc.
9. The class now sing the first 8 bars, words and music, after they have been reminded to sing "lah--if" (life), etc.
10. There remains only the learning of the new phrases.2

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[1]Ibid., p. 43. [2]Ibid., pp. 41-42.

He adds that "in a first lesson on a song the first verse only should, as a rule, be attempted."[1] He stresses that exercises in voice training and breathing should continue with additional attention being given to vowel and diphthong sounds.

For the 9 - 10 year olds, greater attention is given to voice training. The songs Hunt suggests are "folk, national and specially composed songs as before, with songs by the great composers. . . ."[2]

For 10 - 11 years of age, vocal breathing exercises are continued. The kinds of songs suggested are those of well defined types, e.g., simple lullaby, rollicking chorus, "classical" songs, simple rounds and canons and descants to well-known songs.[3]

3. Percussion Band Work:

Hunt writes that at 5 years of age, the children must learn how to manage the instruments first, e.g., drums are hit with a glancing blow.

> Drums are first introduced to indicate the regular
> pulses - that is, the drum is sounded on every beat,
> with an emphasis on the first beat in two, or in
> three, or in four. Cymbals follow, . . .[4]

For 6 year olds, Hunt suggests that their band consists of drums, cymbals, tambourines, bells and triangles. He suggests that now the children should practice shades of tones and imitate the regular rhythm-patterns of two phrases played by the teacher on the piano. If the teacher does not play, Hunt says

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[1]Ibid., p. 43.   [2]Ibid., p. 70.   [3]Ibid., p. 71.

[4]Ibid., p. 64.

that there are gramophone records of "various national songs, classical pieces, and other suitable works"[1] which are easily obtainable. But he adds: "It should always be remembered that the music is the more important, that is, the contribution of the piano or gramophone: the band is only the accompaniment."[2] He suggests that the children do the conducting, and he insists that their directions must be followed by the teacher and children "whether right or wrong."[3] He also encourages children to "orchestrate" their own pieces.

Hunt maintains that 7 - 9 year old children should read different lines of rhythmic notation in the band, but that after 9 years of age, the percussion band should give way to the school orchestra.

4. Musical Appreciation and Creative Work

Hunt suggests that teachers combine two or more of the following methods in teaching music appreciation. In his view, the first three are suitable for younger children.

1. Interpretation through rhythmic movement.
2. Musical appreciation through the child's knowledge of singing . . . beginning with the Soprano Voice; then would follow the Contralto, Tenor and Bass Voices: Duets and Trios: Quartet . . . finally Chorus.
3. As with number 2, but this time with the Orchestra.
4. A general survey of music, taking composers and their works in chronological order. Biographical sketches are given, and charts of names, dates and compositions are displayed, these being supplemented by pictures and busts of the composers.
5. The study of form in music, the aim being to cultivate good taste. . . .
6. The study of the development of form in chronological order, from folk song and dance form to the symphony.[4]

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[1]Ibid., p. 67.   [2]Ibid., p. 66.   [3]Ibid., p. 67.

[4]Ibid., p. 58.

Hunt declares that his own course in musical appreciation, The

Musical Touchstone Parts I and II published by Boosey, combines

the last three methods. He suggests that the teacher refers to

it or to a similar more detailed book as the subject is so vast.

Musical appreciation and creative work are presented

simultaneously for the first time in a scheme of work for 7 - 11

year olds. Hunt claims that musical appreciation for these

children involves the following:

> Some physical activity . . . when a merry or
> graceful dance is played.
> But there should also be some listening to a
> very short piece while keeping quite still. Such
> a piece should express a single mood only.[1]

For a creative activity, Hunt suggests that "individual children

might make up and step new patterns for the rest of the class

to imitate, or pitch their own doh and sing little two-bar

phrases."[2]

For the 9 - 10 year olds, musical appreciation involves

"the musical phrase and sentence: simple binary form as shown

in folk-song: the three primary chords, and the instruments of

the orchestra. . . ."[3] No creative activity is suggested.

For the 10 - 11 year olds, musical appreciation involves

form: i.e., revision of binary form as in folk-song, modulating

sentences, sequences, binary form, ternary form, simple rondo

and the four named cadences. Hunt suggests one creative

activity for this group, i.e., "composing a tune in binary form

to given words, the rhythm being supplied."[4]

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[1]Ibid., p. 69.   [2]Ibid.   [3]Ibid., p. 70.

[4]Ibid., p. 71.

Having presented the philosophy and the process of music education as found in School Music Method, we are now in a position to answer the questions that will determine to what extent this work supports the importance of creativity in elementary music education.

EVALUATION FORM

WORK:School Music Method

AUTHOR/S: Reginald Hunt

PLACE, PUBLISHER & DATE: London: Edwin Ashdown, 1957;
4th reprint, London: Lowe and Brydone, 1968.

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Each question has one of 4 possible answers as listed
below; each one indicates the extent to which the
work supports the point in question. The relevant
number will be circled for each question, and a brief
explanation will be given to verify the answer.

3. This indicates that the point in question receives
    strong support, either explicitly or implicitly.

2. This indicates that the point in question receives
    moderate support, either explicitly or implicitly.

1. This indicates that the point in question receives
    weak support, either explicitly or implicitly.

0. This indicates that the point in question receives
    no support, either explicitly or implicitly.

1. *To what extent does this work take
    cognizance of the fact that creative
    behaviour is thought by some eminent
    psychoanalysts and psychologists to
    be innate in each individual?* . . . .   3 2 1 ⓪
    (from "The Creative Mode of Thinking")

Hunt views infant music as being "entirely recreational",
and primary school music as "the place where formal
teaching begins."

2. *To what extent does this work emphasise
    the presentation of activities or
    "contingencies" which may result in
    creative behaviour?* . . . .   3 2 1 ⓪
    (from "The Creative Mode of Thinking")

The explanation is the same as that given for question 1.

3. *To what extent does this work
    encourage children to use the creative
    process, i.e., any of the steps that
    are similar to or the same as the
    first four steps of S. J. Parnes'
    creative problem-solving process:*

    a. *fact-finding?* . . . .   3 2 1 ⓪
Hunt emphasises the process of teaching notation and singing.

    b. *problem-finding?* . . . .   3 2 1 ⓪
The explanation is the same as that given for 3 a.

    c. *idea-finding?* . . . .   3 2 1 ⓪
The explanation is the same as that given for 3 a.

    d. *solution-finding?* . . . .   3 2 1 ⓪
        (from "The Creative Process")
The explanation is the same as that given for 3 a.

4. *To what extent does this work encourage
   the following capacities in children:*

   a. *curiosity?* . . . . *3 2 1* ⓪

As this work stresses the importance of teaching notation,
singing and appreciation, it does not encourage curiosity.

   b. *initiative?* . . . . *3 2* ① *0*

The only "creative activity" which Hunt suggests is for 10-11 year
olds, e.g., "composing a tune in binary form to given words, the
rhythm being supplied."

   c. *critical faculties?* . . . . *3 2 1* ⓪

This work encourages correct responses.

   d. *intuitive ideas?* . . . . *3 2 1* ⓪

As this work stresses the importance of teaching notation,
singing and appreciation, it does not encourage intuitive
ideas.

   e. *aesthetic judgment?* . . . . ③ *2 1 0*

Hunt declares that one aim of music appreciation is "to store the
youthful mind with good music, in the hopes that there will be
less room or inclination to accommodate the bad."

   f. *wide range of interest beyond music?* . . . . *3 2 1* ⓪
      (from "The Creative Person")

Hunt encourages only music and movement.

5. *To what extent does this work encourage any
   of the aptitudes for creative thinking, as
   identified by J. P. Guilford, with respect
   to music:*

   a. *sensitivity to problems?* . . . . *3 2 1* ⓪

This work is concerned primarily with the teaching of notation,
singing and appreciation and encourages few, if any, of the
aptitudes for creative thinking.

   b. *fluency of ideas?* . . . . *3 2 1* ⓪

The explanation is the same as that given for 5 a.

   c. *flexibility of ideas?* . . . . *3 2 1* ⓪

The explanation is the same as that given for 5 a.

   d. *originality?* . . . . *3 2* ① *0*

Children are encouraged to dramatize rhythmic patterns and to
move freely to dance rhythms.

   e. *redefinition?* . . . . *3 2 1* ⓪

The explanation is the same as that given for 5 a.

   f. *elaboration?* . . . . *3 2 1* ⓪
      (from "The Creative Person")

The explanation is the same as that given for 5 a.

6. *To what extent does this work encourage*
   children to produce musical ideas that
   are unusual and that are appropriate? . . . . 3 2 1 ⓪
   (from "The Creative Product")

Children are encouraged to provide correct responses and
good singing.

7. *To what extent does this work encourage*
   teachers to show:
      a. *respect for unusual questions?* . . . . 3 2 1 ⓪

Children are encouraged to provide correct responses, not to
ask questions.

   b. *confidence in children by:*
     1. *valuing their ideas?* . . . . 3 2 ① 0

Children are encouraged to dramatize rhythmic patterns and to
move freely to dance rhythms.

     2. *granting freedom to explore their ideas?* . 3 2 ① 0

This is encouraged only with respect to sensing intervals
aurally and writing little melodies.

     3. *granting freedom to explore their*
      environment? . . . . .3 2 1 ⓪

This is given no consideration in this work.

     4. *granting periods for non-evaluative*
      practice of ideas? . . . . 3 2 1 ⓪
      (from "The School")

As the aim is to produce correct musical responses in children,
they are told when they are right or wrong with regard to
their responses.

8. *To what extent does this work present*
   processes that involve:
      a. *open-ended questions?* . . . . 3 2 1 ⓪

The process that this work makes use of is mainly to explain,
to show, and to ask direct questions of the children.

   b. *provocative questions?* . . . . 3 2 1 ⓪

The explanation is the same as that given for 8 a.

   c. *synthesis of ideas?* . . . . 3 2 1 ⓪

The explanation is the same as that given for 8 a.

   d. *open-ended learning situations that encourage*
     the discovery method of learning? . . . . . . 3 2 1 ⓪

The explanation is the same as that given for 8 a.

   e. *planned and guided experiences using*
     divergent thinking abilities? . . . . 3 2 1 ⓪
     (from "The School")

The explanation is the same as that given for 8 a.

9. *To what extent does this work encourage*
    children to:

    a. *learn from their own mistakes?* . . . . 3 2 1 ⓪
This is given no consideration in this work.

    b. *share and work together on ideas?* . . . . .3 2 1 ⓪
The teacher is there to teach, and the child is there to learn
from the teacher.

10. *To what extent does this work encourage*
    children to use the following techniques
    when searching for ideas:

    a. *brainstorming?* . . . . 3 2 1 ⓪

    b. *forced relationships?* . . . . .3 2 1 ⓪

    c. *check lists?* . . . . 3 2 1 ⓪
        (from "The School")
No mention is made of these techniques.

11. *To what extent does this work encourage*
    independent musical thought in all
    children? . . . . 3 2 1 ⓪
        (from "Detrimental Effects of a Conforming
            Environment on Creativity")

This work presents the processes of aural training, the teaching
of notation, class singing and appreciation of "good" music.

12. *To what extent does this work stress the*
    importance of using the following modes of
    creative expression in music:

    a. *composition?* . . . . 3 2 ① 0
Hunt suggests that 10 year olds compose a "tune in binary
form to given words, the rhythm being supplied."

    b. *improvisation?* . . . . 3 2 1 ⓪
This is given no consideration.

    c. *analysis?* . . . . 3 2 ① 0
        (from "A Study by Peter R. Webster")
Hunt suggests the use of music dictation, and this requires
some analysis.

2. "Kodaly and Orff Music Teaching Techniques: History and Present Practice" by Margaret L. Stone.

WHAT IS THE UNDERLYING PHILOSOPHY OF THIS WORK WITH RESPECT TO CARL ORFF?[1]

Margaret Stone's thesis synthesises the Orff-Schulwerk philosophy into eight major premises. Each premise which Stone lists is supported by relevant quotations and translations from addresses given by Orff and from writings by leading exponents and teachers of the "Orff method." We present these eight premises and one or two quotations which the author includes to support each premise.

1. MUSIC IS FOR CHILDREN OF ALL AGES AND ABILITIES.[2]

Orff, in his opening address to the Orff Institute, supports this premise by saying:

> I did not think of an education only for specially gifted children but of one on the broadest foundation in which moderately and less gifted children could also take part.[3]

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[1]Although Stone's thesis is an extensive study of both Orff and Kodaly, for the reasons given in the introduction to this chapter, we shall consider only the research that deals with Carl Orff.

[2]Margaret L. Stone, "Kodaly and Orff Music Teaching Techniques: History and Present Practice," Ph.D thesis (Ohio, Kent State University, 1971. Ann Arbor (Michigan): University Microfilms, 1971), p. 113.

[3]Ibid., quoting Carl Orff, "Past and Future"; (address, Opening of the Orff Institute, October 25, 1963), In German, Jahrbuch 1963, Mainz; B. Schott's Sohne, 1963; Also in Orff-Schulwerk Information, 4 (Fall, 1967), 1-8; In English translation by Margaret Murray, Music in Education, XXVIII, 309, (September/October, 1964), 209-214.

2. MUSIC SHOULD BE AN IMMEDIATE EXPERIENCE.[1]

Andreas Leiss supports this premise in his book, <u>Carl
Orff</u>, when he explains that "the Orff musical experience
developed the child's natural instinct for immediate musical
response."[2]

3. MUSICAL EXPERIENCE MUST BEGIN EARLY AND SHOULD LEAD
CHILDREN FROM THE PRIMITIVE CHILD-PLAY WORLD THROUGH THE MORE
COMPLEX STAGES OF MAN'S DEVELOPMENT TO THE PRESENT MUSICAL
DEVELOPMENT.[3]

Orff is quoted again:

I was well aware that rhythmic training should not
start after adolescence but during the first years
and earlier.[4]

4. MUSICAL EXPERIENCES ARE GAINED THROUGH ACTIVE PARTICIPATION.[5]

Quoting still from Orff:

It (Orff-Schulwerk) is music that one makes oneself
in which one takes part not as a listener but as a
participant.[6]

A second quote which supports this premise, is by
Doreen Hall, a leading exponent of the Orff method:

Music educators are becoming increasingly aware of
the need for musical participation before the child
approaches serious study on a chosen instrument and
as a result many methods have come into existence.[7]

5. MUSIC MUST BE ELEMENTAL IN NATURE.[8]

At the 1962 Toronto workshop, Orff said

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[1]Ibid.

[2]Ibid., p. 114 quoting Andreas Leiss, <u>Carl Orff</u>, translation
by Adelheid and Herbert Parkin (London: Calder and Boyars,
1966), p. 59.

[3]Ibid.   [4]Ibid., quoting Carl Orff, op.cit., p. 212.

[5]Ibid., p. 115.   [6]Ibid.

[7]Ibid., quoting Doreen Hall, <u>Teacher's Manual, Music for
Children</u>, Orff-Schulwerk Edition 4898 (Germany: B. Schott's
Sohne, 1960), p. 6.   [8]Ibid.

"Elemental" was the password, applicable to music itself, to the instruments, to forms of speech and movement. What does it mean? The Latin word elementarius from which it is derived means "pertaining to the elements, primeval, basic." What then is elemental music? Never music alone, but music connected with movement, dance and speech---not to be listened to, meaningful only in active participation. Elemental music is pre-intellectual . . . It is fitting for children.[1]

6. MUSIC SHOULD BE A COLLECTIVE EXPERIENCE OF PLAY, SPEECH, SONG, MOVEMENT AND INSTRUMENTS.[2]

Arnold Walter, a leading exponent of the Orff method, writes:

The primary purpose of music education as Orff sees it, is the development of a child's creative faculty which manifests itself in the ability to improvise. . . . Speaking and singing, poetry and music, music and movement, playing and dancing are not yet separated in the world of children. They are essentially one and indivisible, all governed by the play instinct which is a prime mover in the development of art and ritual.[3]

7. RHYTHM AND MELODY ARE THE STARTING POINTS IN MUSIC.[4]

Again Arnold Walter's words are quoted in support of this premise:

. . . he (Orff) treats rhythm and melody as germ cells, out of which all music grows. . . . Orff's starting point is rhythm, rightly regarded as the most basic of all elements. . . . It grows out of speech patterns. For the child, (as for the primitive man) speaking and singing, music and movement are an indivisible entity: it is this intimate connection which leads quite naturally from speech patterns to rhythm, from rhythmical patterns to melody.[5]

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[1]Ibid., quoting Carl Orff, "The Schulwerk - Its Origins and Aims," Speech, Orff Workshop, Toronto, 1962, Music Educators Journal, L, 4 (April/May 1963), p. 72.

[2]Ibid. [3]Ibid., pp. 116-117, quoting Arnold Walter, "Introduction", Orff-Schulwerk, Music for Children, Book I, Pentatonic; Hall, ed. (Mainz: B. Schott's Sons, 1955), p. iv.

[4]Ibid., p. 117. [5]Ibid., quoting Arnold Walter, op.cit., p. 111.

8. FEW CHILDREN ARE UNMUSICAL.[1]

Stone quotes from Orff's address, "Past and Future", in which Orff declares:

> My experience has taught me that completely unmusical children are very rare and that nearly every child is at some point accessible and educable.[2]

This concludes the presentation by Stone of information that is relevent to the philosophy of Orff.

WHAT PROCESS DOES THIS WORK ADVOCATE WITH RESPECT TO ORFF?

Margaret Stone writes that a complete understanding of the many techniques and processes used to implement the Orff-Schulwerk requires several years of study. These processes, she found, "are based on the ways in which children assimilate and respond to music and utilize the natural growing body and voice of the child."[3]

She proceeds to list eight major techniques of the Orff approach with "verification from the works of outstanding Orff teachers"[4] for each technique. To begin with, she writes that "the Orff-Schulwerk approach seeks an aesthetic musical experience through the development of"[5] the following:

1. a rhythmic sense through speech and body movement;[6]

2. a melodic sense through the use of rote singing;[7]

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[1]Ibid., p. 118. [2]Ibid., quoting Orff, "Past and Future, op.cit., p. 212.

[3]Ibid., p. 119. [4]Ibid. [5]Ibid.

[6]Ibid., quoting Doreen Hall, op.cit., p. 22.

[7]Ibid., quoting Margaret Murray, "Orff-Schulwerk – Questions and Answers", Recorder and Music Magazine 2, November, 1967, p. 212.

3. a polyphonic sense through the use of simultaneous melodic and rhythmic activities;[1]

4. a perception of musical design, form and colour through the use of folk art and children's songs;[2]

5. a workable musical language preceding the use of the score;[3]

6. a musical creative sense based on imitation;[4]

7. a musical skill of improvisation which develops rhythms, melody and polyphony beyond the scope of imitation;[5]

8. an instrumental skill based on the use of Orff-Instrumentarium and other standard musical instruments.[6]

These eight techniques, Stone explains, are implemented through ten more specific processes, and each process is verified either by Orff or by teachers who support Orff's ideas. In other words, to develop the basic techniques of the Orff approach, these processes are employed. She lists these processes numerically from the simpler to the more complex procedures.

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[1]Ibid., quoting Ruth Pollach Hamm, "Carl Orff's Schulwerk: A Challenging Approach", Lyons Music News, Issue unknown, p. 7.

[2]Ibid., p. 120, quoting Hermann Regner, "The Orff-Schulwerk Abroad", International Music Educator, 12, October, 1965, 394; Walter, op.cit., p. ii.

[3]Ibid., quoting Doreen Hall, op.cit., p. 6; Jane C. Frazer, "The Mystery of Orphs", Music Educators Journal, LV, 2 October, 1968, p. 11.

[4]Ibid., quoting Margaret Murray, "The Caterpillar and the Lizard", Recorder and Music Magazine, II, May 1967, 143; Frazer, op.cit., p. 77.

[5]Ibid., quoting Jos Wuytack, "Improvisation", Personal Notes, National Conference, AOSA, Cincinnati, Ohio, April 1970.

[6]Ibid., quoting Doreen Hall, op.cit., p. 6.

1. childhood speech rhythms using children's names, animals, birds, etc.;[1]

2. childhood body rhythms of clapping, echo clapping, snapping, patting, stamping and walking;[2]

3. imitative rhythms and melodic patterns, ostinato rhythms, canons and rondos;[3]

4. melody patterns using the chants of children;[4]

5. melodic progression to pentatonic scale melodies and pentatonic harmonies;[5]

6. harmonic progression to major and minor patterns;[6]

7. imitative and improvised rhythmic and melodic patterns played on Orff instruments, recorders, and other music instruments;[7]

8. notation and music reading to portray musical experiences;[8]

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[1]Ibid., p. 121, quoting Carl Orff, "The Schulwerk – Its Origins and Aims", (Address, University of Toronto, July 23, 1962). In English translation by Arnold Walter, The Canadian Music Educator, October/November 1962; also in Music Educators Journal, IL, 5, April/May, 1963, pp. 69-74.

[2]Ibid., quoting Doreen Hall, op.cit., p. 14; Doreen Hall, Personal observation, Orff Workshop, Carnegie Mellon University, Pittsburgh, June, 1970.

[3]Ibid., quoting Orff, "The Schulwerk – Its Origin and Aims", p. 212; Doreen Hall, op.cit., pp. 18, 22, 24.

[4]Ibid., quoting Orff, op.cit., "Origins and Aims," p. 72; Walter, op.cit., p. ii.

[5]Ibid., quoting Margaret Murray, op.cit., p. 143.

[6]Ibid., quoting Orff, "Origins and Aims", p. 72; Werner Thomas, "Orff's Schulwerk" in Carl Orff ed. by E. Schafer, (Mainz: B. Schott's Sohne, 1960), p. 30.

[7]Ibid., p. 122, quoting Doreen Hall, op.cit., p. 30.

[8]Ibid., quoting Preface to Pentatonic Book I Orff-Schulwerk, Adaptation of Schulwerk by Hall, Walter (Mainz: B. Schott's Sohne, 1950).

9. dynamic range and timbre variations through experimentation with body sounds and instruments;[1]

10. child-created dance and movement sequences.[2]

About these processes Stone writes:

> The previous processes are listed numerically from the simplest to the more complex procedures. However, since music is considered a collective experience, several of the processes take place simultaneously as well as individually. These techniques carefully used by creative teachers produce musicality in children.[3]

We draw to a close Orff's process of music education as presented in Margaret Stone's thesis with this summary by Stone.

> The Orff techniques were created to provide musical participation rather than to build a specific school music curriculum. Orff never intended to prepare a full course in music education. Rather, Orff composed music, encouraged the invention of instruments, trained teachers, and even developed a teacher training institute to promulgate the Schulwerk techniques. With all his work he still allowed for much experimentation and freedom for both student and teacher.[4]

Having presented Orff's philosophy and process of music education as found in "Kodaly and Orff Music Teaching Techniques," we are now in a position to answer the questions that will determine to what extent the "Orff Method" supports the importance of creativity in elementary music education.

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[1] Ibid., quoting Doreen Hall, op.cit., p. 28.

[2] Ibid., quoting Film, "Das Schulwerk"; Ruth Pollick Hamm, Personal notes, Greater Cleveland, USA, February, 1970.

[3] Ibid., p. 122.   [4] Ibid., pp. 122-123.

EVALUATION FORM

WORK: "Kodaly and Orff Music Teaching Techniques:
        History and Present Practice"

AUTHOR/S:Margaret L. Stone

PLACE, PUBLISHER & DATE: Ohio, Kent State University, 1971.
        Ann Arbor (Michigan): University Microfilms, 1971.

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Each question has one of 4 possible answers as listed
below; each one indicates the extent to which the
work supports the point in question. The relevant
number will be circled for each question, and a brief
explanation will be given to verify the answer.

3. This indicates that the point in question receives
    strong support, either explicitly or implicitly.

2. This indicates that the point in question receives
    moderate support, either explicitly or implicitly.

1. This indicates that the point in question receives
    weak support, either explicitly or implicitly.

0. This indicates that the point in question receives
    no support, either explicitly or implicitly.

1. *To what extent does this work take cognizance of the fact that creative behaviour is thought by some eminent psychoanalysts and psychologists to be innate in each individual?* . . . . ③ 2 1 0
(from "The Creative Mode of Thinking")

Arnold Walter writes that Orff sees the primary purpose of music education to be "the development of a child's creative faculty."

2. *To what extent does this work emphasise the presentation of activities or "contingencies" which may result in creative behaviour?* . . . . ③ 2 1 0
(from "The Creative Mode of Thinking")

There are several responses to this question. Arnold Walter writes: "The primary purpose of music education as Orff sees it, is the development of a child's creative faculty which manifests itself in the ability to improvise." Margaret Murray writes that Orff advocates that a musical creative sense can be developed through imitation.

3. *To what extent does this work encourage children to use the creative process, i.e., any of the steps that are similar to or the same as the first four steps of S. J. Parnes' creative problem-solving process:*

    a. fact-finding? . . . . 3 2 1 ⓪
The process presented initially requires imitation, and fact-finding is not part of this process or of what follows it.

    b. problem-finding? . . . . 3 2 1 ⓪
This is given no consideration in this work.

    c. idea-finding? . . . . 3 ② 1 0
Jos Wuytack writes that the Orff-Schulwerk develops the musical skill of improvisation. This allows children to work with musical ideas and to find solutions.

    d. solution-finding? . . . . .3 ② 1 0
              (from "The Creative Process")
The explanation is the same as that given for 3 c.

4. *To what extent does this work encourage*
    the following capacities in children:

    a. *curiosity?* 3②1 0

Although imitation is of great importance in what is called the
"Orff Method", Arnold Walter writes that the arts are "all gov-
erned by the play instinct", and this relates to curiosity.
    b. *initiative?* 3②1 0

This is encouraged, both through improvisation and child-
created dances.

    c. *critical faculties?* 3②1 0
The Orff technique was designed to provide musical participation,
and this could develop critical faculties if a creative teacher
is participating.
    d. *intuitive ideas?* 3②1 0
Andreas Leiss writes that "the Orff-Schulwerk allows for the
unleashing of the child's natural instincts for immediate
musical expression," and at times this is encouraged.

    e. *aesthetic judgment?* ③2 1 0
Herman Ragner writes about the importance of developing perception
of musical design, form and colour through the use of folk art
and children's songs, and these are used throughout the process.
    f. *wide range of interest beyond music?* 3②1 0
        (from "The Creative Person")

Orff said that elementary music is never music alone but forms
a unity with movement, dance and speech.

5. *To what extent does this work encourage any*
    of the aptitudes for creative thinking, as
    identified by J. P. Guilford, with respect
    to music:

    a. *sensitivity to problems?* 3 2 1①
Stone writes that the processes are "based on the ways in which
children assimilate and respond to music. . . ," and this does
not relate to the above.
    b. *fluency of ideas?* 3②1 0
Jos Wuytack writes that the Orff-Schulwerk approach seeks to
develop "a musical skill of improvisation which develops rhythm,
melody, and polyphony beyond the scope of imitation."
    c. *flexibility of ideas?* 3②1 0
The explanation is the same as that given for 5 b.

    d. *originality?* 3②1 0
One of the more complex processes is child-created dance and
movement sequences.

    e. *redefinition?* 3 2 ①0

This might accompany improvisation

    f. *elaboration?* 3②1 0
        (from "The Creative Person")
Improvisation calls for elaboration.

6. To what extent does this work encourage
   children to produce musical ideas that
   are unusual and that are appropriate? . . . . 3 2 1 ⓪
   (from "The Creative Product")

The musical ideas are within the realm of folk songs, rhythmic
activities, and movement and evolve from simple to complex ideas.

7. To what extent does this work encourage
   teachers to show:
        a. respect for unusual questions? . . . . 3 2 ① 0
   Though questions are not discussed with regard to the process,
   Walter writes that the development of a child's creative faculty
   is important, and this implies respect for unusual questions.

        b. confidence in children by:
           1. valuing their ideas? . . . . 3 ② 1 0
   Orff emphasises musical experiences which are gained through
   active participation, and this involves improvisation and
   child-created dance patterns.

           2. granting freedom to explore their ideas? . 3 ② 1 0
   Though the process begins with a great deal of imitation, Stone
   writes that Orff allows for much experimentation and freedom
   for the students.
           3. granting freedom to explore their
              environment? . . . . 3 2 1 ⓪
   This is given no consideration in this work.

           4. granting periods for non-evaluative
              practice of ideas? . . . . 3 ② 1 0
              (from "The School")
   Periods of improvisation and child-created dance and movement
   call for this.

8. To what extent does this work present
   processes that involve:
        a. open-ended questions? . . . . 3 2 ① 0
   Though the process initially involves imitation, Stone does say that
   the technique, carefully used by creative teachers, will produce
   musical children. Such teachers might make use of these.
        b. provocative questions? . . . . 3 2 ① 0

The explanation is the same as that given for 8 a.

        c. synthesis of ideas? . . . . 3 2 ① 0
The explanation is the same as that given for 8 a.

        d. open-ended learning situations that encourage
           the discovery method of learning? . . . . . . 3 2 ① 0
   Though the activities are mainly planned and guided, they do
   allow for some discovery of musical ideas.

        e. planned and guided experiences using
           divergent thinking abilities? . . . . 3 ② 1 0
           (from "The School")
   Hall writes that imitative and improvised rhythmic and melodic
   patterns played on Orff instruments, recorders and other
   music instruments are employed, and this involves divergent
   thinking.

9. *To what extent does this work encourage*
    children to:

    a. *learn from their own mistakes?* 3 2 (1) 0
Though the process primarily concerns imitation at the outset,
the play instinct, about which Walter writes, does allow children
to learn from their own mistakes.

    b. *share and work together on ideas?* . . . . (3) 2 1 0
Children are encouraged to create their own vocal and
instrumental music and to dance together.

10. *To what extent does this work encourage*
    children to use the following techniques
    when searching for ideas:

    a. *brainstorming?* 3 2 1 (0)

    b. *forced relationships?* 3 2 1 (0)

    c. *check lists?* 3 2 1 (0)
        (from "The School")
No mention is made of these techniques.

11. *To what extent does this work encourage*
    independent musical thought in all
    children? 3 2 (1) 0
        (from "Detrimental Effects of a Conforming
            Environment on Creativity")
Though the processes are used today primarily to develop the basic
techniques of Orff, Stone does say that Orff allowed for ex-
perimentation and freedom for students and teachers.

12. *To what extent does this work stress the*
    importance of using the following modes of
    creative expression in music:

    a. *composition?* 3 (2) 1 0
This is used to a limited extent when working with Orff instruments.

    b. *improvisation?* . . . .(3) 2 1 0
This is of major importance.

    c. *analysis?* 3 (2) 1 0
        (from "A Study by Peter R. Webster")
Analysis is necessary for the development of a perception of
musical design, form and colour, and for the more complex
tasks requred of the children.

3. <u>Sun: Creativity and Environment</u> by Trevor Wishart
   and friends

WHAT IS THE UNDERLYING PHILOSOPHY OF THIS WORK?

"Creativity as opposed to 'Art' is the theme of <u>Sun</u>."
To explain, Wishart writes: " 'Art' is Art because it involves
'Artists' and 'Audience' in an 'Artistic' context. . . ."[1]
Concerning why this "Artistic" context is divorced from the
world, he postulates:

> In consumer society, unchanneled creativity is sub-
> versive. It must therefore be contained, isolated in
> galleries and concert-halls, among "Artistic Circles"
> where it becomes encapsulated and impotent. Thus
> deprived of all relevance to the world about us, Art
> seeks justification in abstruse theory or appeals to
> other-worldly significance. Successful Artists are
> turned into mythical heroes, standing with godlike
> "Genius" beyond our ability to emulate, or even to
> follow.[2]

With relation to art and society, Wishart advances that
the world is ever-changing. In this regard he suggests that:

> . . . we may take advantage of the changing world
> about us to produce a creative society, in which
> creative activity, no longer standing in contradiction
> to the social world, will become a universal mode of
> living. Only when all men and women become artists
> can "Art" (as we know it) cease to exist. Only when
> one's whole life becomes a spontaneously creative
> process can one cease to be an "Artist". Only when
> the totality of the environment is a continually
> changing aesthetic experience can the distinction
> between "Art" and the world be abolished.[3]

Wishart then asks what the barriers are which separate
art and life. First he considers the audience, i.e., "a set of

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[1]Trevor Wishart et al., <u>Sun: Creativity and Environment</u>
(London: Universal Edition, 1974), p. 7.

[2]Ibid., p. 8.   [3]Ibid.

people who have considered it worthwhile to attend an artistic event."[1] Ideally, Wishart says:

> The entire audience should . . . be an intrinsic part of the event from beginning to end, and when this is the case they cease to be mere audience and the event ceases to be a concert; they create the event, it is their's, it is no longer done for them. They are no longer "the public", divided off from the "Artists" by an unquestionable act of God which caused some people to be born with a "Creative Spark", . . . They participate in the creative process, and in so doing perhaps realise the existence and/or importance of their own creative potential.[2]

This idea, however effective it might be, does not get at the root of the problem of art being apart from life, in Wishart's view. He believes that the greatest problem to be faced is the relationship of art to the great mass of people who would never have considered coming to a concert in the first place, and he proposes the following to effect this problem.

> The audience must be found, must be sought out in the course of its life-patterns, and presented with creative activities. NOT confronted; such confrontations benefit only the egos of the Artists involved. A combination of imagination and something akin to tact is required, together with the ability to adapt into the environment in an inconspicuously conspicuous way![3]

He is referring, for example, to public art projects such as sculptures placed in the old market place that children are able to enjoy, and to projects that relate the arts to the environment such as those taking place at a theatre workshop in Liverpool. He admits that such events "fall short of directly

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[1]Ibid.   [2]Ibid.   [3]Ibid., p. 9.

involving the outsider in the creative process"; [1] he notes furthermore that music lags far behind the other arts in encouraging these activities.

Wishart delves more deeply into the causes of the barriers in western society between art and life and propounds that other basic changes must be instituted. He points a finger, first, at "the basic creative crippler, . . . unskilled, repetitive work . . . that continues to provide profit for those who don't need it."[2] Next he points a finger at our own individual insecurity which makes it difficult for us to institute change or even to allow for it. He says that our insecurity is

> . . . deeply rooted in our past material insecurity
> . . . , job insecurity resulting from the wages-system
> and the spectre of unemployment, and the centralized,
> specialized, hierarchised system of social control
> which has so far been adapted in all industrialising
> nations except China.[3]

Fundamentally, Wishart believes that the nature of the socioeconomic system, i.e.,"the competitive-individualistic ideology of our society" must change. Among other things, this implies "that all uncreative tasks deemed necessary for our socioeconomic machine to function must be shared by all of us."[4]

Wishart proposes that:

> The ultimate aim, to live a creative life in a
> creative society, cannot be exactly realised until the
> creative society (or some approximation to it) arrives
> on our horizon. It can perhaps never be fully

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[1]Ibid. [2]Ibid., p. 10. [3]Ibid.

[4]Ibid., p. 72.

realised; we must all be conventional in some ways,
or life might become extremely confusing. But the
sphere for creative action is immense. . . . Once
we learn to value imagination and creativity,
traditional "Values", roles and conventions, and
other hidden limitations on our freedom of action,
disintegrate. . . . A creative society would not be
merely another set of rules and conventions, but an
open-ended, self-critical society in a continual
state of fluidity and change.[1]

Turning to examine what role artistic activities play

in society, Wishart considers two general concepts of art:

craftsmanship and creativity.

Craftsmanship is the negation of work as routine,
work as a means to an end (other than satisfaction in
the finished product). In advanced industrial
societies, the Private Ownership or State Control of
the means of mass-production has generated a universal
schizophrenia, where "workers" stand in opposition to
"consumers" while remaining at the same time one and
the same people. Thus our individual needs and
desires for possessions or for entertainments become
completely divorced from the world of work, where we
labour to produce these things. . . . The mechanised
work-process is viewed by those who run it merely as
the most efficient means of producing these commodities,
and by those who are obliged to work on it merely as a
means to an end, the procurement of yet more commodi-
ties. . . . In practice the value of work is ignored.[2]

Wishart is not advocating that we abandon the material

advantages of the mass-production process because he believes

that mass-production implies "variety and control in the pro-

duction process, and hence diversification of our environment

and . . . an increase in the quality of life."[3] He believes

that automation will result in liberating the vast majority from

mass-production labour. He is advocating that:

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[1]Ibid., p. 10. [2]Ibid., pp. 37-38. [3]Ibid., p. 38.

Work, in its present psychologically and socially repressive sense, must cease to be the central normative authority of our lives. In the west, this liberation is labelled by the powers-that-be "the problem of leisure", for they realise that it implies much more than a mere increase in leisure-time.[1]

One of the immediate problems resulting from our socio-economic structure, in Wishart's view, is that of contemporary education.

. . . education is geared towards fitting us into the present work-role dominated social context, and is hence totally inadequate for the man with enough time on his hands to question the prevailing wisdom, and to choose his own activities.[2]

The suggestion that more and better creative education is needed is not the answer, Wishart claims, because such programmes "lead merely to more autonomy and more mastery for those who succeed in the system."[3]

The thesis about the arts behind Sun is that all people, not only the "gifted" or the "genius", have new ideas that are continually changing or recurring.

. . . but the institutional arrangements of most social systems suppress them . . . or prevent most people from putting such new ideas into practice and eventually the consciousness of most people adapts to this externally imposed impotence.[4]

The projects presented in Sun are conceived with this social situation in mind. These projects are not only for the improvement of arts-education. They have

. . . the more general function of developing autonomy and a sense of mastery over the world (of special

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[1]Ibid.   [2]Ibid.   [3]Ibid., p. 72.

[4]Ibid.

relevance to many "deprived" children); they could develop one's consciousness of political power over one's world, a refusal to be entirely constrained by other people's institutional arrangements.[1]

Wishart proposes, as an alternative to our present situation where material necessity imposes a meaning structure on our lives, that we work towards a creative society, i.e., a society "continually striving after new ideas, concepts, information, modes of expression and presentation"[2] in all modes of life. Creativity is conceived by him as being

> . . . a way of life, a way of being, for the person concerned or by being other-directed in a REAL way i.e., not mystified as "Art", up there somewhere, for the adulation of connoisseurs of such things, but truly useful, entertaining, educative or conveying insight to others.[3]

The role of the artist who believes in creative-living and an open-ended social structure, Wishart declares, is to work towards the destruction of "art" as we know it today, i.e., "as something special, different, set apart from life and the 'Artist' as a privileged member of an elite."[4]

Wishart concludes his discussion with the warning that:

> To achieve this social end is very far from a simple task, and there is the danger that we might sacrifice our creative autonomy in the process which would make the entire exercise meaningless. Nevertheless, to reach this end must be regarded as the great creative task before us.[5]

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[1]Ibid.   [2]Ibid., p. 38.   [3]Ibid., p. 72.

[4]Ibid., p. 38.   [5]Ibid., p. 72.

WHAT PROCESS OF MUSIC EDUCATION DOES THIS WORK ADVOCATE?

Sun is a report of thirteen projects "devised and mounted" by Wishart and friends from January 1970 to July 1972. Wishart explains that the events described such as "Carnival", "Seaside", etc., all actually took place as described; "these are not 'conceptual events'."[1] Along with the projects is the "Diary Miscellany" which is described as being "a selection from projects mounted, projects proposed, poems written, recipes devised (cooked and eaten), and clothes designed by myself during 1970."[2]

The projects are both similar and different. They are similar in that each is an attempt to experience music as it is related to life, i.e., to art, to movement, to the environment, etc., in a creative way. They are different in that each project is a totally different experience or event that has been devised for varying reasons. We shall look at six projects and at one page from the "Diary Miscellany."

From part one of Sun, there are three projects that are devised in order to improve a particular environmental situation, i.e., "Pied Piper", "Carnival", and "Carnival Again."

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[1]Ibid., p. 3.   [2]Ibid.

"Pied Piper"

Wishart's description of this environmental game is
as follows:

OBJECT OF THE GAME: to improve the environment by building a
public musical instrument.

PEOPLE: a number of people who can build objects, who
can play sounds, and who arrange play. As few or as
many as you like.

PROCEDURE: decide on some basic units which are easily
obtainable e.g. various common items of metal scrap.
Each object-builder may construct sounding-objects to
his or her own design with a basic unit, or decorate
the basic units in such a way as to emphasize their
sounding properties.

The sounding objects should be
SAFE
INDESTRUCTIBLE
TRANSPORTABLE

Decide on an effective, rapid and safe way to secure
and/or suspend these sounding-objects. The finished
structure should be extremely difficult to dismantle
or destroy, and too cumbersome to be transported from
the site, as a whole.

Chose a stretch of derelict land which is safe for children
to approach and to play on. Transport the structure to
the site in parts. Assemble it rapidly. If necessary,
perform sounds on it until a substantial audience has
appeared.

Leave the instrument for the audience, returning, if you
can, to use it as a focus for children's creative play.[1]

"Carnival"

This project was the result of the initial concern of a

student involved in community work, about the living conditions

of people at Bell Farm.

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[1]Ibid., p. 19.

Bell Farm is a largely working-class, typical, small housing-estate, with its barren stereotyped environment of harsh, uncorrodably red-brick houses, symmetrically arranged in a network of narrow cul-de-sacs. Due to the total lack of cultural stimulus and complete failure to direct anything but the minimum resources into such areas, they inevitably become the home of a number of problems (petty crimes, broken families etc.), and are hence quickly stigmatised as "undesirable" neighbourhoods. . . .

There was not even play-space provision on this estate, let along any more sophisticated incentives to creative ability. . . .[1]

The community-worker decided, after much consultation with the local residents, to attempt to set up an "Adventure Playground." Wishart was asked to assist, and it was decided that a Carnival would take place. After gleaning ideas from both children and adults, Wishart directed the organization of an extremely successful Carnival Programme in 1970.

★ The Carnival Programme ★

procession: around each & every one of the streets on the housing-estate, involving hoardes of children, mostly in fancy-dress, four floats, & later, an ice-cream van. Almost every household came out to their gate to watch the procession pass.

fancy dress: The procession came to an end on the concrete ring forming the central focus of half the estate. There the vast array of gypsies, tramps, cooks, butterflies, flowers, babies etc was judged by the local vicar who just happened to be there.

open-house displays: CROCHETING: ponchos, blankets, cardigans, dresses. MILITARIA: weapons, medals, toy soldiers, pictures & other artefacts. PAINTINGS: a joint exhibition by two local painters. TROPICAL FISH: which someone collected in a heated outhouse. (PHOTOGRAPHY: the exhibition had to be postponed for two weeks).

fête: The 1d. stalls were designed & built by two more local residents. These were set up around the Social Hall and used, profitably, before, during & after the children's party.

children's party: The food, supplied & prepared entirely by a team of local residents, was distributed by them in the Social Hall. After this had been cleared away, everyone reassembled in the Hall for the song & dance routines from the older girls, & the afternoon broke up in a happy confusion.

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[1] Ibid., p. 23. [2] Ibid., p. 24.

Wishart concludes that the success of "Carnival"

> . . . completely undermines the basic premise upon
> which the majority of the population are deprived of
> cultural resources. This holds that most people are
> incapable of creative initiative. However, it is
> clear that most people are merely reconciled to
> culturally-limited views of the world out of sheer
> necessity. Their cultural self-confidence needs to
> be restored through participation in such concrete
> achievements. [1]

He adds that the entire "Carnival" cost only £13-98p.

"Carnival Again"

A second Carnival was held the following year. This

time the initiative was taken entirely by the local Tenants

Association, and it is reported that this "Carnival" was even

more successful than the one held the previous year. As a

result, Wishart concludes:

> It seems quite clear that with this degree of
> progress between the first "Carnival" and the second,
> if resources were available, or rather if the
> resources which clearly are available were directed
> into the areas which clearly need them most of all,
> then self-generated creative cultural activities
> would quickly take root and become a normal part of
> living for the majority of the population. In
> contrast, it must be said, this being the year of the
> York Triennial Festival, the Festival office was
> approached for £25 towards our Carnival. It was
> refused, on the explicitly stated grounds that
> concerts of classical music for tourists were more
> important. The festival budget was many thousands
> of pounds. [2]

Two further projects from part one concern the use of

found objects, "Found Objects Music" and "Rubbish Band." We

shall look at "Rubbish Band."

---

[1] Ibid., p. 25.   [2] Ibid., p. 32.

"Rubbish Band"

This project is a found objects music session for children. It is described as "a very open framework for the exploration of the world of sound. . . ."[1] The leaders are not teachers, but rather more experienced members of the Leeds Youth Theatre Workshop and friends of the children. The plan of the session is "to move from the familiar, via the less familiar to the unfamiliar."[2]

First a familiar game that involves sound is played with the children. Second is a "relaxation-based" activity where one leader talks participants into listening to the sounds around, and the other leader takes part in the activity. Third, the group is asked to make quiet sounds, and then questions are asked of the participants, e.g., How are the sounds made, or What sounds combine well with what other sounds? Such questions initiate discussion. Fourth, verbal pictures are conjured up by half of the group, while the other half listens to what is being said and tries to imagine the sights and sounds of a shop, a harbour, a factory or some other verbal picture. Fifth, the group creates a sound world by "using sounds you have heard before, sounds which conjure up specific images, or merely sounds which you like."[3]

The suggestion is made that participants should have learned a little about the interrelationship of sounds; thus,

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[1]Ibid., p. 28.   [2]Ibid.   [3]Ibid., p. 29.

the leader should feel free to make comments about the total

sound picture "to make the participants more aware of the aural

connection."[1]

The following is an extract from a piece for the

"Rubbish-Band."

Metal tubes suspended horizontally.........'BELLS'

M   Metal striker

W   Wooden striker

●   Strike the bell

Oᴡᴡᴡ   Put the striker inside the bell & move rapidly from side to side, "trilling"

◢◤   Scrape rapidly back & forth on the surface of the tube

One straightforward milk-crate.......'CRATE'

⬛⬛   Scraping quickly down the rungs of the crate's underside

ᴵᴵᴵᴵᴵᴵᴵᴵ   Similarly, using the rungs of the crate-side (which were more widely spaced producing a more resonant sound)

⌐ ¬   Scraping continuously around the bottom edges of this crate with a ball-pen.

ᴡᴡᴡᴡ   Placing a stick between the rungs, and trilling it rapidly back & forth.

GENERAL NOTATIONS :-

q   quietly   ☀ loudly

........AND SO ON.

[1] Ibid.   [2] Ibid., p. 30.

The last project we shall consider from part one is:

"Bicycle Music"

The object of this exercise in part is to:

PROCEED FROM VENUE TO VENUE IN THIS WAY BRINGING MUSIC TO THE ENTIRE CITY
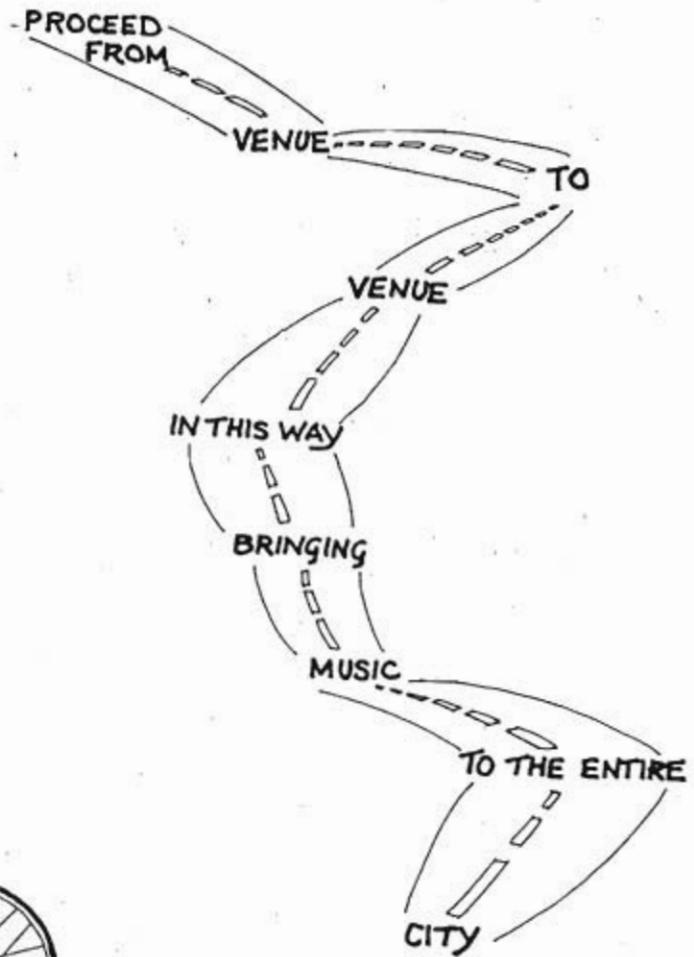
while you move
your future music
is unpredictable
while you play
your future venue
is unpredictable

[1] Ibid., p. 13.

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The directions given to the players of "Bicycle Music"

are:

e-
-mer-
-ging
from the
city in all
directions
dismount at
your meetingplace

invert your
bicycles to
form a neat
group

sit down behind
the back-wheel &
holding it firmly
to your body

play delicate harp
music on the spokes,
with the style and
manner of a harpist

having concluded
remount your
bicycles and
dissolve into
the city in
different
direc-
-tion-
-s

DISCOVER ALL THE SOUNDS WHICH YOUR BICYCLE WILL MAKE: Use them

1

Turning to part two of <u>Sun</u>, seven more projects are arranged: "Invocation", "Rain Music", "Seaside", "Landscape", "Music Search", "The Wicked Wizard of Whitworth", and "People Music." We shall look only at "Music Search."

---

[1] Ibid., p. 11.

"Music Search"

This musical game is to be played in a wood or in thick undergrowth, preferably after dark.

Decide upon a number of small sounding objects, each of characteristic timbre, e.g. metal snappers, small brass bells, suspended metal plate and striker. . . .

Acquire one instrument for each participant and ensure that there are at least two of each type of instrument. Assemble as many players as possible. Disguise the sounding-objects by wrapping them up carefully, and distribute them, one to each participant, AT LEAST TWO of each instrument being given out.

Give the participants the following instructions:-

a: Disperse to the farthest corners of the wood (undergrowth, etc.) and hide yourself from the others. Only then unwrap your sounding-object.
b: Play your object intermittently and NOT LOUDLY. Neither be silent for a long time nor play continuously. Avoid making any other sounds.
c: By listening to the sounds in the wood, search out other players playing the same sound as yourself. DO NOT shout, call or signal to anyone. Find them only through LISTENING.
d: Avoid being seen by anyone, especially by those making sounds different from your own.
e: On finding someone who is making the same sound as yourself, reveal yourself to him or her and begin to play a duet (trio, etc.).

The participants should then disperse and hide themselves. The game ends when everyone has been found.[1]

In conclusion we look at a few entries from "Diary Misc. 1970" because Wishart and friends write:

They serve to illustrate the general theme of this book, which proposes the replacement of specialist "Arts" and "Artists" in a basically, economically functional and uncreative social context, by Creative Living for all in a Creative Society.[2]

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[1]Ibid., pp. 59-60.   [2]Ibid., p. 3.

TIMEPIECE

In a large room, place a large clock-exhibition, with enough space for visitors to move between & among the exhibits. In any direction. Provide a wide variety of clocks. Suspend mikes from the roof & amid have people carry mikes around the area. Relay the sound picked-up to a 2nd room.

In the 2nd large room place an exhibition of the clock-sounds relayed by the mikes from the first room. This 2nd room must be soberly.

Pre-recordings of the exhibition should be carried around the exhibition on portacle. This and should chime or the same time as the exhibition clocks.

(Planned for Northern Open Workshops, 1969/70)

SOME REFLECTIONS ON CREATIVE ACTIVITY (continued)

are thrown into the same situation and their mutual interaction can cause the mutual expression of possibilities which take root in the situation. As a sound ensemble, various people thrown together to ponder existed for a specific environment that only the very wide framework of the physical, social, equality, etc. environment at the specific location, and the sensibility of aptitudes & money. Given such a situation and a number of individuals who have come from different areas of work (visual & music), sound, theatre, etc.), these individuals, through tackling the problem, tend to expand into this wider framework, boundless by the environment itself, and out of their more specialised conceptual & perceptual frameworks.

Such an approach might of been built into something highly sophisticated, a type of creative university, where the principal form of activity would be a large number of interlocking group session, breaking their backgrounds & particulars in diverse samples, with rapid availability, if any require information, from a central sophisticated memory-bank, and an environmental specialist, designed to combat the breakdown of conceptual and perceptual barriers, plus a baseline and sound-series designed (for each individual) to accommodate the various stages of his or her creative thinking. For example, having discovered that my own

Table Music

PREPARATION: arrange or attend an event, where tables will be used by those people present e.g. a dinner, a party, a game of cards, and so on. Attach contact mike's, securely, to the undersurfaces of the tables, will ensure that they are hidden from view. Connect each of the mikes to a separate volume control of a mixer, and connect the mixer output via amplifiers, to loudspeakers hidden in the room.

In order that the mixer-player may discriminate amongst the Table Players', small tables, hence, limiting the number of players per table, are to be preferred.

INTRODUCTION: Amplification zero. Everyone is making sounds on the tables, but no-one is listening.

TABLE MUSIC (Continued)

EXPOSITION: Volume controls are turned up cautiously & briefly each time. The "players" should now become aware of the sounds they are producing.

EXPLORATION: Play the volume controls, and amplify different tables for long or stretches of time. The more you attempt to discriminate, by tuning up the relevant player of width and interesting explorations of the table sounds by the players, are achieved, try to negate (by turning down the volume) the bits of smooth and superficial sound-making.

DEVELOPMENT: If & when you have succeeded in focussing the musical attention of the players, use the volume controls only sparingly, in response to the musical ideas presented by the players.

FINIS: End the event when people lose interest.

DIARY
MISC.
1970

APPLE + CUCUMBER PIE

1b. Cooking Apples
½ a large Cucumber
2-3 tablespoonfuls of Sugar
Black Peppercorns

Pastry Mix.

*   *   *   *   *

Peel the Cucumber and chop it up into small pieces. Put it in a saucepan with the Sugar and stew until it becomes soft.

Meanwhile, peel, core & chop the Apples. Add these to the stewed Cucumber, stir-ring the 2 ingredients so that they are completely mixed, and stew until the Apple is cooked.

During this time add freshly ground Black Pepper, according to taste.

Finally, pour the cooked mixture into a pastry case, and cook in the oven until the pastry is golden-brown.

POSTER (2nd of series of 3)

sound and environment...
(at some place 29th June concert 2nd June 7.30pm)

Rambling Music
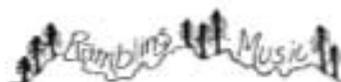
A musical ramble was absorbed & arranged. On the appointed day we set off with whistles, drums, wood-blocks, tambourines, flutes, and so forth, and made our way to Bolland Abbey, carrying food on the way....

... the day brightened - our medieval dance music drifted to the far corners of the hilly lands. The only plainsong in the ruined church....

Ascending through fields to the hilltop, "Greensleeves" and other medieval songs. At the top the ground is the sun is simplest, the sun very high. We ate our food.

... returning to check, we visit a public house for refreshment & delight the regulars with a selection of Irish, jigs and reels, &c. - whole.

Having presented the philosophy and process of
Sun: Creativity and Environment, we are now ready to answer the
questions that will determine to what extent this work supports
the importance of creativity in elementary music education.

EVALUATION FORM

WORK: <u>Sun: Creativity and Environment</u>

AUTHOR/S: Trevor Wishart and friends

PLACE, PUBLISHER & DATE: London: Universal Edition, 1974.

- -

Each question has one of 4 possible answers as listed
below; each one indicates the extent to which the
work supports the point in question. The relevant
number will be circled for each question, and a brief
explanation will be given to verify the answer.

3. This indicates that the point in question receives
   <u>strong support</u>, either explicitly or implicitly.

2. This indicates that the point in question receives
   <u>moderate support</u>, either explicitly or implicitly.

1. This indicates that the point in question receives
   <u>weak support</u>, either explicitly or implicitly.

0. This indicates that the point in question receives
   <u>no support</u>, either explicitly or implicitly.

1. *To what extent does this work take
   cognizance of the fact that creative
   behaviour is thought by some eminent
   psychoanalysts and psychologists to
   be innate in each individual?* . . . . (3) 2 1 0
   (from "The Creative Mode of Thinking")

Wishart's underlying philosophy is that all people have creative
potential. Furthermore, all people must participate in the
creative process, "and in so doing perhaps realise the existence
and/or importance of their own creative potential."

2. *To what extent does this work emphasise
   the presentation of activities or
   "contingencies" which may result in.
   creative behaviour?* . . . . (3) 2 1 0
   (from "The Creative Mode· of Thinking")

Wishart's work is a record of such activities, and he writes
that "creative activity . . . will become a mode of life."

3. *To what extent does this work
   encourage children to use the creative
   process, i.e., any of the steps that
   are similar to or the same as the
   first four steps of S. J. Parnes'
   creative problem-solving process:*

      a.   fact-finding? . . . . (3) 2 1 0
"Carnival" and "Carnival Again" are examples of many projects
which utilize a, c and d.

      b.   problem-finding? 3 2 1 (0)
This is given no consideration in this work.

      c.   idea-finding? . . . . (3) 2 1 0

      d.   solution-finding? . . . . (3) 2 1 0
            (from "The Creative Process")

4. *To what extent does this work encourage
the following capacities in children:*

     a. *curiosity?* . . . . ③ 2 1 0

"Rubbish Band" arouses the curiosity of children concerning
sounds, and other projects also encourage curiosity.

     b. *initiative?* . . . . ③ 2 1 0

The entire project "Carnival Again" is based upon the initiative
of a largely working-class community living on a small housing estate,
and other projects encourage initiative.

     c. *critical faculties?* . . . . ③ 2 1 0

Wishart's aim is to create a "self-critical society", and many
projects require participants to utilize their critical
faculties, e.g., "Pied Piper."

     d. *intuitive ideas?* . . . . ③ 2 1 0

"Music Search" is partically based upon the children's use of
their intuitive ideas, as are other projects.

     e. *aesthetic judgment?* . . . . ③ 2 1 0

Wishart writes: "Only when the totality of the environment is a
continually changing aesthetic experience can the distinction
between "Art" and the world be abolished."

     f. *wide range of interest beyond music?* . . . . . . ③ 2 1 0
       (from "The Creative Person")

The projects attest this.

5. *To what extent does this work encourage any
of the aptitudes for creative thinking, as
identified by J. P. Guilford, with respect
to music:*

     a. *sensitivity to problems?* . . . . 3 ② 1 0

This aptitude was necessary to make "Carnival Again" the
success that Wishart claims it was.

     b. *fluency of ideas?* . . . . ③ 2 1 0

"Carnival" is one of many projects requiring fluency and
also flexibility of ideas.

     c. *flexibility of ideas?* . . . . ③ 2 1 0

"Bicycle Music" is one of many projects which encourages this.

     d. *originality?* . . . . ③ 2 1 0

The majority of projects encourage this.

     e. *redefinition?* . . . . 3 2 ① 0

"Rubbish Band" is one project which encourages this.

     f. *elaboration?* . . . . ③ 2 1 0
       (from "The Creative Person")

"Carnival" is one of many projects which encourage this.

6. *To what extent does this work encourage*
    children to produce musical ideas that
    are unusual and that are appropriate? . . . . ③ 2 1 0
    (from "The Creative Product")
One of the numerous examples is the object of "Bicycle Music",
i.e., "proceed from venue to venue; in this way bring music to
the entire city."

7. *To what extent does this work encourage*
    teachers to show:
        a. *respect for unusual questions?* . . . . ③ 2 1 0
These projects stimulate discussion; thus, by implication,
unusual questions are freely accepted.

        b. *confidence in children by:*
        1. *valuing their ideas?* . . . . ③ 2 1 0
One of the purposes of "Carnival" is to restore the cultural
self-confidence of the people by valuing their ideas.

        2. *granting freedom to explore their ideas?* ③ 2 1 0
"Diary Misc. 1970" attests to this, and it is stated that
"Rubbish Band" is a very open framework for the exploration of
the world of sound."
        3. *granting freedom to explore their*
            environment? . . . . ③ 2 1 0
The object of "Bicycle Music" includes exploring the environment,
and other projects do the same.

        4. *granting periods for non-evaluative*
            practice of ideas? . . . . ③ 2 1 0
            (from "The School")
All projects include periods for non-evaluative practice of
ideas.

8. *To what extent does this work present*
    processes that involve:
        a. *open-ended questions?* . . . . ③ 2 1 0
One of many examples is when the leaders use open-ended questions
in "Rubbish Band", e.g., "What sounds combine well with what
other sounds?"
        b. *provocative questions?* . . . . ③ 2 1 0
"Rubbish Band" provides provocative questions as do other
projects.

        c. *synthesis of ideas?* . . . . 3 ② 1 0
The resultant sound picture in "Rubbish Band" is but one
example of several projects which require this.

        d. *open-ended learning situations that encourage*
            the discovery method of learning? . . . . . . ③ 2 1 0
Wishart intends that the projects be open-ended.

        e. *planned and guided experiences using*
            divergent thinking abilities? . . . . ③ 2 1 0
            (from "The School")
"Bicycle Music" is one of many such projects.

9. *To what extent does this work encourage
   children to:*

   a. *learn from their own mistakes?* . . . . ③ *2 1 0*

Wishart intends that the projects be open-ended and
allow for self-criticism.

   b. *share and work together on ideas?* . . . . ③ *2 1 0*

This occurs throughout the projects. Wishart's aim is to
live a creative life in a creative society.

10. *To what extent does this work encourage
    children to use the following techniques
    when searching for ideas:*

   a. *brainstorming?* . . . . *3 2 1* ⓪

   b. *forced relationships?* . . . .*3 2 1* ⓪

   c. *check lists?* . . . . *3 2 1* ⓪
      (from "The School")

No mention is made of these techniques.

11. *To what extent does this work encourage
    independent musical thought in all
    children?* . . . . ③ *2 1 0*
    *(from "Detrimental Effects of a Conforming
         Environment on Creativity")*

This idea is basic to this work. Wishart writes: "A creative
society would not be merely another set of rules and conventions,
but an open-ended, self-critical society in a continual state of
fluidity and change."

12. *To what extent does this work stress the
    importance of using the following modes of
    creative expression in music:*

   a. *composition?* . . . . *3* ② *1 0*

This is used to a lesser extent than improvisation, e.g.,
in "Rubbish Band" the group creates a sound world.

   b. *improvisation?* . . . . ③ *2 1 0*

"Bicycle Music" is based entirely on improvisation, as are
many other projects.

   c. *analysis?* . . . . ③ *2 1 0*
      (from "A Study by Peter R. Webster")

"Pied Piper" is one of the many projects that encourages this.

Conclusion

     Having evaluated the extent to which each of these
twelve works supports the importance of creativity in contem-
porary elementary music education, we now summarize the results
of the evaluation. This we shall do by presenting four charts,
one for each of the four groups: A, B, C and D. These charts
are graphic representations of the results of the evaluation.
Four columns, representing the four possible answers to the
questions on the evaluation form, are used to show how each
work stands with respect to the question: To what extent does
this work support the importance of creativity in elementary
music education?

    3 = strong support

    2 = moderate support

    1 = weak support

    0 = no support

The numbers 1 - 38, along the left side of each chart, refer
to the total number of replies given to answers 3, 2, 1 and 0
as they appear on the evaluation form, not to the numbering of
individual questions from it. The total number of replies given
to anwers 3, 2, 1 and 0 appears numerically at the base of each
column, and each chart is accompanied by a brief analysis of
the results.

CHART for GROUP A

| 1. THE CLASS MUSIC TEACHER
Charles Proctor | 2. EARS AND EYES
and Work Cards
Dobbs, Fiske and Lane | 3. CREATIVE MUSIC EDUCATION
R. M. Schafer |

number of replies

total	STRONG 3	MODERATE 2	WEAK 1	NO 0	STRONG 3	MODERATE 2	WEAK 1	NO 0	STRONG 3	MODERATE 2	WEAK 1	NO 0
total	1	1	0	36	3	11	19	5	30	4	1	3
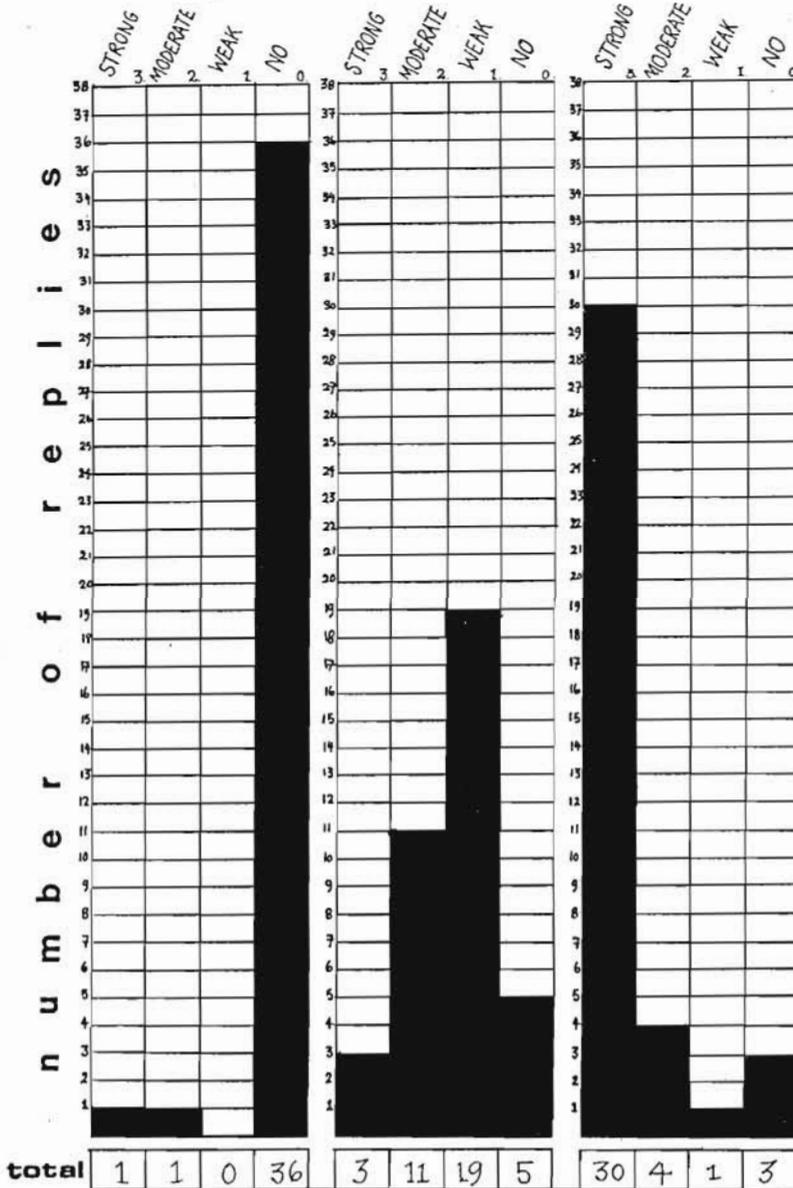
ANALYSIS OF RESULTS

Of the 38 replies, 36 are no support, 1 is moderate support, 1 is strong support. These results indicate that this work supports the importance of creativity in elementary music education to virtually no extent.

Of the 38 replies, 5 are no support, 19 are weak support, 11 are moderate support, 3 are strong support. These results indicate that, as support falls mainly between weak and moderate but leans a little more towards weak support, this work supports the importance of creativity in elementary music education to a very limited extent.

Of the 38 replies, 30 are strong support, 4 are moderate support, 1 is weak support, 3 are no support. These results indicate that this work supports the importance of creativity in elementary music education to a great extent.

CHART for GROUP B

1. THE PLAYGROUND AS MUSIC TEACHER M. Carabo-Cone	2. MUSIC IN THE ELEMENTARY SCHOOL Nye and Nye	3. MANHATTANVILLE MUSIC CURRICULUM PROGRAM Ronald B. Thomas

number of replies

total	0	3	6	29		9	13	11	5		31	2	0	5

ANALYSIS OF RESULTS
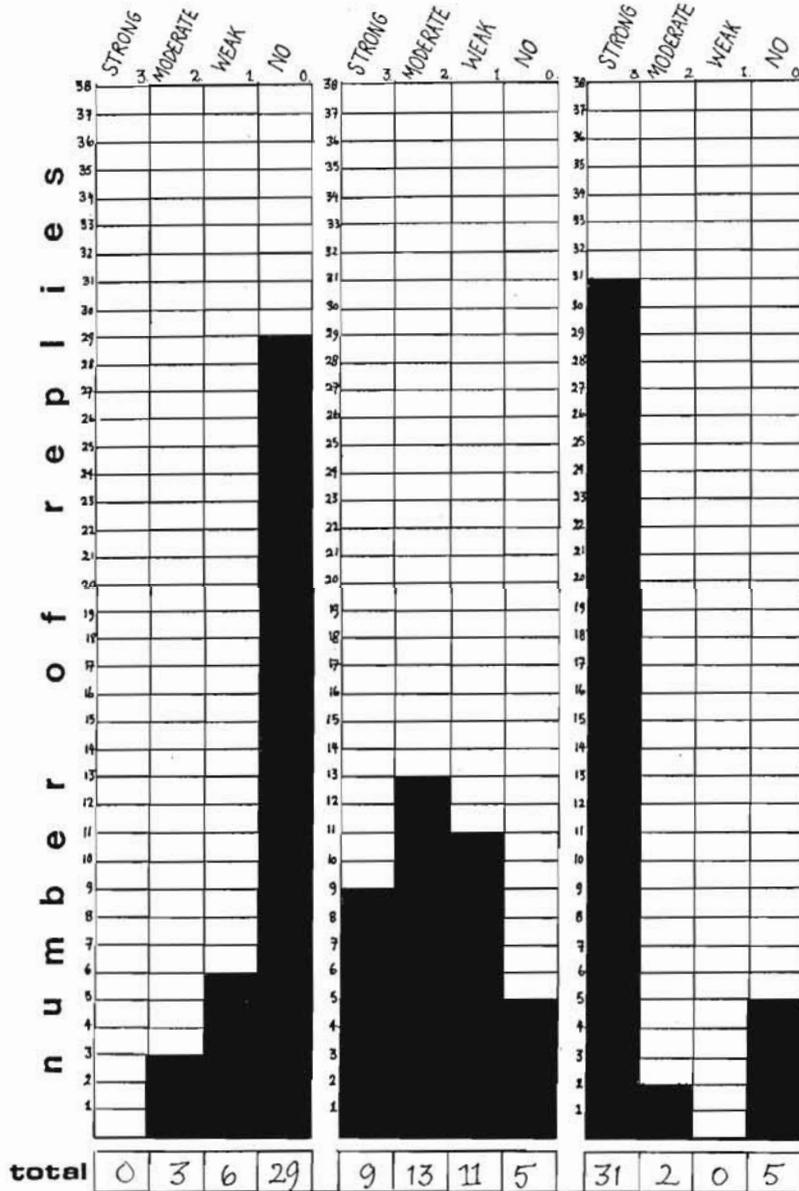
Of the 38 replies, 29 are no support, 6 are weak support, 3 are moderate support. These results indicate that this work supports the importance of creativity in elementary music education to virtually no extent.

Of the 38 replies, 9 are strong support, 13 are moderate support, 11 are weak support, 5 are no support. These results indicate that, as the support is fairly evenly divided but leans a little more towards moderate support, this work supports the importance of creativity in elementary music education to a limited extent.

Of the 38 replies, 31 are strong support, 2 are moderate support, 5 are no support. These results indicate that this work supports the importance of creativity in elementary music education to a great extent.

CHART for GROUP C

1. TEACHING MUSIC CREATIVELY IN THE ELEMENTARY SCHOOL

Cheyette and Cheyette

2. THE STUDY OF MUSIC IN THE ELEMENTARY SCHOOL: A CONCEPTUAL APPROACH

Charles L. Gary, ed.

3. SOUND AND SILENCE: CLASSROOM PROJECTS IN CREATIVE MUSIC

Paynter and Aston

total												
	1	2	18	17		2	14	14	8	30	4	0	4
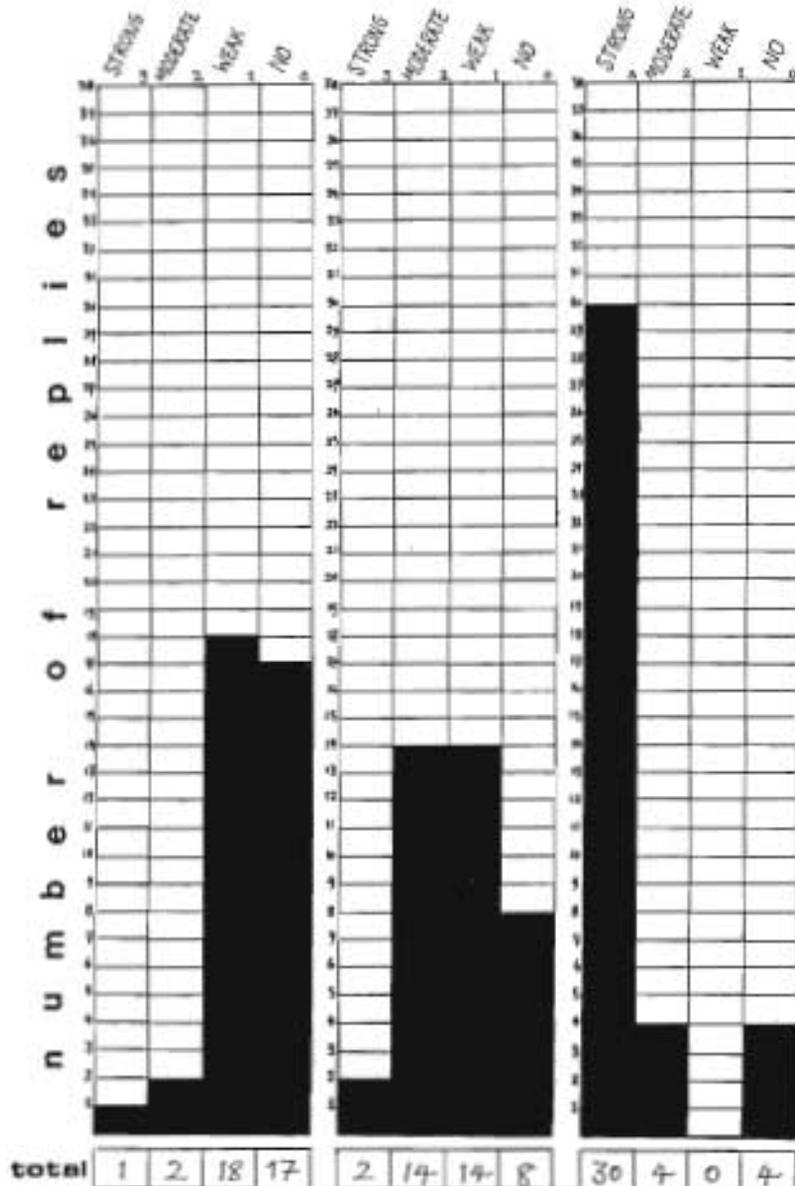
ANALYSIS OF RESULTS

Of the 38 replies, 17 are no support, 18 are weak support, 2 are moderate support, 1 is strong support. These results indicate that this work supports the importance of creativity in elementary music education to an extremely limited extent.

Of the 38 replies, 8 are no support, 14 are weak support, 14 are moderate support, 2 are strong support. These results indicate that the majority of replies are evenly divided between weak and moderate support. The remaining 10 replies indicate that this work leans towards weak support, and, therefore, supports the importance of creativity in elementary music education.

Of the 38 replies, 30 are strong support, 4 are moderate support, 4 are no support. These results indicate that this work supports the importance of creativity in elementary music education to a great extent.

CHART for GROUP D

1. SCHOOL MUSIC METHOD
    R. Hunt

2. "KODALY AND ORFF MUSIC TEACHING"
    M. L. Stone

3. SUN: CREATIVITY AND ENVIRONMENT
    T. Wishart & friends

number of replies

STRONG	MODERATE	WEAK	NO	STRONG	MODERATE	WEAK	NO	STRONG	MODERATE	WEAK	NO
3	2	1	0	3	2	1	0	3	2	1	0

| total | 1 | 0 | 6 | 31 | 5 | 17 | 8 | 8 | 30 | 3 | 1 | 4 |
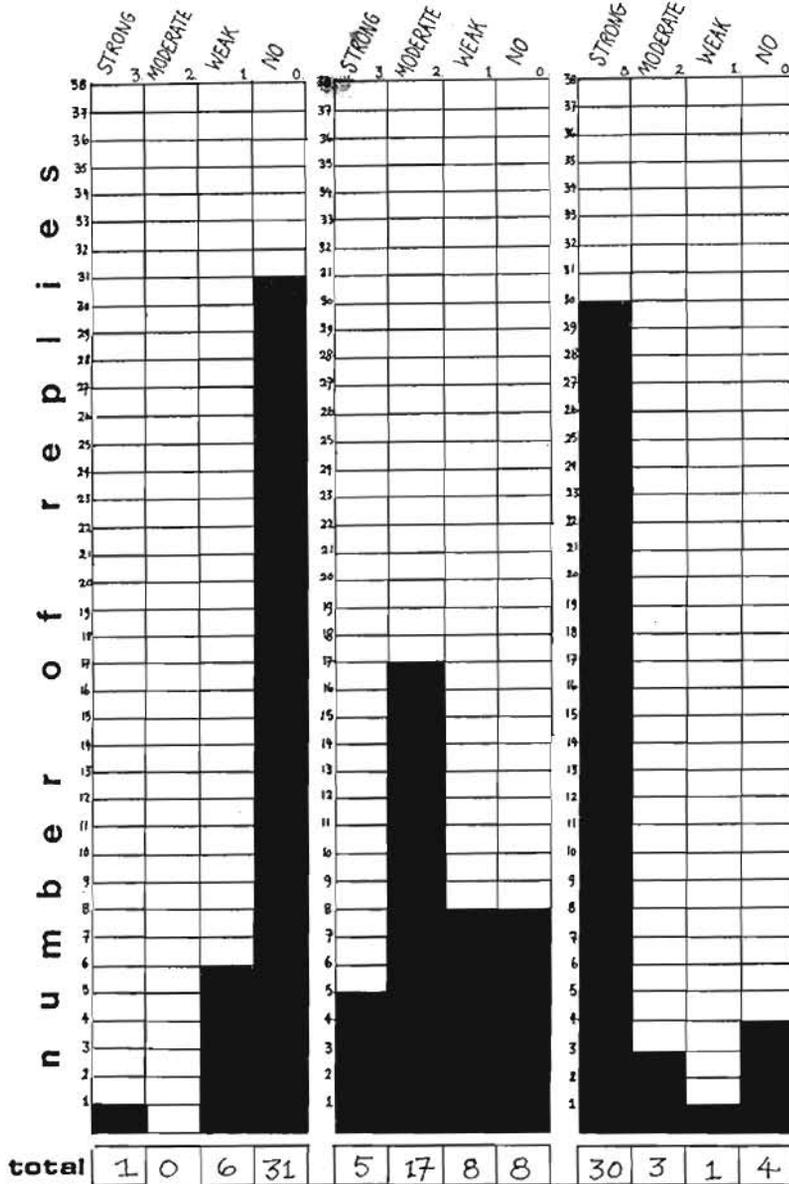
ANALYSIS OF RESULTS

Of the 38 replies 31 are no support, 6 are weak support, 1 is strong support. These results indicate that this work supports the importance of creativity in elementary music education to virtually no extent.

Of the 38 replies 5 are strong support, 17 are moderate support, 8 are weak support, 8 are no support. These results indicate that the part of this work with which we are concerned, Orff music teaching techniques, supports the importance of creativity in elementary music education to a limited extent.

Of the 38 replies, 30 are strong support, 3 are moderate support, 1 is weak support, 4 are no support. These results indicate that this work supports the importance of creativity in elementary music education to a great extent.

We have worked through our investigation and observed
that only one of three works on each of the four charts supports
the importance of creativity in elementary music education to a
great extent. Furthermore, it becomes clear that the contrasts
concerning these twelve representative works, which were spoken
of at the outset of this chapter, are reducible into three identi-
fiable approaches to music education with respect to the way in
which these works support the importance of creativity in education.
In this regard, the works which indicate support to no extent,
or to an extremely limited extent, represent what we shall call the
conservative approach. The works which indicate support to a
limited extent represent what we shall call the moderate approach.
The works which indicate support to a great extent represent what
we shall call the progressive approach. Thus, having advanced and
utilized a set of criteria to determine the extent to which twelve
representative works by well-known music educators from England
and the United States support the importance of creativity in con-
temporary elementary music education, it is clear that only the
works which represent one approach, namely the progressive
approach, do so to a great extent.

Before moving on to Chapter IV to discover what confirma-
tion music educators who are concerned with creativity in educa-
tion will reveive from prominent twentieth century educators,
we shall comment upon several points arising from our investigation.
The reader will recall that in Chapter I, we discussed the fact that
"creativity" in connection with music education has been misused, and
we said that an example of a work which misuses creativity would
be presented in Chapter III. Teaching Music Creatively in the
Elementary School is an example of a work which makes use of the

term "creatively" in its title, but the evaluation clearly shows
that it supports the importance of creativity to an extremely
limited extent. If we refer to the titles of the works which
appear on the chart for Group C, p. 388, we observe that
two works make use of the terms "creatively" and "creative"
in their titles. Only the work by Paynter and Aston, however,
supports the importance of creativity in music education to a
great extent. The work by Cheyette and Cheyette does not. Such
inconsistencies have often been the rule rather than the exception
and caused confusion and frustration for music educators concerned
with creative music education. Turning to one of the major
differences between two of the moderate works and two of the pro-
gressive works, we found the following. Music in the Elementary
School and "Kodaly and Orff Music Teaching Techniques" do not
implement a creative process which teachers can follow. They
rather encourage teachers to execute musical concepts and ideas
in their own creative way, and many music teachers find this an
extremely difficult task. On the other hand, the Manhattanville
Music Curriculum Program in particular, but also Sound and Silence:
Classroom Projects in Creative Music, presents processes for
creative teaching which teachers are able to follow. Concerning the
opinions voiced by opponents of creativity in music education, that
the process of creative music education is one of "organized
chaos",[1] we discovered rather that the four progressive works,

---

[1]R. G. A. Sherratt, "Who's for Creativity", Black Papers 1977,
p. 37.

but again the MMCP and Sound and Silence in particular, utilize

processes that involve planned and guided experiences. The

fact that none of the works encourages children to use techniques

such as brainstorming, forced relationships and check lists when

searching for ideas, simply suggests that these ideas, which have

only recently been published, have not yet found their way to music

education. Finally, even though eleven of the twelve works

encourage aesthetic judgment to a great extent, interpretations

differ vastly with respect to what is being encouraged. One con-

servative work encourages the passing on of a "wholesome tradition"

of folk and classical music (The Class Music Teacher), while one

progressive work maintains that "the only judgments worth making

will be those we want the children to make for themselves in the

process of composition: . . ."[1] (Sound and Silence). One conser-

vative work encourages "good" music as opposed to "bad" (School

Music Method), while one progressive work states that aesthetic

judgment cannot be taught; "it is rather an intimate response

which may grow from the nature of personal experience."[2] (MMCP).

A third progressive work goes further, declaring that "only when

the totality of the environment is a continually changing aesthetic

experience can the distinction between 'art' and the world be

abolished."[3] Sun: Creativity and Environment submits that we must

work towards a society where creativity is a "way of life. . . .",

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[1] John Paynter, op. cit., p. 13.

[2] Ronald B. Thomas, op. cit., p. 82.

[3] Trevor Wishart et al., op. cit., p. 8.

but suggests that the "institutional arrangements of most

social systems"[1] knowingly or unknowingly suppress creativity.

This suggestions will be given consideration in the final chapter.

[1]Ibid. p. 72.

CHAPTER IV

AN EXPLORATION OF THE IDEAS OF EDUCATIONAL PHILOSOPHERS
AND PSYCHOLOGISTS THAT SUPPORT THE IMPORTANCE OF
CREATIVITY IN EDUCATION

Introduction

We turn now to examine what support some ideas from the
philosophy and psychology of education will give to a philosophy and a
process of music education which aims to give credence to the
importance of creativity in music education. Alfred North White-
head and John Dewey have been selected as the philosophers of
education and Jerome S. Bruner and Jean Piaget as the psychologists
of education to be considered. A brief explanation of why each
writer has been chosen for detailed discussion is presented before
we explore to what extent these writers support the importance of
creativity in education.

Looking first at the philosophers and remembering that
our investigation deals with the writings of music educators from
England and the United States, it is appropriate that we give pro-
minence to an English scientist-turned-philosopher and to an
American philosopher-turned-scientist.

Alfred North Whitehead (1861-1947), a fellow of Trinity
College, collaborated with Bertrand Russell in writing the
remarkable Principia Mathematica. In 1914 he became Professor of
Applied Mathematics at the Imperial College of Science and Tech-
nology in London, and in 1924 he was invited as Professor of
Philosophy to Harvard University. Though his main concern was to
develop a philosophy of science, he also encountered educational

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problems which gave rise to the widely acclaimed <u>Aims of Education</u> <u>and Other Essays</u>. This man of great knowledge possessed a fresh and forward-looking view of what was usually considered the dull and uninteresting subject of education.

John Dewey (1859-1952) is acknowledged as a leading American thinker in two fields: philosophy and education. He is both the starting point of twentieth century Anglo-American educational thought and an important link between past and present education theorists, and he was also one of the creators of the initial impetus which gave birth to educational psychology.

Turning to the psychologists, Jerome S. Bruner (1896-   ) was for many years Professor of Psychology at Harvard, where he was the founder and director of the Centre for Cognitive Studies; he is now Watts Professor of Experimental Psychology at Oxford University. He is also a member of the Board of the International Union of Scientific Psychology, a founding fellow of the National Academy of Education, and a fellow of the American Academy of Arts and Sciences and of the American Association for the Advancement of Science. Bruner is chosen because, as his writings reveal, he views the individual as a thinker and a creator and has pictured childhood as a continual opportunity for discovery - a time marked by the joy of learning and delight in exploration.

It is impossible to study the cognitive development of the child without referring to Jean Piaget (1896-1980) whose research into children's cognition has been of major influence on twentieth century educational thinking. It was in Geneva that he began an investigation of children's thinking at the Rousseau Institute. The publication of his first studies in the field appeared about

1950 and gained for him immediate international recognition. He then became Director of the Institute of Educational Science at the University of Geneva and remained there until his retirement. He is noted for his analysis of the stages of cognitive development, and the theory that underlies his work, is of singular value in understanding not only how a person achieves full cognitive functioning, but why he or she does. That music educators are becoming aware of the implications of Piaget's work with respect to music education is evident by the appearance of articles such as "The Thought Life of the Young Child" by Sister Cecilia Schmitt, (Music Educators' Journal, December, 1971.)

To proceed, we shall first present the ideas of each writer concerning education and creativity. We shall then show how these ideas lend support to some of the aspects of creativity which, the reader will recall, emerged from our study of the subject in Chapter II. We shall not be arguing that each writer's remarks have bearing upon all of the aspects of creativity which were discussed, but that each writer's remarks have bearing upon five aspects of creativity, three of which are central to most discussions of creativity, i.e., nos. 2, 3 and 4. These five aspects are:

1. *the fact that creative behaviour is thought by some eminent psychiatrists and psychologists to be innate in each individual*

2. *some traits of the creative person: curiosity, initiative, critical faculties, aesthetic judgment and intuitive ideas*

3. *the creative process: the aspect of the creative process that concerns problem-solving, including stages such as fact-finding, problem-finding, idea-finding and solution-finding*

4. *the nurture of creative behaviour: showing confidence in children by valuing their ideas, granting them some freedom to explore their ideas and their environment, granting them periods of non-evaluative practice, encouraging them to learn from their own mistakes and to share and work together on ideas*

5. *some detrimental effects of a conforming environment upon creativity.*[1]

To facilitate our investigation, we shall explore a single work by each author:

The Aims of Education and Other Essays by Alfred North Whitehead

Democracy and Education by John Dewey

Towards a Theory of Instruction by Jerome S. Bruner

Science of Education and the Psychology of the Child by Jean Piaget

The first work, by Whitehead, is chosen because this text, more than any other work by the author, states his views on education. The second work, by Dewey, is chosen for the same reason. The third work, by Bruner, is chosen because it deals with the way that mental growth proceeds, and the ways in which teaching can profitably adapt itself to that progression. The fourth work, by

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[1] For the sake of easy reference we shall also italicize these five aspects of creativity when they are referred to in the summary of each work.

Piaget, is chosen because this work deals with his views on
education that arise out of his immense research into the
field of child development over the past 50 years. It is one
of the more than 500 publications by Piaget, in which he writes
primarily about teaching.

We begin with The Aims of Education and Other Essays,
by Alfred North Whitehead.

THE AIMS OF EDUCATION AND OTHER ESSAYS by Alfred North Whitehead

In presenting his intriguing concept of "rhythm in education", which we shall discuss further on, Whitehead postulates that a pupil is "a living organism which grows by its own impulse towards self-development."[1] Though he recognizes that this impulse for growth "can be stimulated and guided from outside the organism," and that it can also be stifled, he states that "for all your stimulation and guidance the creative impulse towards growth comes from within, and is intensely characteristic of the individual."[2] Whitehead maintains that:

> Education is the guidance of the individual towards a comprehension of the art of life; and by the art of life I mean the most complete achievement of varied activities expressing the potentialities of that living creature in the face of its actual environment.[3]

Turning to Whitehead's discussion of what he terms the central problem of education with respect to the application of theoretical ideas in the curriculum, he has this to say: "It contains within itself the problem of keeping knowledge alive, of preventing it from becoming inert, which is the central problem of all education."[4] He explains:

> In training a child to activity of thought, above all things we must beware of what I will call "inert ideas" - that is to say, ideas that are merely received into the mind without being utilized, or tested, or thrown into fresh combination.[5]

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[1] Alfred North Whitehead, The Aims of Education and Other Essays (New York: The Free Press, 1929), p. 39.

[2] Ibid. [3] Ibid. [4] Ibid., p. 5. [5] Ibid., p. 1.

Moreover, he declares that:

> Education with inert ideas is not only useless: it
> is, above all things, harmful . . .
> Except at rare intervals of intellectual
> ferment, education in the past has been radically
> infected with inert ideas. That is the reason why
> uneducated clever women, who have seen much of the
> world, are in middle life so much the most cultured
> part of the community. They have been saved from
> this horrible burden of inert ideas.[1]

The text books that are most often in demand, as they appear to
facilitate teaching by supplying ready-made questions and
answers, are full of such ideas, Whitehead contends. By com-
bining these kinds of texts with discipline, "it is always
possible to pump into the minds of a class a certain quantity
of inert knowledge."[2]

He advocates that children must be trained to activity
of thought. This cannot be done by teaching a little about
each of many subjects.

> Let the main ideas which are introduced into a child's
> education be few and important, and let them be
> thrown into every combination possible. The child
> should make them his own, and should understand their
> application here and now in the circumstances of his
> actual life. From the very beginning of his educa-
> tion, the child should experience the joy of discovery.
> The discovery which he has to make, is that general
> ideas give an understanding of that stream of events
> which pours through his life, which is his life.[3]

Whitehead sees the evocation of curiosity as one of the
variable factors upon which the successful accomplishment of the
task of training the activity of thought depends. When speaking

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[1]Ibid., pp. 1-2. [2]Ibid., p. 5.

[3]Ibid., p. 2.

of scientific curiosity, he says that, initially, it is "a
passion for an ordered intellectual vision of the connection of
events,"[1] and that it should lead to or become a combination of
thought and action. He goes on to emphasise the importance of
action.

> In creation only is there vivid insight into the
> properties of the object thereby produced. If you
> want to understand anything make it yourself. Your
> faculties will be alive, your thoughts gain vivid-
> ness by an immediate translation into acts. Your
> ideas gain that reality which comes from seeing the
> limits of their application.[2]

A second way of training activity of thought in children
is by strengthening their powers of initiative, i.e., "initiative
in thought, initiative in action, and the imaginative initiative
of the arts."[3] He holds that "an education which does not begin
by evoking initiative and end by encouraging it must be wrong.
For its whole aim is the production of active wisdom."[4] He
explains:

> The details of knowledge which are important will be
> picked up *ad hoc* in each avocation of life, but the
> habit of the active utilisation of well-understood
> principles is the final possession of wisdom.[5]

A third way of training activity of thought is to find
important applications of theoretical ideas within children's
curricula. Whitehead is aware that this concerns the problem
which, he declares, is central to education, "keeping knowledge
alive", and that this problem involves many factors as we are
dealing "with human minds, not dead matter."[6] It is because the

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[1]Ibid., p. 48.   [2]Ibid., p. 53.   [3]Ibid., p. 47.

[4]Ibid., p. 37.   [5]Ibid.   [6]Ibid., p. 5.

best procedure of keeping knowledge alive depends upon so many

factors that he says "the uniform external examination is so

deadly."[1] He explains:

> The evocation of curiosity, of judgment, of the
> power of mastering a complicated tangle of circum-
> stances, the use of theory in giving foresight in
> special cases - all these powers are not to be im-
> parted by a set rule embodied in one schedule of
> examination subjects.[2]

Whitehead is concerned that in England, each school

should be an educational unit; that the headmaster should have

a free hand to

> . . . develop his general education or his specialist
> studies in accordance with the opportunities of his
> school, which are created by its staff, its environ-
> ment, its class of boys, and its endowments. I
> suggest that no system of external tests which aim
> primarily at examining individual scholars can
> result in anything but educational waste.[3]

He warns against accepting a traditional educational

argument which runs thus: "The mind is an instrument; you

first sharpen it, and then use it."[4] Whitehead's reply to this is

what he terms "the golden rule of education, and a very difficult

one to follow." He writes:

> I have no hesitation in denouncing the traditional
> argument as one of the most fatal, erroneous and
> dangerous conceptions ever introduced into the
> theory of education. The mind is never passive; it
> is a perpetual activity, delicate, receptive, re-
> sponsive to stimulus. You cannot postpone its
> life until you have sharpened it. Whatever interest
> attaches to your subject-matter must be evoked here
> and now; whatever powers you are strengthening in
> the pupils, must be exercised here and now; what-
> ever possibilities of mental life your teaching
> should impart, must be exhibited here and now.[5]

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[1]Ibid.   [2]Ibid.   [3]Ibid., p. 13.

[4]Ibid., p. 6.   [5]Ibid.

Turning to Whitehead's views about aesthetics and educa-
tion, we find that he questions whether we give sufficient im-
portance to "the function of the arts" in education.

> The ultimate motive power, alike in science, in
> morality and in religion, is the sense of value,
> the sense of importance. It takes the various
> forms of wonder, of curiosity, of reverence, or
> worship of tumultuous desire for merging personal-
> ity in something beyond itself. This sense of
> value imposes on life incredible labours, and
> apart from it life sinks back into the passivity
> of its lower types. The most penetrating exhibition
> of this force is the sense of beauty, the aesthetic
> sense of realised perfection. This thought leads me
> to ask, whether in our modern education we emphasise
> sufficiently the functions of art.[1]

Commenting further about the importance of art in education, he

argues:

> You cannot, without loss, ignore in the life of the
> spirit so great a factor as art. Our aesthetic
> emotions provide us with vivid apprehensions of
> value. If you maim these, you weaken the force of
> the whole system of spiritual apprehensions. The
> claim for freedom in education carries with it the
> corollary that the development of the whole person-
> ality must be attended to. You must not arbitrarily
> refuse its urgent demands. In these days of economy,
> we hear much of the futility of our educational
> efforts and of the possibility of curtailing them.
> The endeavour to develop a bare intellectuality is
> bound to issue in a large crop of failure. This is
> just what we have done in our national schools. We
> do just enough to excite and not enough to satisfy.
> History shows us that an efflorescence of art is the
> first activity of nations on the road to civilisation.
> Yet, in the face of this plain fact, we practically
> shut out art from the masses of the population. Can
> we wonder that such an education, evoking and defeat-
> ing cravings, leads to failure and discontent?[2]

As the young crave expansion and activity, he says that

their needs must be met not within a dry imposition of disciplined

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[1]Ibid., p. 40.   [2]Ibid., p. 40.

knowledge, but within a situation which allows for "the rhythm
of education." This concept arises from Whitehead's criticism
of several educational ideas, one being that "the pupil's pro-
gress is often conceived as a uniform steady advance undiffer-
entiated by change of type or alteration of pace."[1] This, he
testifies, is not true. What is true is the following:

> Life is essentially periodic. It comprises daily
> periods . . . seasonal periods . . . yearly
> periods. . . . There are also subtle periods of
> mental growth, with their cyclic recurrences, yet
> always different as we pass from cycle to cycle,
> though the subordinate stages are reproduced in
> each cycle. That is why I have chosen the term
> "rhythmic", as meaning essentially the conveyance
> of difference within a framework of repetition.
> Lack of attention to the rhythm and character of
> mental growth is a main source of wooden futility
> in education.[2]

Put another way, Whitehead contends that education overlooks the
whole problem of adapting "freedom and discipline to the natural
sway of development,"[3] i.e., the rhythm of education, and con-
centrates only upon the discipline, i.e., the precision stage
of learning.

Another criticism he makes of educational ideas is that
education often holds to the "the idea of a mythical, far-off end."[4]
He claims that in the cyclic process of education, "the pupils
must continually enjoy some fruition and starting afresh."[5] Too
often children are set tasks in an unnatural way, "without rhythm
and without stimulus of intermediate success and without concen-
tration."[6] One example, which he uses, of the natural sway of

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[1]Ibid., p. 17.   [2]Ibid.   [3]Ibid., p. 31.

[4]Ibid., p. 19.   [5]Ibid.   [6]Ibid., p. 20.

development is the cycle of progress when children learn their own language. "It is the only cycle of progress which we can observe in its purely natural state."[1]

Whitehead's concept of education encourages, infact, insists upon the idea that there is oscillation in learning between romance and precision, intake and output, freedom and discipline, but he emphasises that freedom dominates.

> My main position is that the dominant note of educa-
> tion at its beginning and at its end is freedom,
> but that there is an intermediate stage of discipline
> with freedom in subordination: Further, that there is
> not one unique threefold cycle of freedom, discipline,
> and freedom; but that all mental development is com-
> posed of such cycles, and of cycles of such cycles.
> Such a cycle is a unit cell . . . and the complete
> stage of growth is an organic structure of such cells.[2]

In Whitehead's analysis of the "cell", there are three stages: a stage of freedom, "Romance", a stage of discipline, "Precision", and a stage of freedom again, "Generalisation."

Romance: In this initial stage "the emphasis must always be on freedom to allow the child to see for itself and to act for itself."[3] Whitehead expands upon this:

> The first procedure of the mind in a new environment
> is a somewhat discursive activity amid a welter of
> ideas and experiences. It is a process of discovery,
> a process of becoming used to curious thoughts, of
> shaping questions, of seeking for answers, of
> devising new experiences, of noticing what happens as
> the result of new ventures. This general process is
> both natural and of absorbing interest. . . . It is
> dominated by wonder.[4]

He concurs that discipline and freedom are essential to education, but he maintains that "in the stage of romance the

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[1]Ibid., p. 19. [2]Ibid., p. 31. [3]Ibid., p. 33.

[4]Ibid., p. 32.

emphasis must always be on freedom, to allow the child to see for
itself and to act for itself."[1] When the stage of precision, the
second stage, is imposed too soon or "before the stage of romance
has run its course in a growing mind," the result is that "a
block in the assimilation of ideas inevitably arises."[2] White-
head testifies that:

> . . . there is no comprehension apart from romance.
> It is my strong belief that the cause of so much
> failure in the past has been due to the lack of
> careful study of the due place of romance. Without
> the adventure of romance, at the best you can get
> inert knowledge without initiative, and at the
> worst you can get contempt of ideas without knowledge.[3]

Precision: Ideally, Whitehead maintains that this stage
is a natural outgrowth of having satisfied the romantic adven-
ture. The child now asks to know the right and the wrong way –
the definite truths. Discipline, and preferably self-discipline,
is now to be emphasised, but not to the total exclusion of
freedom.

> I freely admit that if the stage of romance has been
> properly managed, the discipline of the second stage
> is much less apparent, that the children know how to
> go about their work, want to make a good job of it,
> and can be safely trusted with the details.[4]

Whitehead warns that there is a danger of killing initia-
tive at this stage by imposing too much training, but he offers no
answer to "this difficult problem". He also recognizes that it
is not possible to take an entire class along this road of pre-
cision without some dulling of the interest. Had he not

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[1]Ibid., p. 33. [2]Ibid. [3]Ibid.

[4]Ibid., p. 35.

recognized this, the reader might be inclined to think that
Whitehead is yet another idealist speaking from an ivory tower.
He assists us, however, by pointing out that one secret of
successful teaching is that the teachers formulate very clearly
in their minds what the pupil is required to know during this
stage. Through correct pacing, determined by the child's con-
centration, the child should "get its knowledge quickly, and
then use it."[1] Whitehead writes: "The stage of precision is the
stage of growing into the apprehension of principles by the
acquisition of a precise knowledge of details."[2]

Generalisation: During this third stage, Whitehead says
that the student needs to use acquired knowledge, and "he
relapses into the discursive adventures of the romantic stage
with the advantage that his mind is now a disciplined regiment
instead of a rabble."[3] It is during this final stage that people
search for principles, are actively and freely utilizing them,
and are able to meet life "with relevant ideas and appropriate
action."[4]

We conclude our exploration of Whitehead's ideas concern-
ing creativity and education, with his reconciliation of, what
seems to be a paradox in the minds of some educators, the rela-
tionship of freedom and discipline. Whitehead's concept of
"rhythm in education" reconciles these opposites.

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[1]Ibid., p. 36.   [2]Ibid., p. 37.

[3]Ibid.   [4]Ibid.

What I am anxious to impress on you is that though
knowledge is one chief aim of intellectual educa-
tion, there is another ingredient, vaguer but
greater, and more dominating in its importance.
The ancients called it "wisdom." You cannot be
wise without some basic knowledge; but you may
easily acquire knowledge and remain bare of wisdom.
Now wisdom is the way in which knowledge is
held. It concerns the handling of knowledge, its
selection for the determination of relevant issues,
its employment to add value to our immediate exper-
ience. This mastery of knowledge, which is wisdom,
is the most intimate freedom obtainable . . . The
only avenue towards wisdom is by freedom in the pre-
sence of knowledge. But the only avenue towards
knowledge is by discipline in the acquirement of
ordered fact. . . .
. . . The two principles, freedom and discipline,
are not antagonistic, but should be so adjusted in
the child's life that they correspond to a natural
sway, to and fro, of the developing personality.[1]

Thus having explored and presented Whitehead's ideas

concerning education with reference to creativity, we shall now

show, in a summary manner, how his ideas lend support to

the five aspects of creativity which were enumerated

in the introduction to this chapter. By so doing, we shall see

that Whitehead's ideas have a definite bearing upon the import-

ance of creativity in education.

With respect to *Aspect no. 1: the fact that creative*

behaviour is thought by some eminent psychiatrists and psycholo-

gists to be innate in each individual, Whitehead's theory is that

the creative impulse is innate in all people, and that growth

towards self-development stems from this creative impulse. More-

over, he maintains that growth is progress, and the result of

progress is the freedom to utilize one's principles in the

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[1]Ibid., p. 30.

circumstances of life. Such freedom, he writes, belongs to the wise, and the journey to wisdom begins when education guides pupils "boldly to exercise their creative energies."[1]

With respect to *Aspect no. 2: some traits of the creative person: curiosity, initiative, critical faculties, aesthetic judgment and intuitive ideas*, Whitehead declares with certitude that education must evoke curiosity, must both use and strengthen the powers of initiative, and must develop what he terms aesthetic emotion. He maintains that aesthetics is the core of the educational process, as "our aesthetic emotions provide us with vivid apprehensions of value."[2] Furthermore, Whitehead argues that the initial stage of learning must emphasise freedom, and one may assume that intuitive ideas would emerge during this stage. One also may assume that children would use their critical faculties during this stage, and that these faculties will be sharpened during Whitehead's second stage of learning, the stage of precision, when the discipline of learning dominates. To keep knowledge alive, "the central problem of all education",[3] Whitehead emphasises that we must train children to activity of thought, and this would include making use of critical faculties.

With respect to *Aspect no. 3: the creative process: those aspects of the creative process that concern problem-solving, including stages such as fact-finding, problem-finding, idea-finding and solution-finding*, we discover that

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[1]Ibid., p. 59.   [2]Ibid., p. 40.

[3]Ibid., p. 5.

Whitehead does not deal with the creative problem-solving process as such. He deals, rather, with education at a different level, i.e., with the relationship of the principles of freedom and discipline in education. It is in this context that his thoughts relating to the nurture of creative behaviour emerge.

With respect to *Aspect no. 4: the nurture of creative behaviour: showing confidence in children by valuing their ideas, granting them some freedom to explore their ideas and their environment, granting them periods of non-evaluative practice, encouraging them to learn from their own mistakes and to share and work together on ideas*, we find that in the first stage of Whitehead's three stages of learning, the stage of romance where freedom dominates over discipline, he refers directly to allowing children to see things, to ask questions, and to explore their ideas and environment. Although Whitehead does not specifically mention the nurture of other creative behaviour, it would be difficult to argue that behaviours such as non-evaluative practice, learning from their own mistakes, and working together with other children on ideas, would not find a place in this stage of romance.

The importance that Whitehead attaches to the inclusion of this first stage of learning and, accordingly, to the creative behaviours involved in this stage, is evident when he states that "my main position is that the dominant note of education at its beginning and at its end is freedom, . . ."[1] The peril that

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[1]Ibid., p. 31.

Whitehead attaches to the exclusion of this first stage of
learning, and, therefore, to the exclusion of the creative
behaviours involved in this stage, is evident when he states
that: "Without the adventure of romance, at the best you can get
inert knowledge without initiative, and at the worst you can get
contempt of ideas without knowledge."[1] Thus the rejection of
this stage of romance, the stage where freedom of activity is
dominant over precise discipline and where creative behaviours
are encouraged, would defeat what Whitehead sees as the aim of
education.

> What education has to impart is an intimate sense
> for the power of ideas, for the beauty of ideas, and
> for the structure of ideas, together with a particular
> body of knowledge which has peculiar reference to the
> life of the being possessing it.[2]

Whitehead blames the failure of education in the past partially
upon the fact that educators have not studied, with enough care,
the role that the stage of romance should play in education.

He postulates that the "discursive adventures of the
romantic stage"[3] also occur during the third and last stage of
learning, the stage of "generalization"[4] when the mind is well
disciplined. In fact, according to Whitehead, the stage of romance
recurs as the cycles of mental growth continue, which could be
throughout a lifetime for one who is open to learning and to change.

Finally with respect to *Aspect no. 5: some detrimental
effects of a conforming environment upon creativity*, Whitehead

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[1]Ibid., p. 33. [2]Ibid., p. 11. [3]Ibid., p. 37.
[4]Ibid., p. 19.

expresses his total opposition to the use of the imposed external examination system in English education. Such uniform external examinations, he writes, are deadly, and do not evoke curiosity or judgment, which are but two of the factors that he holds essential to keeping knowledge alive, i.e., essential to what he considers to be "the central problem of education."[1]

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[1]Ibid.

DEMOCRACY AND EDUCATION by John Dewey

Dewey sees education as growth, i.e., "the cumulative movement of action toward a later result."[1] For growth to take place, he points out that the primary condition is immaturity; thus, he begins by discussing what immaturity is not.

> Our tendence to take immaturity as mere lack, and growth as something which fills the gap between the immature and the mature is due to regarding childhood comparatively, instead of intrinsically. We treat it simply as a privation because we are measuring it by adulthood as a fixed standard. This fixes attention upon what the child has not, and will not have till he becomes a man. This comparative standpoint is legitimate enough for some purposes, but if we make it final, the question arises whether we are not guilty of an overweening presumption.[2]

Dewey points out that the danger of holding the comparative view of childhood with adulthood "is apparent when we reflect that it sets up an ideal and standard, a static end."[3] He views growth as being rather the exact antithesis of immaturity, as being a life-long process. He sees in growth a positive power or ability: growth is something that children do, not something done to them, he explains. Thus, having opened the mind of the reader initially to a realization of what immaturity is not, Dewey then sets about to discuss what immaturity is.

Having explained that immaturity is the primary condition of growth, he then goes on to describe the two chief traits of immaturity which allow for growth, dependency and plasticity. By

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[1]John Dewey, Democracy and Education (New York: MacMillan Publishing Co., 1916), p. 41.

[2]Ibid., p. 42. [3]Ibid.

dependency Dewey is not referring to the fact that children are
totally physically dependent for their first few years. He is
referring specifically to the fact that children "are gifted with
an equipment of the first order for social intercourse."[1] He
explains this by saying:

> Few grown-up persons retain all of the flexibility
> and sensitive ability of children to vibrate sym-
> pathetically with attitudes and doings of those about
> them. Inattention to physical things (going with
> incapacity to control them) is accompanied by a
> corresponding intensification of interest and attention
> as to the doings of people. The native mechanism of
> the child and his impulses all tend to facile social
> responsiveness.[2]

By plasticity Dewey is not referring to one's ability to change
according to external pressures. He is referring to the ability
of individuals to learn from experience, to transfer learning
from one experience to another, and to readjust actions to
accommodate experiences.

> The infant has the advantage (over animals) of the
> multitude of instinctive tentative reactions and
> of the experiences that accompany them, even though
> he is at a temporary disadvantage because they cross
> one another. In learning an action, instead of
> having it given readymade, one of necessity learns
> to vary its factors, to make varied combinations of
> them, according to change of circumstances. A poss-
> ibility of continuing progress is opened up by the
> fact that in learning one act, methods are developed
> good for use in other situations. Still more
> important is the fact that the human being acquires
> a habit of learning. He learns to learn.[3]

One's ability to carry over experiences from prior
activities, which may modify further activities, results in the
formation of habits or dispositions. To this point Dewey writes:

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[1]Ibid., p. 43. [2]Ibid. [3]Ibid., p. 45.

Habits give control over the environment, power to
utilize it for human purposes. Habits take the form
both of habituation, or a general and persistent
balance of organized activities with the surroundings,
and of active capacities to readjust activity to meet
new conditions. The former furnishes the background
of growth; the latter constitutes growing. Active
habits involve thought, invention and initiative in
applying capacities to new aims. They are opposed to
routine which marks an arrest of growth.[1]

Such ideas, as well as those resulting from Dewey's "net
conclusion that life is development, and that developing, grow-
ing, is life,"[2] have far-reaching consequences for education.
One such consequence is that "the educational process has no end
beyond itself; it is its own end."[3] Dewey recognizes that both
adults and children are, or should be, growing, and the only
difference is in the "modes of growth appropriate to different
conditions."[4] While Dewey agrees that children "with respect to
the development of powers to cope with scientific and economic
problems,"[5] should be growing into adulthood, he also agrees that
"with respect to sympathetic curiosity, unbiased responsiveness,
and openness of mind, we may say that the adult should be growing
in childlikeness."[6] He concludes his discussion of education as
growth by saying:

Since growth is the characteristic of life, education
is all one with growing; it has no end beyond itself.
The criterion of the value of school education is the
extent in which it creates a desire for continued
growth and supplies means for making the desire effect-
ive in fact.[7]

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[1]Ibid., pp. 52-53.　[2]Ibid., p. 49.　[3]Ibid., p. 50.
[4]Ibid.　[5]Ibid.　[6]Ibid.　[7]Ibid., p. 53.

We turn next to explore what Dewey considers to be "the

essentials of method." He avers that "thinking is the method

of intelligent learning, of learning that employs and rewards

mind."[1] He explains:

> We speak, legitimately enough, about the method of
> thinking, but the important thing to bear in mind
> about the method is that thinking is method, the
> method of intelligent experience in the course which
> it takes.[2]

Dewey also holds that "the essentials of method are identical

with the essentials of reflection."[3] It is for this reason that

reference is sometimes made to his reflective method, or scien-

tific method or experimental method, and, more recently, to his

problem-solving method. We choose to use the latter term;

hence we shall present the five stages of Dewey's problem-solving

method, and then look at each in some detail.

> They are first that the pupil have a genuine situation
> of experience-- that there be a continuous activity in
> which he is interested for its own sake; secondly,
> that a genuine problem develop within this situation
> as a stimulus to thought; third, that he possess the
> information and make the observations needed to deal
> with it; fourth, that suggested solutions occur to him
> which he shall be responsible for developing in an
> orderly way; fifth, that he have opportunity and
> occasion to test his ideas by application, to make their
> meaning clear and to discover for himself their validity.[4]

The first stage, "that the pupil have a genuine situation of

experience - that there be a continuous activity in which he is

interested for its own sake,"[5] is accompanied by features of

"perplexity, confusion, and doubt, due to the fact that one is

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[1]Ibid., p. 153. [2]Ibid. [3]Ibid., p. 163.

[4]Ibid. [5]Ibid.

implicated in an incomplete situation whose full character is
not yet determined."[1] Dewey posits that teachers must assume
that pupils have had no experience with respect to the problem
at hand; therefore the pupils must be given access to the raw
materials of the subject.

> . . . the first stage of contact with any new material,
> at whatever age of maturity, must inevitably be of the
> trial and error sort. An individual must actually
> try, in play or work, to do something with material in
> carrying out his own impulsive activity, and then note
> the interaction of his energy and that of the material
> employed.[2]

Dewey maintains that schools must give pupils something to do,
not just something to learn, to memorize, or to practise, because
learning naturally occurs when "the doing is of such a nature as
to demand thinking, or the intentional noting of connections."[3]

He also holds that the experience, in order "to stimulate
and direct observation of the connections involved, and to lead
to inference and its testing,"[4] should relate to or be the pupil's
own problem, rather than a problem imposed on the pupil by the
teacher. The problems with which the students normally deal,
however, are those generated by the teacher, not those of any real
significance to the student. The student's problem then becomes
that of how to meet the teacher's requirements, or at its worst,
"how to seem to meet them, or, how to come near enough to meeting
them to slide along without an undue amount of friction."[5] The
type of judgment formed by such devices Dewey decries; it is
"not a desirable addition to character."[6]

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[1]Ibid., p. 150. [2]Ibid., p. 154. [3]Ibid.

[4]Ibid., p. 155. [5]Ibid., p. 156. [6]Ibid.

Although he argues that education should provide "situations which normally generate problems occasioning thoughtful inquiry," he contends that this does not happen.

> No one has ever explained why children are so full of questions outside of the school (so that they pester grown-up persons if they get any encouragement), and the conspicuous absence of display of curiosity about the subject matter of school lessons.[1]

Dewey testifies that:

> . . . where children are engaged in doing things and in discussing what arises in the course of their doing, it is found, even with comparatively indifferent modes of instruction, that children's inquiries are spontaneous and numerous, and the proposals of solution advanced, varied, and ingenious.[2]

One further point which we shall explore concerning this first stage of Dewey's problem-solving method is a deeper understanding of the meaning which he gives to the notion of experience. This necessitates an explanation of the division that exists between knowledge and experience, a division that Dewey demonstrates to be deeply rooted in western thinking. Knowledge and reason, he holds, are synonomous with permanence and uniformity. Experience, which is associated with the senses, i.e., the organs of perceiving change, is associated with the unstable and the diverse; therefore experience came to be thought of as dealing only with temporal matters.

> There is something morally dangerous about experience, as such words as sensual, carnal, material, worldly interest, suggest; while pure reason and spirit connote something morally praiseworthy.[3]

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[1]Ibid., p. 155. [2]Ibid., p. 156. [3]Ibid., p. 265.

Dewey points out that this rift between knowledge and experience became even deeper, when "all the obnoxious characteristics of change and diversity thus attach themselves to doing while knowing is as permanent as its object."[1] Dewey explains that such ideas that emerged from Greek thinking were later reinforced by Medieval philosophy.

> To know reality meant to be in relation to the
> supreme reality, of God, and to enjoy the eternal
> bliss of that relation. Contemplation of supreme
> reality was the ultimate end of man to which action
> is subordinate. Experience had to do with mundane,
> profane and secular affairs, practically necessary
> indeed, but of little import in comparison with
> supernatural objects of knowledge.[2]

The result of the attempts of modern reformers, such as Bacon and Locke, to alter the concept of experience was that:

> Experience lost the practical meaning which it had
> borne from the time of Plato. It ceased to mean
> ways of doing and being done to and became a name
> for something intellectual and cognitive.[3]

For education, that experience came to mean activities that took place as an "aftermath of knowing", i.e.,

> . . . to confirm the exclusion of active pursuits from
> the school, save as they might be brought in for
> purely utilitarian ends - the acquisition by drill of
> certain habits.[4]

Thus, we arrive at Dewey's own concept of experience, one that evolves out of "advances of psychology, of industrial methods, and of the experimental method in science."[5] In Dewey's words:

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[1]Ibid.   [2]Ibid., p. 266.   [3]Ibid., p. 267.

[4]Ibid.   [5]Ibid., p. 276.

This theory reinstates the idea of the ancients that
experience is primarily practical, not cognitive -
a matter of doing and undergoing the consequences of
doing. But the ancient theory is transformed by
realizing that doing may be directed so as to take
up into its own content all which thought suggests,
and so as to result in securely tested knowledge.
"Experience" then ceases to be empirical and becomes
experimental. Reason ceases to be a remote and ideal
faculty, and signifies all the resources by which
activity is made fruitful in meaning.[1]

The second stage of Dewey's problem-solving method, "that

a genuine problem develop within this situation as a stimulus to

thought,"[2] is accompanied by a "tentative interpretation of the

given elements, attributing to them a tendency to effect certain

consequences."[3] This requires from the teacher the art of

finding the balance between the difficulties inherent in the

problem, to make it challenging enough, and yet to keep the

problem within the capabilities of the student. Dewey criticizes

schools because they make knowledge an end in itself, "and then

the goal becomes to heap it up and display it when called for."[4]

Further, he writes:

This static, cold-storage ideal of knowledge is inimical
to educative development. . . . Pupils who have stored
their "minds" with all kinds of material which they
have never put to intellectual uses are sure to be
hampered when they try to think. They have no practice
in selecting what is appropriate, and no criterion to
go by; everything is on the same dead static level.[5]

The third stage of Dewey's problem-solving method, "when

children make the observations needed to deal with it [the

experience],"[6] is accompanied by "a careful survey (examination,

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[1]Ibid. [2]Ibid., p. 163. [3]Ibid., p. 154.

[4]Ibid., p. 158. [5]Ibid. [6]Ibid., p. 163.

inspection, exploration, and analysis) of all attainable consideration which will define and clarify the problem."[1] This leads to suggestions about what one might do concerning the problem, even to conceptions of novel or original ideas.

> In this sense, a thought (what a thing suggests but is not as it is presented) is creative,- an incursion into the novel. It involves some inventiveness. What is suggested must, indeed, be familiar in some context; the novelty, the inventive devising, clings to the new light in which it is seen, the different use to which it is put.[2]

Following upon this is Dewey's educational conclusion that:

> *all* thinking is original in a projection of considerations which have not been previously apprehended. The child of three who discovers what can be done with blocks. . . , is really a discoverer, even though everybody else in the world knows it. There is a genuine increment of experience; not another item mechanically added on, but enrichment by a new quality. The charm which the spontaneity of little children has for sympathetic observers is due to perception of this intellectual originality. The joy which children themselves experience is the joy of intellectual constructiveness - of creativeness, if the word may be used without misunderstanding.[3]

To those who argue that the foremost task of educators is to pass on materials from the more informed to the less informed because pupils are not capable of originality, Dewey has a two-fold reply:

> (i) We are concerned with originality of attitude which is equivalent to the unforced response of one's own individuality, not with originality as measured by product. . . . But it is not unreasonable to expect that learning may take place under such conditions that from the standpoint of the learner

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[1]Ibid., p. 150. [2]Ibid., pp. 158-159.

[3]Ibid., p. 159.

there is genuine discovery. While immature students will not make discoveries from the standpoint of advanced students, they make them from their own standpoint, whenever there is genuine learning.

(ii) In the normal process of becoming acquainted with subject matter already known to others, even young pupils react in unexpected ways. There is something fresh, something not capable of being fully anticipated by even the most experienced teacher, in the ways they go at the topic, and in the particular ways in which things strike them. Too often all this is brushed aside as irrelevant; pupils are deliberately held to rehearsing material in the exact form in which the older person conceives it. The result is that what is instinctively original in individuality, that which marks off one from another, goes unused and undirected. Teaching then ceases to be an educative process for the teacher. At most he learns simply to improve his existing technique; he does not get new points of view; he fails to experience any intellectual companionship. Hence both teaching and learning tend to become conventional and mechanical with all the nervous strain on both sides therein implied.[1]

The child with the assistance of the adult, Dewey maintains, truly thinks under the following conditions:

> . . . by wrestling with the conditions of the problems at first hand, seeking and finding his own way out, . . . If he cannot devise his own solution (not of course in isolation but in correspondence with the teacher and other pupils) . . . he will not learn.[2]

Dewey envisages that the teacher shares in the activity to the extent that he or she becomes the learner and the learner becomes the teacher. Dewey also points out that the teacher or parent can only do two things that will assist the child in his or her own learning: set up situations which "stimulate thinking" and provide a "sympathetic attitude toward the activities of the learner by entering into a common conjoint experience."[3]

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[1]Ibid., p. 303.   [2]Ibid., p. 160.   [3]Ibid.

The fourth stage of Dewey's problem-solving process, "that suggested solutions occur to him [the pupil] which he shall be responsible for developing in an orderly way,"[1] is accompanied by "a consequent elaboration of the tentative hypothesis to make it more precise and more consistent, because squaring with a wider range of facts."[2] The ideas that arise at this stage are not ends in themselves, according to Dewey, but they are "intermediate learning" or guides to further learning. The effectiveness of these ideas must be tested by applying them to a situation.

Dewey strongly criticizes the fact that the schools incorporate too much artificiality in their learning.

> The bad effects are twofold. Ordinary experience does not receive the enrichment which it should; it is not fertilized by school learning. And the attitudes which spring from getting used to and accepting half-understood and ill-digested material weaken vigor and efficiency of thought.[3]

The fifth and final stage of Dewey's problem-solving process is that the child has the "opportunity and occasion to test his ideas by application, to make their meaning clear and to discover for himself their validity."[4]

Having considered Dewey's problem-solving method, which, he asserts, individuals handle in their own way, he next affirms that some attitudes "are central in effective intellectual ways of dealing with subject matter."[5] He presents four of the most important.

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[1]Ibid., p. 163. [2]Ibid., p. 150. [3]Ibid., p. 161.
[4]Ibid., p. 163. [5]Ibid., p. 173.

The first attitude is "directness" or confidence in the straightforwardness with which one goes about one's task. This attitude allows for the possibility that the subject matter itself induces learning.

The second attitude is open-mindedness, i.e., "the accessibility of mind to any and every consideration that will throw light upon the situation that needs to be cleared up."[1] Dewey states that education that does not allow for, and even encourage open-mindedness, is restricting both the development of the individual and his or her vision. He explains further:

> But intellectual growth means constant expansion of horizons and consequent formation of new purposes and new responses. These are impossible without an active disposition to welcome points of view hitherto alien; an active desire to entertain considerations which modify existing purposes. Retention of capacity to grow is the reward of such intellectual hospitality.[2]

Dewey adds:

> The teacher who does not permit and encourage diversity of operation in dealing with questions is imposing intellectual blinders upon pupils - restricting their vision to the one path the teacher's mind happens to approve. Probably the chief cause of devotion to rigidity of method is, however, that it seems to promise speedy, accurately measurable, correct results.[3]

His discussion of open-mindedness ends with these words:

> Were all instructors to realize that the quality of mental process, not the producing of correct answers, is the measure of educative growth something hardly less than a revolution in teaching would be worked.[4]

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[1]Ibid., p. 175. [2]Ibid. [3]Ibid.

[4]Ibid., p. 176.

The third attitude is single-mindedness or integrity of
purpose. Dewey realizes that there are similarities in meaning
between single-mindedness and the first attitude, directness.
What he means in the case of this third attitude, however, is the
following:

> . . . *completeness* of interest, unity of purpose; the
> absence of suppressed but effectual ulterior aims for
> which the professed aim is but a mask. It is equiva-
> lent to mental integrity. Absorption, engrossment,
> full concern with subject matter for its own sake,
> nurture it. Divided interest and evasion destroy it.[1]

The conditions of schooling, Dewey maintains, foster divided
attention by imposing external pressures, by emphasizing "skill
and drill" without engaging the children's thoughts, by "every-
thing that makes schooling preparative."[2] The result is that:

> What is native, spontaneous, and vital in mental
> reaction goes unused and untested, and the habits
> formed are such that these qualities become less
> and less available for public and avowed ends.[3]

The fourth attitude is responsibility, i.e., "the dispo-
sition to consider in advance the probable consequences of any
projected step and deliberately to accept them."[4] Dewey's con-
cern is that children learn what is involved in "really knowing
and believing a thing."[5] This involves intellectual thoroughness,
the term Dewey uses for the idea of "seeing a thing through."
He concurs that this is only possible in school if fewer ideas
are presented, i.e.,

> . . . if a smaller number of situations could be

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[1]Ibid., p. 176. [2]Ibid., p. 177. [3]Ibid., p. 178.
[4]Ibid. [5]Ibid.

intellectually worked out to the point where conviction meant something real – some identification of the self with the type of conduct demanded by facts and fore-sight of results.[1]

Finally, we look at what Dewey has to say about the struggle that ensued in what he calls the recent acquisition of freedom of imagination and of observation. He declares that we are heirs to both by virtue of the modern scientific revolution but that neither was "easily secured; . . . Discovery, research, enquiry in new lines, inventions, finally came to be either the social fashion, or in some degree tolerable."[2] He takes us one step further, and relates these abilities and others to social progress.

> The intellectual variations of the individual in observations, imagination, judgment, and invention are simply the agencies of social progress, just as conformity to habit is the agency of social conservation.[3]

Dewey believes that unless "a special atmosphere and motive for learning"[4] is present in education, there will be no progress. By that he means:

> When learning is a phase of active undertakings which involve mutual exchange, social control enters into the very process of learning. When the social factor is absent, learning becomes a carrying over of some presented material into a purely individual consciousness, and there is no inherent reason why it should give a more socialised direction to mental and emotional disposition.[5]

For social direction to occur, Dewey purports that free-dom of thinking is essential. Contrary to the opinion of many

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[1]Ibid.   [2]Ibid., pp. 296-297.   [3]Ibid., p. 297.

[4]Ibid., p. 301.   [5]Ibid.

opponents of Dewey who criticized what they often wrongly thought
to be his belief regarding freedom and education, we read these
words:

> Freedom means essentially the part played by thinking –
> which is personal – in learning – it means intellectual
> initiative, independence in observation, judicious
> invention, foresight of consequences, and ingenuity of
> adaptation to them.[1]

Mental freedom, Dewey continues, cannot be separated from free-
dom of activity of movement. Dewey explains that "the whole
cycle of self-activity demands an opportunity for investigation
and experimentation, for trying out one's ideas upon things,
discovering what can be done with materials and appliances."[2]

Children, he writes, must be encouraged to do their own
thinking. "Only by the pupil's own observations, reflections and
framing and testing of suggestions can what he already knows be
amplified and rectified."[3] As Dewey holds that thinking is an
individual matter, then it follows that there must be different
ways of looking at all things.

> When these variations are suppressed in the alleged
> interests of uniformity, and an attempt is made to
> have a single mold of method of study and recitation,
> mental confusion and artificiality inevitably result.
> Originality is gradually destroyed, confidence in
> one's own quality of mental operation is undermined,
> and a docile subjection to the opinion of others is
> inculcated, or else ideas run wild.[4]

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[1] Ibid., p. 302.

[2] Ibid.

[3] Ibid., p. 303.

[4] Ibid.

Dewey further clarifies his use of the term freedom when
he writes that "the important thing to bear in mind is that
freedom designates a mental attitude rather than external con-
straints of movement."[1] To understand what he means:

> If attention is centered upon the conditions which
> have to be met in order to secure a situation
> favorable to effective thinking, freedom will
> take care of itself. The individual who has a
> question which being really a question to him
> instigates his curiosity, which feeds his eager-
> ness for information that will help him cope with
> it, and who has at command an equipment which will
> permit these interests to take effect, is intellect-
> ually free. Whatever initiative and imaginative
> vision he possesses will be called into play and
> control his impulses and habits. His own purposes
> will direct his actions. Otherwise, his seeming
> attention, his docility, his memorizings and
> reproductions, will partake of intellectual ser-
> vility. Such a condition of intellectual subjection
> is needed for fitting the masses into a society
> where the many are not expected to have aims or
> ideas of their own, but to take orders from the few
> set in authority. It is not adapted to a society
> which intends to be democratic.[2]

This presentation of Dewey's ideas concerning education
and creativity concludes with his proposition that an education
which places sufficient emphasis upon conditions that, among
other things, instigate children's curiosity, initiative and
imagination is preparing them to take part in a democratic
society; whereas an education which attends primarily to docil-
ity, memorizing and reproduction is preparing its children to
take orders from "the few set in authority."[3] Dewey's dictum is
that:

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[1]Ibid., p. 304. [2]Ibid., pp. 304-305.

[3]Ibid., p. 305.

A progressive society counts individual variations as
precious since it finds in them the means of its own
growth. Hence a democratic society must, in consist-
ency with its ideal, allow for intellectual freedom
and the play of diverse gifts and interests in its
educational measures.[1]

Thus having explored and presented Dewey's ideas con-

cerning education with reference to creativity, we shall now

show, in a summary manner, how his ideas lend support to

the five aspects of creativity which were enumerated

in the introduction to this chapter. By so doing, we shall

discover that Dewey's ideas lend prodigious support to creativ-

ity in education.

With respect to *Aspect no. 1: . . . the fact that*

creative behaviour is thought by some eminent psychiatrists and

psychologists to be innate in each individual, we must first

point out that Dewey's book is primarily concerned with the

interdependence of public education and the democratic system.

It is in this context that creativity is mentioned. If we limit

our remarks only to the direct references that Dewey makes to

creativity, we discover that it is in relation to the third step

of his problem-solving method that he cautiously makes use of the

term. Thoughts which are novel or inventive are creative, he

writes, and they are also original for the individual who has

not previously perceived them. It is this discovery of thoughts —

this "intellectual originality" — that Dewey claims is the "joy

of creativeness" because the child experiences a "genuine incre-

ment of experience."[2] Furthermore, he argues that all pupils

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[1]Ibid. [2]Ibid., p. 159.

are capable of originality. From these few, but very definite

thoughts of Dewey, we conclude that he endorses the theory that,

given the opportunity, all children will exhibit some measure of

creative thought and will experience the joy of creativeness,

i.e., they will grow. Conditions which allow for such growth

also prepare children to take their place in a progressive demo-

cratic society, according to Dewey.

With respect to *Aspect no. 2: some traits of the creative*

person: curiosity, initiative, critical faculties, aesthetic

judgment and intuitive ideas, we find the following. Looking

first at Dewey's initial stage of problem-solving, i.e.,

experiencing something in which children are interested, he

asserts that children carry out their own impulsive activity or

intuitive ideas during this stage. Children are encouraged to

make numerous and spontaneous inquiries, and they also make

proposals that are "advanced, varied and ingenious."[1] The

second stage of problem-solving, i.e., the problem-finding

stage, gives children practice in selecting materials and in

drawing up criteria with respect to problem-finding; hence, they

utilize their critical faculties. Such faculties are also

utilized during his third stage of problem-solving, when a

greater clarification of the problem ensues through examination

and analysis, and also during his fourth stage when ideas become

more precise and refined.

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[1]Ibid., p. 156.

Dewey argues that initiative and invention are essential traits needed for habitual activity of thought that is required for development, for growth, for life. Furthermore, for growth to occur, he holds that it is important for adults to grow in "sympathetic curiosity, openness-of-mind, and unbiased responsiveness"[1] as well as in the powers to cope with scientific and economic problems.

For social progress to occur, i.e., to arrive at a more democratic society, Dewey proposes that freedom in thinking is essential. Freedom in this case means:

> . . . the part played by thinking – which is personal – in learning. It means intellectual initiative, independence in observation, judicious invention, foresight of consequences, and ingenuity of adaptation to them.[2]

Finally, we note that the trait which is not mentioned in this book is aesthetic judgment, but we are aware that Dewey discusses this at length in a later work titled Art and Experience. Thus it is clear that the traits mentioned are of vital significance to Dewey's concept of the process of education.

With respect to *Aspect no. 3: the creative process: the aspect of the creative process that concerns problem-solving, including stages such as fact-finding, problem-finding, idea-finding and solution-finding,* we discover that the five stages of Dewey's hypothetical method of learning, which we have termed the problem-solving method, are similar to the five steps that were discussed in Chapter II in connection with S. J. Parnes' creative problem-solving process. To illustrate:

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[1]Ibid., p. 50.   [2]Ibid., p. 302.

Dewey's problem-solving method[1]	S. J. Parnes' problem-solving method[2]
1. Stage one: Providing an experience through which one may explore ideas and materials and note interactions.	1. Fact-finding: gathering and analyzing related data.
2. Stage two: Arising out of this experience, a problem begins to emerge.	2. Problem-finding: finding the *real* problem.
3. Stage three: Making suggestions on information and observations as to what one might do to solve the problem.	3. Idea-finding: processing and developing possible leads to solutions.
4. Stage four: Testing and developing solutions which occur in an orderly way.	4. Solution-finding: evaluating potential solutions.
5. Stage five: Testing final solution by application.	5. Acceptance-finding: implementing the chosen solution.

With respect to *Aspect no. 4: the nurture of creative behaviour: showing confidence in children by valuing their ideas, granting them some freedom to explore their ideas and environment, granting them periods of non-evaluative practice, and encouraging them to learn from their own mistakes and to share and work together on ideas*, we discover the following. Dewey not only categorically supports these ideas, but he sees the nurture of such behaviours to be an essential feature in the

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[1]Ibid., p. 302.

[2]Parnes' method was presented in Chapter II under "The Creative Process."

interdependence of public education and the democratic system.
To give but one example, Dewey values children's ideas. He also
encourages children to work together, and explains, that in
correspondence with the teacher and other pupils, the child must
wrestle with "the conditions of the problem at first hand and
find his own solutions."[1] The importance that Dewey attaches to
the process of education, which includes the nurture of creative
behaviour, is inherent in these words which were previously
quoted but bear repeating in this context:

> Were all instructors to realize that the quality of
> mental process, not the production of correct answers,
> is the measure of educational growth something hardly
> less than a revolution in teaching would be worked.[2]

Finally with respect to *Aspect no. 5: some detrimental
effect of a conforming environment upon creativity*, Dewey declares
that a society which, through its education, attends primarily to
conforming behaviours, e.g., docility, reproduction and memoriza-
tion, does so at the expense of the nurture of creative behaviours.
Such education, he continues, is that which only gives pupils
material to memorize, to learn, or to practice rather than some-
thing to do. Such education is that which restricts the pupil's
views to one path, which conforms to that of the teacher, rather
than encouraging open-mindedness. Such education is that which
imposes external problems on the students, rather than providing
them with experiences out of which they evolve their own problems.
Dewey declares that "originality is gradually destroyed,

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[1]Ibid., p. 160. [2]Ibid., p. 176.

confidence in one's own quality of mental operation is under-
mined, and a docile subjection to the opinion of others is
inculcated, or else ideas run wild."[1] Such an educational
system, Dewey claims, totally undermines the ideals of a demo-
cratic society.

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[1]Ibid., p. 303.

TOWARDS A THEORY OF INSTRUCTION by Jerome S. Bruner

In one of eight essays in this book, "The Will to Learn",
Bruner writes that "almost all children possess what have come
to be called 'intrinsic' motives for learning."[1] Such motives,
he explains, rely for rewards either upon the "successful termin-
ation of that activity or even in the activity itself."[2] In
other words, they do not rely upon extrinsic rewards or punishments
but upon intrinsic motivation. The first intrinsic motive to
which he refers is that of curiosity.

> Curiosity is almost a prototype of the intrinsic
> motive. Our attention is attracted to something that
> is unclear, unfinished, or uncertain. We sustain our
> attention until the matter in hand becomes clear,
> finished, or certain. The achievement of clarity or
> merely the search for it is what satisfies. . . .
> What activates and satisfies curiosity is something
> inherent in the cycle of activity by which we express
> curiosity. Surely such activity is biologically
> relevant, for curiosity is essential to the survival
> not only of the individual but of the species.[3]

Bruner emphasises that the infant who is deprived of "the rich
diet of impressions on which his curiosity normally feeds with
such extravagance"[4] shows a backwardness or a decline in intelli-
gence. Further he tells us that unchanneled curiosity may not be
sustained.

> To channel curiosity into more powerful intellectual
> pursuits requires that there be this transition from
> the passive, receptive, episodic form of curiosity
> to the sustained and active form.[5]

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[1] Jerome S. Bruner, Towards a Theory of Instruction (Cambridge,
Massachusetts, The Belknap Press of Harvard University Press, 1967),
p. 114.

[2] Ibid.   [3] Ibid., pp. 114-115.   [4] Ibid., p. 115.

[5] Ibid., p. 117.

Questions or games with objects are two ways that Bruner suggests

this intrinsic motive may be channeled.

Concerning the importance of curiosity in education

Bruner writes:

> Insofar as one may count on this important human
> motive - and it seems among the most reliable of the
> motives - then it seems obvious that our artificial
> education can in fact be made less artificial from
> a motivational standpoint by relating it initially
> to the more surfacy forms of curiosity and attention,
> and then cultivating curiosity to more subtle and
> active expression. I think it is fair to say that
> most of the success in contemporary curriculum
> building has been achieved by this route.[1]

To continue with Bruner's ideas about curiosity, we

shall turn for a moment to his discussion of one of the four

aspects of his "theory of instruction", a theory "concerned with

how what one wishes to teach can best be learned, with improving

rather than describing learning."[2] Curiosity is mentioned in

relation to the first aspect, "predispositions to learning."[3]

Although Bruner recognizes that social factors are involved in a

"predisposition to learning", he chooses to concentrate upon a

"cognitive illustration: upon the predisposition to explore

alternatives."[4] He maintains that "since learning and problem

solving depend upon the exploration of alternatives, instruction

must facilitate and regulate the exploration of alternatives on

the part of the learner."[5] The exploration of alternatives

requires "*activation, maintenance,* and *direction.*"[6] It is with

respect to activation that Bruner writes about curiosity.

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[1]Ibid. [2]Ibid., p. 40. [3]Ibid., p. 42.

[4]Ibid., p. 43. [5]Ibid. [6]Ibid.

> The major condition for activating exploration of
> alternatives in a task is the presence of some optimal
> level of uncertainty. Curiosity, it has been per-
> suasively argued, is a response to uncertainty and
> ambiguity. A cut-and-dried routine task provokes
> little exploration; one that is too uncertain may
> arouse confusion and anxiety, with the effect of
> reducing exploration.[1]

Bruner is saying that a balance must be found when a learning

task is being structured and presented, and that it is essential

that the balance allows for the activation of curiosity.

Returning now to Bruner's discussion of intrinsic motives

for learning, we look at the second motive to which he refers.

This is "the drive to achieve competence."[2] He explains this

motive as being "increased confidence in one's ability to cope,"

and he maintains that "we get interested in what we get good

at."[3] Thus the competency motive is sustained by a "sense of

accomplishment" and also by external influences. Such external

influences vary according to several factors, i.e., "cultures and

strata within any particular society."[4] In his discussion of

cultural influences he maintains that:

> Emphasis upon individual responsibility and initiative,
> upon independence in decision and action, upon
> perfectibility of the self - all of these things serve
> to perpetuate more basic competency motives past child-
> hood.[5]

The third intrinsic motive for learning that Bruner posits

is the aspiration to emulate a model or to identify with someone.

One example he gives is that of the parent who passes on to the

child the language of his or her mother tongue. Bruner contends,

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[1]Ibid. [2]Ibid., p. 117. [3]Ibid., p. 118.

[4]Ibid., p. 120. [5]Ibid., p. 121.

however, that persons not only pass on skills but also attitudes.

> Often, in our schools, for example, this first lesson
> is that learning has to do with remembering things
> when asked, with maintaining a certain undefined
> tidiness in what one does, with following a train of
> thought that comes from outside rather than from
> within and with honoring right answers. Observant
> anthropologists have suggested that the basic values
> of the early grades are a stylized version of the
> feminine role in the society, cautious rather than
> daring, governed by a ladylike politeness.[1]

The fourth and final intrinsic motive for learning Bruner terms reciprocity. "It involves a deep human need to respond to others and to operate jointly with them toward an objective."[2] With respect to this motive, he criticizes the educational system by saying:

> The corpus of learning, using the word now as
> synonymous with knowledge, is reciprocal. A culture
> in its very nature is a set of values, skills and
> ways of life that no one member of society masters.
> Knowledge in this sense is like a rope, each strand
> of which extends no more than a few inches along its
> length, all being intertwined to give a solidity to
> the whole. The conduct of our educational system has
> been curiously blind to this interdependent nature of
> knowledge. We have "teachers" and "pupils", "experts"
> and "laymen." But the community of learning is some-
> how overlooked.[3]

Bruner suggests that holding seminars where "discussion is the vehicle of instruction" is a way of allowing for reciprocity, and he warns us that "reciprocity and the demand that everybody learn the same thing are incompatible."[4]

Bruner concludes his essay "The Will to Learn" by saying:

> At the risk of being repetitious, let me restate
> the argument. It is this. The will to learn is an

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[1]Ibid., p. 123.   [2]Ibid., p. 125.   [3]Ibid., p. 126.

[4]Ibid.

intrinsic motive, one that finds both its source and
its reward in its own exercise. The will to learn
becomes a "problem" only under specialized circum-
stances like those of a school, where a curriculum
is set, students confined, and a path fixed. The
problem exists not so much in learning itself, but
in the fact that what the school imposes often fails
to enlist the natural energies that sustain spontan-
eous learning - curiosity, a desire for competence,
aspiration to emulate a model, and a deep-sensed
commitment to the web of social reciprocity. Our
concern has been with how these energies may be culti-
vated in support of school learning. If we know little
firmly, at least we are not without reasonable hypo-
theses about how to proceed. The practice of education
does, at least, produce interesting hypotheses. After
all, the Great Age of Discovery was made possible by men
whose hypotheses were formed before they had developed
a decent technique for measuring longitude.[1]

We now turn to Bruner's discussion of cognitive learning,
and how it takes place. For effective cognitive learning to
occur, he claims that:

What seems to be required for a proper growth of
respect for the requirements of problem solving is a
"defusing" of intellectual activity from the demands
of immediate action, affect, and drive.[2]

He explains that this process "depends upon several conditions in
the early history of the child."[3] The first condition he terms
"stimulation." Bruner testifies that "varied stimulation with
relative freedom from stress is about the only way we know of pro-
moting such growth."[4] The second condition he terms play or
playfulness. Bruner explains this as an attitude "in which a
child learns that the outcomes of various activities are not as
extreme as he either hoped or feared - it involves learning to
place limits on the anticipated consequence of activity."[5] Bruner

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[1]Ibid., p. 127. [2]Ibid., p. 147. [3]Ibid., p. 134.
[4]Ibid. [5]Ibid.

emphasises the importance of the attitude of playfulness in learning by including a remark made by Niels Bohr to some of his graduate students, who felt that there was too much "horse-play and joking" in Bohr's laboratory. To these students, Bruner relates that Bohr replied: "But there are some things so important that one can only joke about them."[1]

The third condition we have already referred to in connection with the intrinsic motives for learning. It is identification, i.e., having a "competency model."[2] The fourth and last condition is freedom from drive and anxiety. The pressure of extrinsic rewards in learning, Bruner claims, "narrows the learning and renders it less generic, in the sense of its being less transferable."[3] He maintains that:

> Intrinsic learning that provides its own rewards, . . .
> represents, . . . what might be considered the beginning
> of a "conflict-free sphere of the ego", characterized
> by the curiosity and competence-seeking discussed
> earlier.[4]

Bruner then discusses the complexities of our literate society with respect to education. He points out that the transmission of our twentieth century literate technological culture presents far more problems for education than does the transmission of the culture of the twentieth century illiterate indigenous people.

> First of all, there is knowledge and skill in the culture
> far in excess of what any one individual knows. And so,
> increasingly, there develops an economical technique of
> instructing the young based heavily on *telling* out of
> context rather than *showing* in context.[5]

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[1]Ibid., p. 135.   [2]Ibid.   [3]Ibid., p. 136.

[4]Ibid., p. 134.   [5]Ibid., p. 151.

It is in dealing with the problems which result from "the educational techniques inherent in teaching by telling out of context,"[1] that Bruner's concept of problem-solving becomes apparent. These difficulties or problems which result are discussed under the following headings: "the psychology of a subject matter, how to stimulate thought in a school, how to personalize knowledge, and how to evaluate what one is doing."[2] We shall look at each one.

The psychology of a subject matter - Bruner testifies that:

> . . . the best introduction to a subject is the subject itself. At the very first breath, the young learner should, we think, be given the chance to solve problems, to conjecture, to quarrel, as these are done at the heart of the discipline.[3]

Thought in the classroom - Bruner asks how thought is stimulated in the setting of a school, and this leads to a discussion of problem-solving. First, he points out that two studies indicate "that there is a striking difference in the acts of a person who thinks that the task before him represents a problem to be solved and not that it is controlled by random forces."[4] He explains:

> By school age, children have come to expect quite arbitrary and, from their point of view, meaningless demands to be made upon them by adults--the result, most likely, of the fact that adults often fail to recognize the task of conversion necessary to make their questions have some intrinsic significance for the child. Children, of course, will try to solve problems if they recognize them as such. But they are not often either predisposed to or skillful in problem *finding*, in recognizing the hidden conjectural feature in tasks set them. But we know that children in school can quite quickly be led to such problem finding by encouragement and instruction.[5]

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[1]Ibid., p. 153.   [2]Ibid., p. 154.   [3]Ibid., p. 155.

[4]Ibid., p. 157.   [5]Ibid.

What does Bruner mean when he uses the terms "encourage-
ment and instruction?"

> Children, like adults, need reassurance that it is all
> right to entertain and express highly subjective ideas,
> to treat a task as a problem where you *invent* an answer
> rather than *finding* one out there in the book or on the
> blackboard. With children in elementary school, there
> is often a need to devise emotionally vivid special
> games, story-making episodes, or construction projects
> to re-establish in the child's mind his right not only
> to have his own private ideas but to express them in
> the public setting of a classroom.[1]

Bruner confirms that a perplexity which children face
with respect to these intrinsic problem-solving rewards is that
they are often interfered with by extrinsic problem-solving
rewards.

> Young children in school expend extraordinary time
> and effort figuring out what it is that the teacher
> wants — and usually coming to the conclusion that she
> or he wants tidiness or remembering or doing something
> in a certain way.[2]

He suggests that there are ways to incite problem-solving
in education, but he mentions only the one which he considers
to be most effective, i.e., "training teachers to want it."[3] To
overcome the impediments that occur "because instruction takes
the form of telling-out-of-the-context-of-action,"[4] Bruner
suggests "that the answer is the design of exercises in conjec-
tures, in ways of inquiry, in problem-finding. It is something
the good teacher does naturally at least some of the time."[5]
Bruner holds that it is "such conjecture . . . that produces
rational, self-consciously problem-finding behavior so crucial to
growth of intellectual power."[6]

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[1]Ibid., pp. 157-158. [2]Ibid., p. 158. [3]Ibid.

[4]Ibid., pp. 159-160. [5]Ibid., p. 160. [6]Ibid., p. 159.

The personalization of knowledge - The third problem deals
with "getting to the child's feelings, fantasies, and values with
one's lessons."[1] By personalized knowledge, Bruner clearly states
that he is not meaning simply the linking of knowledge to the
familiar. He is suggesting that we allow for "the experience of
discovering kinship and likeness in what at first seemed bizarre,
exotic, and even a little repellent."[2] He is suggesting that
"one makes the familiar an instance of a more general case and
thereby produces awareness of it," so that children learn "about
their own feelings and preconceptions that, up to then, were too
implicit to be recognizable to them."[3]

Evaluation - Bruner made an intensive study of the pro-
blems of evaluation and one of his findings is that evaluation
should not be used "for reporting what students or teachers say
or do or for providing unspecified tidings of success or fail-
ure."[4] If evaluation is used for this purpose, Bruner maintains
that it can not contribute to the "central task of a theory of
instruction, i.e., the task of understanding how human beings,
in fact, can be assisted in their learning and development."[5]
According to Bruner, evaluation should take place in the following
manner:

> . . . *before* and *during* curriculum construction, as a
> form of intelligence operation to help the curriculum
> maker in his choice of material, in his approach, in
> his manner of setting tasks for the learner.[6]

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[1]Ibid., p. 160. [2]Ibid. [3]Ibid., p. 161.

[4]Ibid., p. 166. [5]Ibid., p. 167. [6]Ibid., p. 30.

Thus having explored and presented Bruner's ideas concerning education with reference to creativity, we shall now show, in a summary manner, how his ideas lend support to the five aspects of creativity which were enumerated in the introduction to this chapter. By so doing, we shall see that Bruner's ideas have a definite bearing on the importance of creativity in education.

With respect to *Aspect no. 1: the fact that creative behaviour is thought by some eminent psychiatrists and psychologists to be innate in each individual*, this is an aspect of creativity to which he does not refer.

With respect to *Aspect no. 2: some traits of the creative person: curiosity, initiative, critical faculties, aesthetic judgment and intuitive ideas*, Bruner strongly maintains that education must foster a child's curiosity as he views this trait to be one of the four "intrinsic motives for learning" which almost all children possess. Furthermore, he holds that curiosity is the catalyst for the activation of the exploration of alternatives in a learning situation, and that, from a motivational standpoint, education must be related "initially to the more surfacy forms of curiosity and attention, and then cultivating curiosity to more subtle and active expression."[1] He mentions initiative along with other factors in his discussion of the second "intrinsic motive for learning, the competency drive."[2]

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[1]Ibid., p. 117.   [2]Ibid.

Bruner points out that by emphasising initiative and individual responsibility one "perpetuates more basic competency motives past childhood."[1] Bruner does not directly mention intuitive ideas, but he does hold that for effective cognitive learning to occur in children, we must not initially demand "immediate action, affect, and drive."[2] We must rather allow for stimulation with freedom from stress, for playfulness in learning, and for freedom from external drive and anxiety. Such conditions, one may assume, will allow children the opportunity to express and make use of their intuitive ideas as well as their critical faculties and aesthetic judgment.

With respect to *Aspect no. 3: the creative process: those aspects of the creative process that concern problem-solving, including stages such as fact-finding, problem-finding, idea-finding and solution-finding,* we discover that Bruner strongly supports the idea that education should foster problem-solving. He proposes that young children should have the opportunity to take part in problem-solving which involves the subject matter at hand, and, moreover, that this "is at the heart of the discipline."[3] With respect to the different steps involved in the problem-solving process, he discusses only one aspect in detail, problem-finding. He avers that instruction and encouragement in problem-finding will help to overcome one of the basic problems in education today, stimulating thought in the

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[1]Ibid., p. 121.   [2]Ibid., p. 147.   [3]Ibid., p. 155.

classroom. Finally, he contends that critical to the growth of intellectual powers is conjecture that produces rational, self-conscious, problem-finding behaviour.

With respect to *Aspect no. 4: the nurture of creative behaviour: showing confidence in children by valuing their ideas, granting them some freedom to explore their ideas and their environment, granting them periods of non-evaluative practice, encouraging them to learn from their own mistakes and to share and work together on ideas,* Bruner strongly supports the following ideas. Educators should not only show confidence in children by valuing their ideas, but also encourage children to freely express themselves publicly and to learn about their own preconceptions and feelings. Educators should also grant children some freedom to explore their ideas. In other words, Bruner advocates that young children must experience freedom from stress, freedom for playfulness towards learning, and freedom from extrinsic rewards. Such freedoms, Bruner explains, allow children to learn that intrinsic learning provides its own rewards. Educators must not only allow for periods of non-evaluative practice, and they must not use evaluation simply to determine whether children succeed or fail at problem-solving. Finally, he maintains that educators should not only allow children to share and to work together on ideas, but that they must recognize that one of the intrinsic motives of learning involves a deep human need to respond to others and to operate jointly with them towards an objective. The behaviour that Bruner does not directly mention is the encourage-

ment of children to learn from their own mistakes. The assump-
tion is made, however, that the writer who advocates that
educators must recognize the "community of learners"[1], and that
evaluation must be for the sake of improving instruction and
learning, would also advocate that children must be encouraged
to learn from their own mistakes.

Finally with respect to *Aspect no. 5: some detrimental
effects of a conforming environment upon creativity*, Bruner
maintains that the will to learn, and all that we have discovered
this entails, becomes a problem when extrinsic motives are
imposed upon children. He also contends that a "set curriculum
confines students and a fixed path often fails to enlist the
natural energies of children,"[2] and these include creative
behaviours.

[1]Ibid., p. 126.
[2]Ibid., p. 127.

THE SCIENCE OF EDUCATION AND THE PSYCHOLOGY OF THE CHILD

by Jean Piaget

Piaget's pejorative views about the present state of the teaching profession are of initial concern. Education, he believes, must strive to become a recognized profession.

> Faced with so bold a task as attempting to sum up the development of education and teaching during the past thirty years, and the even bolder one of attempting to evaluate it, one is immediately seized by a genuine alarm at the disproportion that still subsists today, undiminished since 1935, between the immensity of the efforts that have been made and the absence of any fundamental renewal in our methods, in our programs, in the very position of our problems, or, indeed, in pedagogy as a whole considered as a guiding discipline.[1]

The fact that teachers, unlike others in different professions, have not attained "status in society," Piaget attributes to their lack of intellectual prestige due to "an extraordinary and rather disturbing combination of circumstances."[2]

One reason for this condition is that:

> . . . the schoolteacher is not thought of either by others or, what is worse, by himself, as a specialist from the double point of view of technique and scientific creativeness, but rather as a transmitter of a kind of knowledge that is within everyone's grasp.[3]

Another reason involves the naivety of teachers themselves and of certain educational authorities, who have not conceived of the idea that pedagogy could be a science comparable with other sciences, and a very difficult one, given the complexity of the

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[1]Jean Piaget, The Science of Education and the Psychology of the Child, trans. Derek Coltman (New York: Penguin Books, 1977), introduction.

[2]Ibid., p. 11.   [3]Ibid.

factors involved. Piaget explains:

> When medicine applies biology and general physiology
> to the problems of curing diseases, it need not
> hesitate about the aims to be attained, and it employs
> already advanced sciences. In contrast, when pedagogy
> seeks to apply the data of psychology and sociology,
> it finds itself confronted with a tangle of questions
> concerning not only ends but also means, and it receives
> no more than modest aid from its mother science, since
> these disciplines have themselves still not made
> sufficient progress.[1]

Yet another reason which Piaget gives to explain the
lowly state of the teaching profession is that administrative
educators, too busy for research, dictate programmes and apply
methods which constrain the teacher and call for conformity to a
set programme. Thus, "the specific intellectual autonomy of the
teaching body itself still remains extremely restricted, through-
out the world, in comparison with that enjoyed by the other
liberal professions."[2]

And finally, Piaget proposes that very often teacher
training means only training in the subject which they teach and
not in pedagogy. He comments that teacher training often has
nothing to do with the university, the place where a teacher may
learn to become more than a mere transmitter and delve into
knowledge.

Teaching, Piaget writes, should embrace flexibility and
activity of method along with initiative, discovery and research.
He says, however, that such ideas are remote to the profession
for the following reasons:

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[1]Ibid., pp. 12-13. [2]Ibid., p. 13.

. . . our school system, as much under left-wing as
right-wing regimes, has been constructed by conserva-
tives (from the pedagogic point of view) who were
thinking much more in terms of fitting our rising
generations into the molds of traditional learning
than in terms of training inventive and critical
minds. From the point of view of society's present
needs, it is apparent that those old molds are crack-
ing in order to make way for broader, more flexible
systems and more active methods. But from the point of
view of the teachers and their social situation, those
old educational conceptions, having made the teachers
into mere transmitters of elementary or only slightly
more than elementary general knowledge, without allow-
ing them any opportunity for initiative and even less
for research and discovery, have thereby imprisoned
them in their present lowly status.[1]

Piaget advocates that essential to the training of
teachers should be training in psychology. By this he does not
mean that students must attend set lectures and examinations,
but rather, that student teachers must become involved
initially in the process of research. First they should become
associated with professors or teachers who are conducting their
own research, "so that they learn how to record facts and how to
question the children, and above all so that they can make
periodic reports. . . ."[2] Piaget continues:

This is the kind of collaboration to which the future
teachers are increasingly being invited to contribute,
and it is this kind of contact with the process of
gradually isolating and then collating facts that
constitutes their essential training: an intellectual
training, since it forces them to understand the com-
plexity of the questions involved . . . , and a moral
or social training, since it gives the educator a con-
viction that his subject embraces indefinite oppor-
tunities for theoretical exploration and technical
improvements.[3]

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[1]Ibid., p. 124.   [2]Ibid., p. 130.

[3]Ibid.

Next Piaget explains what he thinks education should be.

> If we desire, in answer to what is becoming an increas-
> ingly widely felt need, to form individuals capable of
> inventive thought and of helping the society of tomorrow
> to achieve progress, then it is clear that an education
> which is an active discovery of reality is superior to
> one that consists merely in providing the young with
> ready-made wills to will with and ready-made truths to
> know with.[1]

In case this may sound as though Piaget is totally opposed to the

passing on of accepted facts or ideas, e.g., correct spelling or

historical ideas, he points out that

> . . . the question remains one of determining whether
> the transmission of established truths is more
> efficiently carried out by using the process of simple
> repetition or by a more active form of assimilation.[2]

He sheds light upon this problem of the choice of teaching methods

by discussing his concept of the formation of intelligence and of

the active nature of knowledge.

Concerning intelligence Piaget agrees with R. M. Hutchin's

principle aim of education as it is found in the Encyclopaedia

Britannica, i.e., "to develop the intelligence itself, and above

all to teach how to develop it 'for as long as it is capable of

further progress'."[3] One must know what is meant by intelligence

because this determines contemporary pedagogy. Piaget contends

that psychological experiment has aided us in this respect "by

characterizing intelligence according to its modes of formation

and development."[4] Child psychology, he relates, "has provided

us with new results in this field since 1935."[5] Piaget explains:

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[1]Ibid., p. 26. [2]Ibid., pp. 26-27. [3]Ibid., p. 27.

[4]Ibid. [5]Ibid.

The essential functions of intelligence consist in understanding and in inventing, in other words, in building up structures by structuring reality. It increasingly appears, in fact, that these two functions are inseparable, since, in order to understand a phenomenon or an event, we must reconstitute the transformations of which they are the resultant, and since, also, in order to reconstitute them, we must have worked out a structure of transformations, which presupposes an element of invention or of re-invention. Whereas the older theories of intelligence emphasized understanding and looked upon invention as the mere discovery of already existing realities, more recent theories, on the other hand, increasingly verified by facts, subordinate understanding to invention, looking upon the latter as the expression of a continual construction process building up structured wholes.[1]

One may not consider the problem of intelligence, Piaget maintains, without considering the problem of the nature of knowledge; thus, he asks, "Does the latter constitute a copy of reality or, on the contrary, an assimilation of reality into a structure of transformation?"[2] Although Piaget recognizes the validity of the idea behind the knowledge-copy concept and also the simple associative responses, he claims that the essential fact that contradicts these ideas, and which has revolutionized our concept of intelligence, is the following:

> . . . knowledge is derived from action not, in the sense of simple associative responses, but in a much deeper sense of the assimilation of reality into the necessary and general coordination of action. To know an object is to act upon it and to transform it, in order to grasp the mechanisms of that transformation as they function in connection with the transformative actions themselves. To know is therefore to assimilate reality into structures of transformation, and these are the structures that intelligence constructs as a direct extension of our actions. . . .

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[1]Ibid., pp. 27-28.   [2]Ibid., pp. 28-29.

. . . intelligence, at all levels, is an assim-
ilation of the datum into structures of trans-
formations, from the structures of elementary
actions to the higher operational structures,
and . . . these structurations consist in an
organization of reality, whether in act or
thought, and not in simply making a copy of it.[1]

Piaget writes that "the spontaneous development of in-

telligence"[2] is characterized by two aspects of knowledge. The

first he calls the " 'operative', the term embracing the initial

actions . . ."[3] The second he calls the " 'figurative', the tools

of knowledge that deal with states . . .: perception . . . as well

as imitation . . ."[4] These two aspects are closely related.

. . . whenever it is believed that an idea has been
derived from a perception, without any other process
intervening, in every case the activity itself has
been forgotten, and it becomes apparent later that
the sensorimotor activity constitutes the common
origin of the corresponding ideas and perceptions.
This is a general and fundamental fact that
education cannot ignore.[5]

In other words, to illistrate what Piaget is saying:

. . . by carrying out experiments in the child's
presence instead of making the child carry them
out, one loses the entire informational and
formative value offered by action proper as such.[6]

Piaget believe that the development of an experimental

attitude of mind should be the result of education. He

contends, however, that "a fundamental lacuna in our teaching

methods continue to display an almost total lack of interest in

developing the experimental attitude of mind in our students."[7]

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[1]Ibid., pp. 28-29.   [2]Ibid., p. 33.   [3]Ibid.

[4]Ibid., p. 34.   [5]Ibid., p. 35.   [6]Ibid., p. 36.

[7]Ibid., p. 37.

Articles which accompanied the Recommendation No. 43, made in 1956

by the International Conference on Public Education (Inter-

national Bureau of Education and UNESCO) about the teaching of

mathematics, are quoted by Piaget as an example of what he means

by an experimental attitude:

> 20. It is important (a) to guide the student into
> forming his own ideas and discovering mathematical
> relations and properties himself, rather than
> imposing ready-made adult thought upon him; (b) to
> make sure that he acquires operational processes and
> ideas before introducing him to formalism; (c) not
> to entrust to automatism any operations that are not
> already assimilated.
> 21. It is indispensable (a) to make sure that the
> student first acquires experience of mathematical
> entities and relations and is only then initiated
> into deductive reasoning; (b) to extend the deductive
> construction of mathematics progressively; (c) to
> teach the student to pose problems, to establish data,
> to exploit them, and to weigh the results; (d) to
> give preference to the heuristic investigation of
> questions rather than to the doctrinal exposition of
> theorems.
> 22. It is necessary (a) to study the mistakes made
> by students and to see them as a means of under-
> standing their mathematical thought; (b) to train
> students in the practice of personal checking and
> autocorrection; (c) to instill in students a sense
> of approximation; (e) to give priority to reflection
> and to reasoning, etc.[1]

Piaget is pleading for educators to become more concerned

with the process of education rather than the end product, for

educators to accept the ideas of people such as Rousseau and

Pestalozzi that a child has its own peculiar way of seeing,

thinking and of feeling, and for educators to support activity of

thought using methods which take account of children's develop-

mental psychology.

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[1]Ibid., p. 48.

We shall now consider Piaget's concept of the process
of education. Though he describes four educational methods: the
Active, the Receptive, the Intuitive and the Programmed Methods,
the Active or New Education Method is the one which Piaget says
he prefers; therefore, we shall present this method only.

The Active Method is designed to develop an experimental
attitude of mind. Piaget explains that it is not only an out-
wardly active method but includes activity being directed towards
interior and abstract reflection. The reason it is not put into
practice, he claims, is that it is far more difficult to control
than other methods such as the Receptive Method, i.e., the
traditional method of oral teaching, and it presupposes a much
more advanced training on the part of the teacher. Piaget
maintains that this method aims at the education of intelligence
and a method of acquiring knowledge in general through the medium
of action. He described the activities of Freinet, a French-
speaking teacher, as an example of one educator who "attempted
above all else to turn the school into a center for activities
that are constantly in communion with those of the surrounding
social collectivity."[1] By introducing the use of printing, the
children in Freinet's school learned to read, write and spell.
Piaget explains:

> Freinet thus achieved these constant objectives of
> the active school by directing his thought above all
> to the development of the child's interest and his
> social training. . . . he thereby attained what are
> without doubt the two most central truths of the

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[1]Ibid., p. 70.

psychology of the cognitive functions: that the
development of intellectual operations proceeds
from effective action in the fullest sense. . . ,
since logic is before all else the expression of
the general coordination of actions; and secondly,
that this general coordination of the actions
necessarily includes a social dimension. . . .[1]

Piaget continues by discussing the genesis of the new

methods of education. In his attempt to trace the beginnings of

these new methods, i.e., Dewey's experimental school in the

United States, Montessori's school in Italy, or Kerchensteiner's

"Arbeitschule" in Germany whose aim was "to develop the student's

spontaneity,"[2] he relates them to present-day psychology.

The psychology of the twentieth century . . . was
from the outset, and in all its aspects, an affirma-
tion and an analysis of activity. . . . everywhere we
find the idea that the life of the mind is a dynamic
reality; intelligence, a real and constructive activity;
will and personality, continuous and irreducible kinds
of creativity.[3]

Piaget holds that:

To educate means to adapt the individual to the
surrounding social environment. The new methods, how-
ever, seek to encourage this adaption by making use of
the impulses inherent in childhood itself, allied with
the spontaneous activity that is inseparable from
mental development. And they do so, moreover, with the
idea that society itself will also thereby be enriched.[4]

Next Piaget contrasts the traditional school with the new

or active school. The traditional school, he maintains, "imposes

his [sic] work on the student; it 'makes him work',"[5] whereas

the new school "appeals to real activity, to spontaneous work

based on personal need and interest."[6] Interest is the operative

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[1]Ibid., p. 71. [2]Ibid., p. 145. [3]Ibid., p. 146.

[4]Ibid. [5]Ibid., p. 151. [6]Ibid., p. 152.

word. Piaget is not content to rely upon the fact that "great

classical educators" such as Dewey have affirmed that "all fruit-

ful activity presupposes an interest."[1] Thus, Piaget poses what

he calls the "central problem of the new education", i.e., "Is

childhood capable of . . . diligent and continuous research

springing from spontaneous need?"[2]

Piaget's answer to this question is in the affirmative.

He claims that whereas we used to attribute to the child the

intellectual and moral structure of the adult, we know today that

these structures of the child are not the same as those of the

adult.

> What is childhood then? And how are we to adjust
> out educational techniques to beings at once so like
> and yet so unlike us? Childhood, for the theorists
> of the new school, is not a necessary evil: it is a
> biologically useful phase whose significance is that
> of a progressive adaptation to a physical and social
> environment.[3]

In the context of discussing adaptation, Piaget next

introduces two terms, assimilation and accommodation. He

advances the ideas that:

> Intellectual adaptation is . . . a process of achieving
> a state of balance between the assimilation of experience
> into the deductive structures and the accommodation of
> those structures to the data of experience.[4]

To explain more fully, Piaget writes:

> The characteristic of childhood is precisely that
> it has to find this state of balance by means of a
> series of exercises or behavior patterns that are *sui
> generis*, by means of a continuous structuring activity
> beginning from a state of chaotic nondifferentiation

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[1]Ibid.   [2]Ibid.   [3]Ibid., p. 153.

[4]Ibid., p. 154.

between subject and object. This means, in effect, that at the very beginning of its mental development the child is pulled in opposite directions by two tendencies that have still not been brought into harmony with one another and are still relatively undifferentiated, insofar as they have not yet found their equilibrium with regard to one another. Firstly, it is perpetually obliged to accommodate its sensori-motor, or intellectual, organs to external reality, to the particularities of things, about which it has every-thing to learn. And this continuous process of accom-modation . . . constitutes one primary necessity of its action. Secondly, however - and this is something that has generally been less understood, . . . in order to accommodate its activity to the properties of things, the child needs to assimilate them and, in a very real sense, to incorporate them into itself.[1]

Piaget declares that:

. . . these considerations are fundamental where school-ing is concerned. For assimilation, in its purest form - which is to say as long as it has not yet been brought into equilibrium with the process of accommodation to reality - is in effect nothing other than play; . . .[2]

Through the agency of intelligence, the child must adapt a progressive synthesis of assimilation with accommodation. Since intelligence is one of the notions upon which his active method of education is based, Piaget next examines the concept of intelligence.

He declares that experimental psychology opposes the classical concept of intelligence as being a faculty given once and for all. Various psychologists, Piaget writes, have differing concepts or emphasis with regard to intelligence, but

. . . all these psychologists agree in accepting that intelligence begins by being practical, or sensori-motor, in nature before gradually interiorizing itself to become thought in the strict sense, and in recognizing that its activity is a continuous process of construction. . . .

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[1]Ibid.   [2]Ibid., p. 155.

. . . intelligence is adaptation in its highest form, the balance between a continuous assimilation of things to activity proper and the accommodation of those assimilative schemata to things themselves.[1]

Accordingly, Piaget continues:

Then, as assimilation becomes more and more closely combined with accommodation, the first of these is reduced to deductive activity itself, the second to experimentation, and the union of these two becomes that indissociable relation between deduction and experience that is the characteristic of reason.[2]

The meaning that such concepts have for educational methods, Piaget asserts, is that:

Conceived in this way, infantile intelligence cannot be treated, any more than adult intelligence, by purely receptive educational methods. All intelligence is an adaptive process; all adaptation entails an assimilation of things into the mind, just as the complementary process of accommodation does. Thus all work on the part of the intelligence rests on an interest.[3]

Piaget points out that:

Interest is nothing other than the dynamic aspect of assimilation. . . . When the active school requires that the student's effort should come from the student himself instead of being imposed, and that his intelligence should undertake authentic work instead of accepting pre-digested knowledge from outside, it is therefore simply asking that the laws of intelligence should be respected.[4]

Another notion upon which Piaget's active method of education is based, is to "treat the child as an autonomous being both from the point of view of the functional conditions of its work and taking into account its mentality from the structural point of view."[5] Piaget reminds us that the traditional educational theory "treated the child as a small adult; as a being

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[1]Ibid., p. 158. [2]Ibid. [3]Ibid.

[4]Ibid., pp. 158-159. [5]Ibid., p. 159.

who reasons and feels as we do while lacking in our knowledge and experience."[1] As a result the task of the educator "was not so much to form its mind as simply to furnish it."[2]

Piaget hypothesises that there are structural variations between the thought life of a child and that of an adult. One of the structural differences between adults and children is the reversal of the relationship between the practical and the reflexive intelligence. This is why adults arrive at solutions to problems of practical intelligence either from theoretical representations or from a process of empirical grouping.

> . . . practical adaptation in infants, far from being an application of conceptual knowledge, constitutes, on the contrary, the first stage of knowledge itself and the necessary condition of all reflexive knowledge.[3]

The golden mean of education which, according to Piaget, is "allowing room both for internal structural maturation and also for the influences of experience and of the social and physical environment,"[4] constitutes the foundation of tomorrow's active schools. Piaget explains that the methods of these schools

> . . . take the stages of mental development into account; but, as opposed to those theories based on the idea of purely hereditary maturation, they also believe in the possibility of influencing that development.[5]

The value of recognizing developmental stages in educational science from the point of view of schooling, in Piaget's view, means that:

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[1]Ibid. [2]Ibid., p. 160. [3]Ibid., p. 162.
[4]Ibid., p. 169. [5]Ibid., pp. 169-170.

> . . . we must recognize the existence of a process
> of mental development; that all intellectual raw
> material is not invariably assimilable at all ages;
> that we should take into account the particular
> interests and needs of each stage.[1]

Environment plays a decisive role in the development of Piaget's mental stages, stages which are briefly described. The first two years of a child's existence Piaget speaks of as the "Sensorimotor stage", and from 2 to 7 years, the "Preoperational stage." Children's ability to think, he maintains, becomes refined during this period. First they develop what he calls preconceptual thinking, in which they deal with each thing individually but are unable to group objects. Children are able to use symbols, such as words, to deal with problems, Piaget explains, and during the latter half of this period, they develop better reasoning ability but are still bound to the here-and-now. From 7 to 11 years Piaget speaks of the "Concrete Operational stage." He claims that at this stage children develop the ability to perform intellectual operations such as reversibility and conservation, and their ability to relate time and space is also matured. From 11 to 15 Piaget speaks of the "Formal Operations stage." Now children are able to absorb hypothetical reasoning, and to function purely on a symbolic, abstract level, and their conceptualization capacities are matured.

Finally, we turn our attention to Piaget's discussion of the social environment of the school. He testifies that such an environment should be of a nature that it allows for genuine

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[1] Ibid., p. 173.

cooperation and development of children in the learning process.

Essential to this operation in the school are team work and

self-government. Discipline, Piaget writes, should not be based

upon authority and outside control, but should be encouraged by

having the children impose and act upon their own, agreed upon,

views and by allowing them time to reflect upon actions.

Compare this idea with the more traditional educational

idea of offering only one type of relationship - that of the

teacher acting upon the pupil.

> . . . Since the teacher is endowed with both intellec-
> tual and moral authority, and since the pupil owes
> him or her obedience, this social relationship con-
> stitutes an absolutely typical case of what sociologists
> term constraint."[1]

Piaget explains that we must understand that:

> . . . the social development of the child proceeds
> from ego-centrism toward reciprocity, from assimila-
> tion into a self still not conscious of itself to
> mutual comprehension leading to the constitution of
> personality, from chaotic nondifferentiation within
> the group to a differentiation based upon disciplined
> organization.[2]

He maintains that children remain egocentric in every sphere

until the process of intellectual adaptation is achieved, i.e.,

a state of balance between the assimilation of experience into

the deductive structures and the accommodation of these structures

to the data of experience, and until they adapt to external social

realities. Having already discussed the matter of balance or

adaptation, Piaget now poses a question concerning social real-

ities, "How does the child succeed in adapting itself to social

life?"[3] To this he replies:

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[1]Ibid., p. 173. [2]Ibid., pp. 175-176. [3]Ibid., p. 178.

Here the originality of the new methods of educa-
tion becomes very apparent. The traditional school
reduced all socialization, whether intellectual or
moral, to a mechanism of constraint. The active school,
on the contrary, makes a careful distinction in almost
all its achievements between two processes that have
very different results and become complementary only
with much care and tact: the constraint exercised by
the adult and the cooperation of the children with
each other.[1]

To understand more fully what is being said, he goes on

to explain that the child generally respects the adult; in other

words the adult is the source of all morality and truth. Piaget

hastily points out:

. . . this situation, however, is not without its
concomitant dangers. From the intellectual point
of view, for example, the prestige the adult possesses
in the child's eyes means that the latter accepts all
affirmations issuing from the teacher as unquestionable,
that authority, in other words, dispenses with the need
for reflection. And since its egocentric attitude is
already impelling the child's mind toward precisely such
uncontrolled affirmation, respect for the adult often
succeeds in consolidating the child's egocentrism
instead of correcting it, by simply replacing a belief
in self with a belief based on authority, instead of
leading the way toward the reflection and the critical
discussion that help to constitute reason and that can
only be developed by cooperation and genuine intellectual
exchange.[2]

Other dangers occur from the moral point of view, according to

Piaget.

. . . there is a sort of moral realism: good and bad
are simply conceived of as being that which is or is
not in conformity with adult rules. This essentially
heteronomous morality of obedience leads to all sorts
of distortions. Since it is incapable of leading the
child toward that autonomy of the personal conscience
that constitutes the morality of the good as opposed
to that of pure duty, it thus fails to prepare the child
for an acceptance of the essential values of contemporary

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[1]Ibid.   [2]Ibid., p. 179.

society. This explains the efforts of the new
educational theory to supplement the deficiencies
of externally imposed discipline with an internal
discipline based upon the social life of the
children themselves.[1]

Piaget, like Dewey, believes that a democracy of educa-

tion should exist. Having observed the characteristics of

children's mentality which endow them with their own genuine

form of activity, he propounds that society may expect more of

individuals who arrive at the right way of doing things through

their own experience and their own efforts. This he expounds

more fully upon in his book, To Understand is to Invent - The

Future of Education.

Thus having explored and presented Piaget's ideas con-

cerning education with reference to creativity, we shall now

show, in a summary manner, how his ideas lend support to the five

aspects of creativity which were enumerated in the introduction

to this chapter. By so doing, we shall see that Piaget's ideas

have a definite bearing on the importance of creativity in

education.

With respect to *Aspect no. 1: the fact that creative*

behaviour is thought by some eminent psychiatrists and psycholo-

gists to be innate in each individual, Piaget has this to say:

The psychology of the twentieth century . . . was
from the outset, and in all its aspects, an affirma-
tion and an analysis of activity. . . . everywhere we
find the idea that the life of the mind is a dynamic
reality; intelligence, a real and constructive activity;
will and personality, continuous and irreducible kinds of
creativity.[2]

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[1]Ibid.   [2]Ibid., p. 146.

With respect to *Aspect no. 2: some traits of the creative person: curiosity, initiative, critical faculties, aesthetic judgment and intuitive ideas*, Piaget declares that the aim of education is to "form individuals capable of inventive thought. . ."[1] He considers the "essential and inseparable" functions of intelligence to be understanding and inventing, and he subordinates the former to the latter. As the word invent means "to contrive or discover by thought or imagination,"[2] and would most likely involve curiosity, initiative, critical faculties, intuitive ideas and even aesthetic judgment, it is likely that the use and development of these traits in education are of fundamental importance to Piaget's concept of education. Furthermore, these traits are also important in developing an "experimental attitude of mind"[3] which, Piaget asserts, should be the result of education.

With respect to *Aspect no. 3: the creative process: those aspects of the creative process that concern problem-solving, including stages such as fact-finding, problem-finding, idea-finding and solution-finding*, Piaget writes that if we are desirous of producing individuals capable of inventive thought, then we need an education which involves "an active discovery of reality"[4] or an active form of assimilation. He explains that "to know an object is to act upon it and to transform it in order to grasp the mechanisms of that transformation

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[1]Ibid., p. 26.

[2]The Universal Dictionary of the English Language, 1936 ed.

[3]Jean Piaget, op.cit., p. 37.   [4]Ibid., p. 26.

as they function in connection with the transformative actions themselves."[1] Piaget's claim that education must seek to develop an experimental attitude necessitates that children become involved in the creative process. Articles which accompany the Recommendation No. 43 made by the International Conference on Public Education about the teaching of mathematics, which Piaget quotes, is a good example of one interpretation of the creative process as it includes fact-finding, problem-finding, idea-finding and solution-finding. The reader will recall that one part of the recommendation reads: "It is indispensable . . . to teach the student to pose problems, to establish data, to exploit them and to weigh the results."[2]

With respect to *Aspect no. 4: the nurture of creative behaviour: showing confidence in children by valuing their ideas, granting them some freedom to explore their ideas and their environment, granting them some periods of non-evaluative practice, and encouraging them to learn from their own mistakes and to share and work together on ideas,* we refer again to Piaget's aim of education, "the development of an experimental attitude of mind", and suggest that the nurture of the behaviours which we have listed is essential to the achievement of this aim. More specifically, he presents and supports the following idea about the teaching of mathematics and declares, furthermore, that the "laws of intelligence" demands that this

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[1]Ibid., p. 28.   [2]Ibid., p. 48.

happens: "It is important to guide the students into forming their own ideas . . . rather than imposing ready-made adult behaviour upon children."[1]

Piaget also holds that cooperation or sharing and working together on ideas is essential if the development of the child in the learning process is to take place. Such cooperation would enable children also to learn from their own mistakes.

With respect to *Aspect no. 5: some detrimental effects of a conforming environment upon creativity*, Piaget attributes what he terms the lowly status of the teaching profession, in part, to two factors that relate to conformity. Firstly, he writes that teachers are made to conform by educative administrators who are themselves too busy for research, and who dictate programmes and apply methods that constrain the teacher. Secondly, he writes that teachers do not think of themselves as specialists "from the double point of view of techniques and scientific creativeness";[2] rather, he asserts that teachers still adhere to the old educational concepts. To illustrate, Piaget's words bear repetition:

> Our school system . . . has been constructed by
> conservatives . . . who were thinking much more in
> terms of fitting our rising generation into molds
> of traditional learning than in terms of training
> inventive and critical minds.[3]

Finally, a conforming environment, in Piaget's view, violates what he speaks of as "the law of intelligence", which, he declares, should be respected.

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[1]Ibid., p. 48.　[2]Ibid., p. 11.　[3]Ibid., p. 124.

When the active school requires that the student's
effort should come from the student himself instead
of being imposed, and that his intelligence should
undertake authentic work instead of accepting pre-
digested knowledge from outside, it is therefore
simply asking that the laws of intelligence should
be respected.[1]

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[1]Ibid., p. 159.

Conclusion

Having discovered how the educational ideas of each writer support the five aspects of creativity which were enumerated at the beginning of this chapter, it now remains for us to draw the ideas together , and thereby show that the importance of creativity in education can be supported by well-known and widely respected philosophers and psychologists of education of the twentieth century.

Concerning *Aspect no. 1: the fact that creative behaviour is thought by some eminent psychiatrists and psychologists to be innate in each individual*, Whitehead holds that the creative impulse is innate in all and that growth towards self-development stems from this impulse. Dewey claims that, given the right conditions, all children are capable of discovering ideas which are new to them: moreover, such discoveries lead to growth and prepare children to live in a democratic society. Bruner's prescriptive work does not deal directly with the subject of innate creative behaviour. Piaget writes:

> . . . everywhere we find the idea that the life of the mind is a dynamic reality; intelligence, a real and *constructive activity; will and personality, continuous* and irreducible kinds of creativity.[1]

Concerning *Aspect no. 2: some traits of creative people: curiosity, initiative, critical faculties, aesthetic judgment and intuitive ideas*, Whitehead and Dewey both emphasise the

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[1]Jean Piaget, op.cit., p. 146.

importance of evoking curiosity and initiative in education. Bruner sees both of these traits as part of what he calls the "four intrinsic motives of learning" and strongly maintains that education must foster these motives. Whitehead holds that education must develop aesthetic emotions, as he places aesthetic education at the core of the educational process. Dewey specifically asserts that children must carry out their own intuitive ideas and must make use of their critical faculties in problem-solving. Bruner and Whitehead suggest conditions in education which would allow for and encourage the use of intuitive ideas and critical faculties, although they do not specifically mention these traits in their discussion. Piaget claims that the aim of education is to "form individuals capable of inventive thought"[1] and traits such as those listed above play an important role in inventive thought.

Concerning *Aspect no. 3: the creative process: those aspects of the creative process that concern problem-solving, including stages such as fact-finding, problem-finding, idea-finding, and solution-finding,* Whitehead does not deal with this point. Dewey presents, in detail, his five stages of the creative process, i.e., the problem-solving process, which is the crux of his method of learning. Bruner claims that problem-solving is the heart of the discipline but discusses only problem-finding in detail. Piaget declares that education should involve "the active discovery of reality,"[2] and this would include stages

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[1]Ibid., p. 26.   [2]Ibid.

of the creative process. He indicates his support for the problem-solving process by including in his work articles which accompany Recommendation No. 43 concerning the teaching of mathematics. One of the points made is that "It is indispensable to teach the student to pose problems, to establish data, to exploit them, and to weigh the results."[1]

Concerning *Aspect no. 4: the nurture of creative behaviour: showing confidence in children by valuing their ideas, granting them some freedom to explore their ideas and their environment, granting them periods of non-evaluative practice, encouraging them to learn from their own mistakes and to share and work together on ideas*, Whitehead writes that, as freedom is the dominant note of education from the beginning to the end, teachers must initially encourage children to explore and discover their own ideas and their environment. It is likely that the nurture of other creative behaviours will also take place during Whitehead's first stage of education, the stage of "Romance." Dewey not only categorically supports the nurture of all of these behaviours, but he declares that the nurture of such behaviours is an essential feature in the interdependence of public education and the democratic system. Bruner explicitly mentions and supports all but one of these behaviours, that of encouraging children to learn from their own mistakes. It is reasonable to infer, however, that Bruner would support this idea as well. While Piaget strongly supports the

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[1]Ibid., p. 48.

valuing of children's ideas, which he claims the "law of intelligence" requires, and having children cooperate and work together on ideas, which he claims is essential for their development, he also lends support to the other creative behaviours when he says that education should result in "an experimental attitude of mind."

Concerning *Aspect no. 5: some detrimental effects of a conforming environment upon creativity*, Whitehead speaks out against the use of imposed external examinations because he claims that they fail to evoke the factors which keep knowledge alive, such as curiosity. Bruner and Piaget maintain that extrinsic motives imposed by teachers on children fail to enlist the natural energies of children. Dewey is in agreement on these points and declares that an education that attends primarily to conforming behaviours does so at the expense of the nurture of creative behaviours. Further, Dewey declares that such an education is the antithesis of democracy. Piaget claims that a conforming environment is one of the major causes of the "lowly status" of the teaching profession, and that such an environment violates the "law of intelligence", i.e., "students should undertake their own work instead of pre-digested knowledge from outside."[1]

Thus, on the one hand, we have shown that two of the writers do not mention two of the five aspects of creativity.

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[1]Jean Piaget, op.cit., p. 159.

Whitehead does not discuss the creative process, i.e., problem-solving, but rather discusses three stages of learning, and Bruner does not discuss innate creative behaviour as his is a prescriptive work. But, on the other hand, we have shown that Whitehead, Dewey and Piaget support the idea that creative behaviour is a human characteristic possessed by all people; that all four writers emphasise the importance of encouraging and utilizing most of the traits associated with the characteristics of creative people, especially curiosity and initiative; that Dewey explicitly and Bruner and Piaget implicitly support the inclusion of those aspects of the creative process that concern problem-solving; that all four writers agree that education must include the nurture of creative behaviours; and finally that all mention some detrimental effects of a conforming environment upon creativity. It is clear, therefore, that these very important educators of the twentieth century do strongly endorse those aspects of creativity which we have enumerated, three of which are central to most discussions of creativity: traits of creative persons, the creative process and the nurture of creative behaviour. This conclusion confirms that well-known and widely respected philosophers and psychologists of education of the twentieth century (Whitehead, Dewey, Bruner and Piaget) do give decisive support to a philosophy and process of music education which aims to give credence to the important of creativity in elementary music education. They consider creativity to be an essential aspect of education. This conclusion points the way towards what John Paynter states is

still needed in elementary music education: a fundamental and universally agreed line of thought "which is understood by everyone and which will be capable of re-interpretation and re-development as the years go by."[1]

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[1] John Paynter, op.cit., p. 14.

CHAPTER V

THOUGHTS ON POSSIBLE UNDERLYING CAUSES OF THE

ABSENCE OF CREATIVITY IN MUSIC EDUCATION

On the basis of the criteria which evolved from the study

of creativity, two points with regard to creativity in education

have become evident. Chapter IV revealed that four of the most

prominent educators of the twentieth century present prodigious

support for the importance of creativity in general education.

These educators contend that the development of creative potential

should be an essential part of the education of children. In

Chapter III, however, we observed that the majority of the works

evaluated, which represent the wide spectrum of approach to contem-

porary elementary music education in England and the United States,

do not include creativity as an essential part of either their

philosophy or their process of contemporary elementary music educa-

tion. Looking at the weighty evidence in support of the develop-

ment of creative potential in education, we are led finally to

probe what is perhaps the most fundamental question of all – a

question which relates to comments that appeared in Chapter II

about creativity and education. The reader will recall that

Lawrence Kubie, speaking of "our 'primitive' educational prac-

tices," wrote in 1967:

> . . . the free creative velocity of our thinking
> apparatus is continually being braked and driven
> off course by . . . conventional educational
> practices;[1]

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[1]L. Kubie, "Blocks in Creativity" in Explorations in Creativity,
ed., R. Mooney and T. Razck, pp. 40-41.

It will also be recalled that Donald W. MacKinnon declared in 1978:

> Almost without exception, the conclusions seemed
> to be that those with creative potential are
> neglected, if not discriminated against, at all
> levels in American education;[1]

that Morris I. Stein, concerning his research into education,

wrote in 1975:

> Unfortunately encouragement for development in the
> creative direction is lacking. It would be a very
> important step forward if ways could be found wherein
> classmates and teachers would value, encourage, and
> reward the creativity of the students with whom they
> come into contact;[2]

and that Victor Lowenfeld and W. L. Brittain pointed out in 1975:

> The abilities to question, to seek answers, to find
> form and order, to rethink and restructure and
> find new relationships are qualities that are not
> generally taught; in fact, they seem to be frowned
> upon in our present educational system.[3]

It appears that the importance of creativity in education not only

receives little or no support, but is actively discouraged.

Thus, the question now raised is: Why is it that the importance of

creativity is not supported to any great extent by educational insti-

tutions in general and by the majority of works on elementary music

education in particular? To respond to this vexing and complex

question will require research and debate far beyond the scope of

this thesis. But the need to make a start is compelling; thus,

in the pages which follow, a few factors will be pinpointed that

will perhaps suggest some of the answers.

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[1]Donald W. MacKinnon, op. cit., p. 169.

[2]Morris I. Stein, Stimulating Creativity, vol. 2, p. 259.

[3]V. Lowenfeld and W. L Brittain, op. cit., p. 4.

To begin with, concerning elementary music education, a
factor emerges from the historical background of school
music education in England and the United States. Initially,
two primary aims of elementary music education were: the teaching
of singing and of music literacy. Add to these, the teaching of
so-called "music appreciation", and we have the three aspects of
elementary music education that have been supported to a great
extent by most elementary music educators in England and the
United States. As we are powerfully constrained by historical
factors, this may be one reason why these aims have been, and
still are, of central importance to the teaching of music in the
elementary school, and why prior to the 1960's creativity in
music education was emphasised by only a few music educators:
e.g., Yorke Trotter in England and Satis Coleman in the United
States.

The problem of instituting new aims or underlying ideas
in elementary music education, which differ from those set out in
the 1800's, is difficult, the more so because those original
aims have been ingrained, not only in the minds of music
educators, but also in the minds of people who have come through
the elementary music education system, and this includes school
administrators. Consider one of the "Typical goals of School
Administrators"[1] in the United States concerning elementary music:
"On the elementary level, all children should have exposure to
music; and music skills should be taught in an ordered and

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[1]Thomas Quinn and Cheryl Hanks, eds. American Council for the
Arts in Education: Arts, Education and American Panel, Coming to
Our Senses: The Significnace of the Arts for American Education.
(New York: McGraw-Hill Co., 1977), p. 72

sequential manner."[1] Another of their goals states that "music lessons can help transmit the culture and heritage of the nation and should be correlated with American history."[2]

This importance attached to preserving the musical heritage of the past was confirmed by the "senior institute of higher learning"[3] in the United States, Harvard University. In 1976 Henry Rosovsky, who was then dean of Harvard's Faculty of Arts and Science, when summing up the new proposal for the first major overhaul of its liberal arts programme since 1945, had only this to say about music: "An educated person should have an informed acquaintance with . . . some of the important scholarly, literary, and artistic achievements of the past. . . ."[4].

References such as these, which evince particular concern amongst educators for the transmission of musical culture or the acquaintance of "artistic achievements of the past", pertain almost exclusively to one kind of music, to what music educators often speak of as "masterpieces" of music literature. Such exclusivism in this regard is propounded not only by American education, but also by the American government. The research of Alan Lomax into federal and local support for music in the United States, in financial terms, is an indication of how important the maintenance of one aspect of the American musical heritage is, "the symphonic, fine-art tradition."[5] Lomax writes:

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[1]Ibid.   [2]Ibid.

[3]Ibid., p. 123, quoting Henry Rosovsky, New York Times, 10, 1976, p. B4.

[4]Ibid.

[5]Alan Lomax, "Appeal for Cultural Equity," African Music, Journal of the African Music Society 6, 1 (1980), p. 24.

> The administration of music in America is a prime
> example of how one cultural heritage maintains a
> monopoly. Ninety percent of the federal and local
> money spent on music goes to support one musical
> tradition - the symphonic, fine art tradition.
> Public music education is still largely devoted to
> increasing skill in appreciation of this one music.[1]

Lomax goes further to declare that:

> The standard Western European system of music
> education, taken to other cultural settings, is
> a form of aesthetic imperialism that is as destruct-
> ive of native musical autonomy as the takeover of
> political and economic power is destructive of
> native initiative.[2]

Such an imposition is clearly evident in South Africa where

mainly western music is being taught in both Indian and African

schools.

Other possible reasons why creativity does not play a

prominent role in western music education are given in David

Swanger's[3] discussion of "Ideology and Aesthetic Education." He

begins: "Aesthetic education occupies a hinterland between the

pervasive Western ideology of education and the essential idea of

Art."[4]

> He continues by clarifying his use of the term "ideology":

> By "ideology" I mean an integrated and inter-
> dependent set of beliefs, a belief system. I also
> intend the term to describe the public, prescriptive,
> and moral functions of such a belief system. That
> is, "Ideology" is a generic term I shall apply to
> belief systems held in conjunction with directions
> for the management of practical concerns---and because
> ideology involves both belief and action, I understand
> it to make explicit the moral basis of action. Thus
> ideology offers moral prescriptions to social institu-
> tions and justifies certain practices over others.[5]

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[1]Ibid. [2]Ibid.

[3]David Swanger is an associate professor of education at
The University of California at Santa Cruz.

[4]David Swanger, "Ideology and Aesthetic Education", Journal
of Aesthetic Education, 15, 2 (April 1982): 33.

[5]Ibid.

To explain what he means by "the essential idea of art",
he writes that "while ideology systematizes and prescribes, art
individualizes and invents."[1] In other words, Swanger maintains
that:

> . . . all art has this in common: that, in effect, the
> idea of art is the combination of individuality and
> invention, the result of which — the art work — is a
> unique vision, a presentational reality.[2]

An art work, he contends, embraces "elements of our common shared
reality, and yet it creates the clearly identifiable vision which
characterizes the work of art."[3] But, he says:

> . . . in all cases, the vision presented by art cannot
> be identified with the reality of the ideology, since
> the ideology comprises a reality based on a system of
> belief, while art presents the individualization and
> invention of reality.[4]

Swanger argues, therefore, that:

> . . . ideologies are conservative (to a lesser or
> greater degree by definition), while the idea of art
> is always radical. Ideology depends on the continuing
> support and implementation of its beliefs, while art
> is sustained by continuous innovation.[5]

He continues his argument by saying:

> Nowhere has the conflict between the idea of art
> and ideology been so clearly articulated as in educa-
> tion, for nowhere else have both the ideology and the
> idea sprung virtually full-blown from the mind of one
> creator.[6]

Swanger is referring here to Plato, and he explains:

> . . . Whitehead once wrote that all of Western philosophy
> is but a footnote to Plato, and this is especially true
> of educational philosophy. The Republic is as much a
> work of educational as of political theory, and its

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[1]Ibid., p. 34. [2]Ibid. [3]Ibid.

[4]Ibid. [5]Ibid. [6]Ibid., p. 34.

ideology permeates our educational system. Speci-
fically, the conflict between the idea of art and
the ideology of education, which is established in
The Republic, continues to this day.[1]

Further, Swanger writes:

Given the Premise of The Republic that a utopia is
desirable, the matter of education, and the role of
aesthetic education within it, becomes readily systema-
tized. The goal of society is the perfect state,
because only in such a state will perfect justice be
realized. Education, as a social institution, must
support the state unequivocally so that the state may
realize perfection. Educational and political theory
thus become inseparable - or, when a difference exists
between them, educational theory must accommodate it-
self to political theory. Plato thus creates an ideo-
logy which bonds political and educational theory but
necessitates the reactive and subordinate role of
educational theory.[2]

Swanger then specifically refers to education and music.

He propounds that the following passage from Book 6 of The

Republic epitomizes "the conflict between ideology and art, the

function of education within ideology, and the dilemma of

aesthetic education."[3] It reads:

Also, I said, the State, if once started well, moves
with accumulating force like a wheel. For good nurture
and education implant good constitutions, and these
good constitutions taking root in a good education
improve more and more, and this improvement affects the
breed in man as in other animals.

Very possibly, he said.

Then to sum up: This is the point to which, above all,
the attention of our rulers should be directed - that
music and gymnastic be preserved in their original form,
and no innovation made. They must do their utmost to
maintain them intact. And when anyone says that man-
kind most regard the newest song which the singers have,

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[1]Ibid. [2]Ibid., pp. 34-35. [3]Ibid., p. 37.

they will be afraid that he may be praising, not new
songs, but a new kind of song; and this ought not to
be praised, or conceived to be the meaning of the poet;
for any musical innovation is full of danger to the
whole State, and ought to be prohibited. So Damon tells
me, and I can quite believe him - he says that when
modes of music change, the fundamental laws of the State
always change with them.[1]

About this, Swanger comments:

In brief, education has not succumbed to "new
music" or its equivalent in the other arts. No one
could argue that "a kind of song" has been created
with the support of the educational establishment; on
the contrary, students must flee schools and colleges
to form rock groups, to write experimental poetry, to
devote themselves to contemporary visual art. This is
self-evident; however, it is not the symptoms but the
cause which must be attended to here.[2]

One of the causes which he names is that "art must be

'safe' before it is allowed into the educational system." This,

he says, "is embodied in Plato's warning that 'when modes of music

change, the fundamental laws of the State always change with

them'."[3] Thus, Swanger concludes:

While it cannot be proven that art makes anything
happen, it is part of our ideology to believe that it
might. And because the ideology is conservative, the
belief is manifest as fear. . . . Art must be deemed
"safe" by guardians of the ideology before it will be
allowed in the schools; yet art is never safe---i.e.
conservative . . .[4]

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[1]Ibid., quoting The Republic of Plato, trans, B. Jowett
(Oxford: Clarendon, 1888), pp. 112-113.

[2]Ibid.

[3]Ibid., p. 38.   [4]Ibid.

The injunction that we should attend to the causes
for students having to "flee schools and colleges to form
rock groups, to write experimental poetry, to devote themselves
to contemporary visual art,"[1] raises the question: Why does
education, in this case American education, discriminate against
such individuals?, or, to go further: Why does American society
discriminate against the most creative aspects of a person's
nature, and how is such discrimination reflected in education?
Realizing that answers to questions like these are extremely
complex because they relate to social, economic and political
factors in society, the dilemma in the mind of this writer
is whether, in this age of specialization, one trained as
a musician and an educator, but not as a sociologist, an econo-
mist, or a political scientist, dares to touch on these issues.
Upon reflection, the realization comes to mind that different
disciplines need not be blinkered by artificial boundaries.
Moreover, unless musicians and educators do venture outside
the narrow confines of their special fields, it will never
be possible to attain a breadth of vision.

For assistance, therefore, in finding answers to these
questions, it is necessary to turn to the work of two specialists:
Samuel Bowles, who is Professor of Economics at the University of
Massachusetts and was previously Associate Professor of Economics
at Harvard University, and Herbert Gintis, who is Associate

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[1] Ibid., p. 37.

Professor of Economics at the University of Massachusetts and
was previously Assistant Professor of Economics at Harvard Uni-
versity. Their extensive and well-documented study, Schooling
in Capitalistic America, will give the reader material from which
to draw his or her own conclusions to the question: Why does
American society discriminate against the more creative aspects
of a person's nature, and how is such discrimination reflected
in education?

Conservatives, Piaget wrote, think more of fitting youth
into moulds of traditional learning than of training inventive
and creative minds. Educational reformers in the sixties and
seventies in the United States came out strongly against tradi-
tional conservative ideas of education, but Bowles and Gintis
think that these reformers have all stopped short of the more
basic problems within the school system itself. They see the
basis of the problems that the United States is facing in educa-
tion as being rooted in the economic system. They see a clash in
the capitalistic economy between the aims of the workers as human
beings, i.e., to "satisfy their personal and social needs",
and the aims of the employers, i.e., to "channel the worker
into the production and expropriation of surplus values."[1] The
educational system, according to Bowles and Gintis, is part of
the socio-economic system, and thus perpetuates the flow of young
people into the labour force in the following ways: by reinforcing

[1] Samuel Bowles and Herbert Gintis, Schooling in Capitalistic
America: Educational Reform and the Contradictions of Economic
Life (London: Routledge & Kegan Paul, 1976), p. 10.

patterns of social class, by fostering types of personal develop-
ment compatible with dominance and subordination in the labour
force, and, by what they term, the "meritocratic"[1] manner in
which it rewards and supports students. Their solution to the
ills of today's educational system in the United States lies
within a reorganization of the economic life, and then of the
educational life, so that "people's creative powers may be
unleashed without recreating the oppressive policies of domina-
tion and sub-ordination, self-esteem and self-hatred, affluence
and deprivation."[2] The economic life they envisage is a "more
democratic, egalitarian, and participatory one."[3]

The ills of today's education, about which Bowles and
Gintis speak, are the following. Firstly, education is not the
"great equalizer"[4] that people thought it should and would be.
Evidence is presented to the effect that:

> The well-to-do perpetuate an arrangement which con-
> sistently yields to themselves disproportional
> advantages, while thwarting the aspirations and
> needs of the working people of the United States.[5]

One piece of evidence which illustrates the "disproportional
advantages" is

> . . . the relationship between family income and
> college attendance. Even among those who had grad-
> uated from high school in the early 1960s, children
> of families earning less than $3000 per year were
> over six times as likely not to attend college as
> were the children of families earning over $15000.
> Moreover, children from less well-off families are
> both less likely to have graduated from high school

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[1]To be discussed.

[2]Ibid., p. 17. [3]Ibid., p. 282. [4]Ibid., p. 26.

[5]Ibid., p. 30.

and more likely to attend inexpensive, two-year
community colleges rather than a four-year B.A.
program if they do make it to college.[1]

Secondly, education, they say, is not the fundamental method
of social reform which Dewey testified that it should be. The authors
emphasise that so-called progressive educators of today are still
advancing the same aims and objectives which the Association for
the Advancement of Progressive Education put forward in 1918.

> . . . the aim was to sublimate natural creative
> drives in fruitful directions rather than to repress
> them. Emotional and intellectual development were
> to hold equal importance, and activity was to be
> "real life" and "student-directed."[2]

Education, however, not only continually neglects these aims,
but works against them, according to Bowles and Gintis, and data
to substantiate this statement are emerging as interest in the
study of creativity increases. One example, to which these
authors refer, is the study by Getzels and Jackson, Creativity
and Intelligence: exploration with gifted children, which was
discussed in Chapter II. About the findings of this study Bowles
and Gintis write:

> Most striking of all, however, was the finding that,
> while the high IQs' "preferred traits" correspond
> closely to their perception of the teachers' values,
> the high creatives' ranking of preferred traits was
> actually inversely related to the perceived teachers'
> ranking. The high creatives do not fail to conform;
> rather they do not wish to conform.[3]

A further study, which Bowles and Gintis claim to be the
"most extensive of our sources"[4], is that of John L. Holland,

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[1]Ibid., p. 31.   [2]Ibid., p. 43.   [3]Ibid., p. 40.

[4]Ibid., p. 41.

"Creative and Academic Performance Among Talented Adolescents."[1]

They write:

> In the early 1960s, John L. Holland undertook a study
> of the determinants of high school success among a
> group of 639 National Merit Scholarship finalists –
> males for the most part in the top 10 percent of
> students in IQ and the top 15 percent in class rank.
> Holland collected four objective measures of cognitive
> development from his subjects' College Entrance Examina-
> tion Board tests. In addition, he collected some sixty-
> five measures of personality, attitude, self-concept,
> creativity, and home life through testing the students,
> their parents, and obtaining various ratings from their
> teachers.[2]

One conclusion that Bowles and Gintis draw from this

study is that:

> . . . many of the personality variables were signifi-
> cantly and positively related to grades. Most
> important were the teachers' rating of the students'
> *Citizenship* and the students' self-evaluation of *Drive
> to Achieve*.[3]

The authors do not express surprise at these results, and they

comment that "only the most naive would expect school grades to

depend on scholastic achievement alone."[4]

Bowles and Gintis relate that the important factor is

what the terms *Citizenship* and *Drive to Achieve* really reflect.

> In a liberated educational encounter, we would
> expect these traits to embody some combination of
> diligence, social popularity, creativity, and mental
> flexibility. Yet statistical analysis of the Holland
> data reveals a strikingly different pattern. Students
> who are ranked by their teachers as high on *Citizenship*
> and *Drive to Achieve* are indeed more likely to be
> diligent (e.g., they are high in such measures as

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[1]John L. Holland, "Creative and Academic Performance Among Talented Adolescents," Journal of Educational Psychology, 52 (1961).

[2]Samuel Bowles and Herbert Gintis, op. cit., p. 41.

[3]Ibid. ("Holland's personality measures are presented in italics. Unless otherwise indicated they are statistically significant at the 1 percent level.")   [4]Ibid., p. 40.

Deferred Gratification, *Perseverance*, and *Control*) and
socially popular (e.g., they are high on *Social Leader-
ship* and *Popularity*). But they are, in fact, signifi-
cantly below average on measures of creativity and
mental flexibility (e.g., they are low on such measures
as *Cognitive Flexibility*, *Complexity of Thought*,
Originality, *Creativity*, and *Independence of Judgment*).[1]

Conclusions drawn from these studies by the authors are:

Conformity to the social order of the school involves
submission to a set of authority relationships which
are inimical to personal growth. Instead of promoting
a healthy balance among the capacity for creative
autonomy, diligence, and susceptibility to social
regulations, the reward system of the school inhibits
those manifestations of personal capacity which
threaten hierarchical authority.[2]

Thus, we ask: "Why do schools reward docility, passivity, and

obedience? Why do they penalize creativity and spontaneity?"[3]

The explanation that Bowles and Gintis offer is that:

. . . the history of twentieth-century education is
the history not of Progressivism but of the imposition
upon the schools of "business values" and social
relationships reflecting the pyramid of authority
and privilege in the burgeoning capitalist system.[4]

By "business values" the authors mean:

"Business methods" in schools meant that administrators
were to be recruited from the ranks of politicians and
especially business men rather than professional
educators, . . .
Business methods also meant that the teacher was to be
reduced to the status of a simple worker, with little
control over curriculum, activities, or discipline,
. . . Lastly, the student was reduced to an "object"
of administration, "busy-work," and standardized tests
coming to prevail over play and self-development.[5]

The remainder of the book by Bowles and Gintis is devoted

to a presentation of the reasons why progressive educational

reforms have not been accepted, and this includes a discussion of

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[1]Ibid., p. 41. [2]Ibid., p. 42. [3]Ibid.

[4]Ibid., p. 44. [5]Ibid.

why creativity is not considered to be important in our educational system. The authors hold that we may not consider educational change without considering other social forces. Education does not operate in a vacuum, they declare. Thus, along with Dewey and others, they view education as a social invention and, as such, they see social objectives and also economic objectives as having shaped United States education.

> . . . the contradictory nature of liberal educational reform objectives may be directly traced to the dual role imposed on education in the interests of profitability and stability; namely, enhancing workers' productive capacities and perpetuating the social, political, and economic conditions for the transformation of the fruits of labor into capitalist profits. It is these overriding objectives of the capitalist class - not the ideals of liberal reformers - which have shaped the actuality of United States education and left little room for the school to facilitate the pursuit of equality of full human development.[1]

Looking at the characteristics of the capitalist economy, which the authors claim are the basis of the problems in our educational process, we recall their assertion that the social relations are by no means democratic and egalitarian, as Dewey had lead us to hope they might be in Democracy and Education. Dewey wrote:

> Education can foster personal development and economic equality while, at the same time, integrating youth into adult society only under one condition; a thorough extension of democracy to all parts of the social order.[2]

According to the authors, we shall only realize Dewey's concept when "all relationships of power and authority are based on

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[1]Ibid., p. 49.

[2]John Dewey, Democracy and Education, p. 20.

[3]Samuel Bowles and Herbert Gintis, op.cit., p. 101.

participation and democratic consent."[1] They argue that what we
have instead are alienated labour and income inequality which
"are rooted in the social relations of the capitalist economy."[2]
They hold that: "These relations are embodied in the structure of
property and market relations, in the system of control within
the capitalistic enterprise and in the dynamic of uneven develop-
ment."[3]

It is the contention of Bowles and Gintis that "an
adequate execution of the educational system's goal of integrat-
ing youth into adult society will conflict with its role in
promoting equality and full human development."[4]

One major feature of the American educational process,
they claim, is the meritocratic selection and reward system.

> Every society must and will reward some individual
> excellences. But which ones they reward, in what
> manner, to what extent, and through what social
> process depend critically on how economic life is
> organized. The predatory, competitive, and per-
> sonally destructive way in which intellectual
> achievement is rewarded in U.S. schools and colleges
> is a movement not to creative rationality, but to
> the need of a privileged class to justify an
> irrational, exploitative, and undemocratic system.[5]

Another feature of the same educational process, Bowles
and Gintis claim, is that "the experience of schooling, and not
merely the content of formal learning, is central to this pro-
cess."[6] To explain, they point out that the hierarchical social

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[1]Ibid.   [2]Ibid.   [3]Ibid.

[4]Ibid.   [5]Ibid., p. 108   [6]Ibid., p. 125.

relationship between administrators, teachers, and pupils

compares with that of the hierarchical division of labour, i.e.,

they see the vertical relations of educational authority as

reflecting the hierarchical labour relations.

> Alienated labor is reflected in the student's lack
> of control over his or her education, the motiva-
> tion of school work through a system of grades and
> other external rewards rather than the student's
> integration with either the process (learning) or
> the outcome (knowledge).[1]

Furthermore, Bowles and Gintis write that:

> Different levels of education feed workers into different
> levels within the occupational structure and, corres-
> pondingly, tend toward an internal organization com-
> parable to levels in the hierarchical division of labor.[2]

They point out that:

> . . . working-class parents favor stricter educational
> methods as a result of knowing, through their own
> working experience, that submission to authority is
> an essential ingredient in one's ability to get and
> hold a well paying job. On the other hand professional
> and self-employed parents prefer a more open atmos-
> phere and a greater emphasis on motivational control
> which is a reflection of their position in the social
> division of labor. When given the opportunity, higher-
> status parents are far more likely than their lower-
> status neighbors to choose "open classrooms" for their
> children.[3]

And finally, Bowles and Gintis present two well-documented

studies which concern the relationship between personality traits

which are rewarded in the school and those approved by super-

visors in industry. The results are now presented, but for

details the reader must refer to their book.

The first study was conducted by the authors in collabora-

tion with Peter Meyer. Meyer chose a predominantly higher income

New York State High School and singled out 237 members of

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[1]Ibid., p. 131.   [2]Ibid., p. 132.   [3]Ibid., p. 133.

the senior class. He "created sixteen pairs of personality traits, and obtained individual grade-point averages, IQ scores, and college-entrance-examination SAT-verbal and SAT-mathematical scores from the official school records."[1] The conclusion of this study is:

> As we expected, the cognitive scores provided the best
> single predictor of grade-point average---indeed, that
> grading is based significantly on cognitive performance is
> perhaps the most valid element in the "meritocratic ideol-
> ogy." But the sixteen personality measures possessed
> nearly comparable predictive value, having a multiple
> correlation of 0.63 compared to 0.77 for the cognitive
> variables. More important than the overall predictive
> value of the personality traits, however, was the pattern
> of their contribution to grades. To reveal this pattern,
> we first eliminated the effects of differences in cognitive
> performance in individual grades and then calculated the
> correlation between grades and the personality traits.
> The results are presented in Figure 5-1.

FIGURE 5-1.
Personality Traits Rewarded and Penalized
(in a New York High School)

Partial Correlation with Grade = Point Average
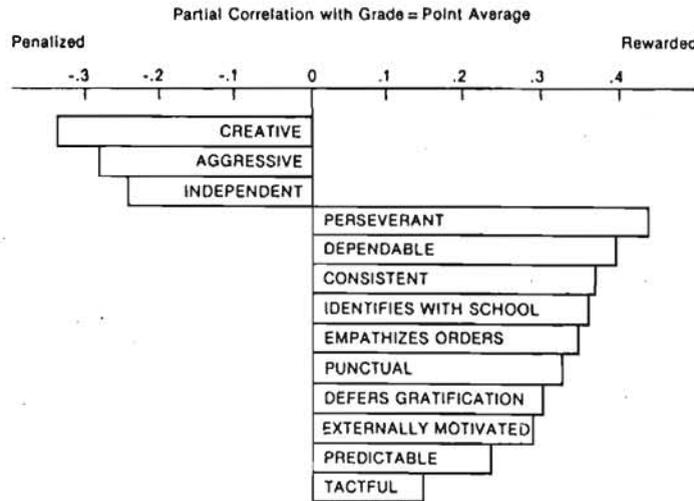
NOTES: Each bar shows the partial correlation between grade-point average and the indicated personality trait, controlling for IQ, SAT-Verbal, and SAT-Mathematical. The penalized traits (left) indicate creativity and autonomy, while the rewarded traits (right) indicate subordinacy and discipline. The data are from Samuel Bowles, Herbert Gintis, and Peter Meyer, "The Long Shadow of Work: Education, the Family, and the Reproduction of the Social Division of Labor," *The Insurgent Sociologist*, Summer 1975, and is described in Appendix B (see Bibliography Appendix B). All partial correlations are statistically significant at the 1 percent level.[2]

[1] Ibid., p. 136.   [2] Ibid., pp. 136-137.

From this chart we see that the personality trait, creativity, is penalized in this school. Bowles and Gintis maintain that "the only significant penalized traits are precisely those which are incompatible with conformity to the hierarchical division of labor - creativity, independence, and aggressivity."[1]

The second study is by Richard C. Edwards, and the results are part of his Ph.D. thesis on the nature of the hierarchical division of labour. Edwards contends "that since supervisor ratings of employees are a basic determinant of hiring, firing, and promotions, they are the best measure of job adequacy, and indeed, are the implements of the organization's motivational system."[2] The results of his inquiry appear as follows:

FIGURE 5–2.
Personality Traits Approved by Supervisors.
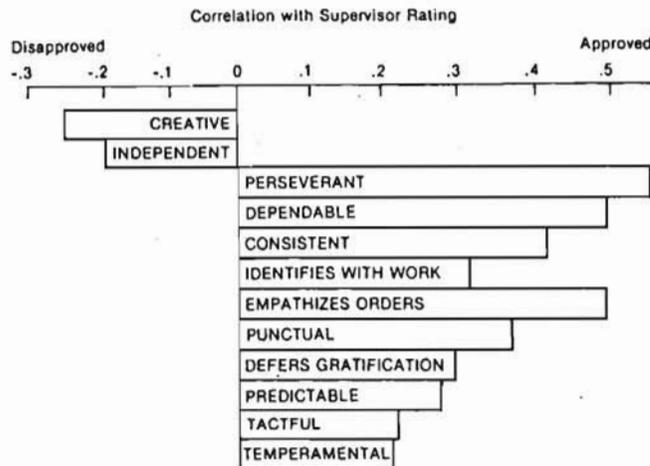
NOTES: The pattern of personality traits indicative of supervisor approval correspond to those rewarded in high school. Each bar shows the correlation between supervisor rating and the indicated personality trait. The results are similar to Figure 5–1, except that aggressive is insignificant and temperamental significant in the sample of workers. The data are from Richard C. Edwards, "Personal Traits and 'Success' in Schooling and Work," *Educational and Psychological Measurement*, in Press, 1976; "Individual Traits and Organizational Incentives: What Makes a "Good Worker?" *Journal of Human Resources*, Spring 1976, and are based on a sample of 240 workers in several government offices in the Boston area. All correlations are significant at the 1 percent level. [3]

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[1]Ibid., p. 135.   [2]Ibid.   [3]Ibid., p. 138.

Upon comparing these two charts, Bowles and Gintis point out that ". . . at least for this sample, the personality traits rewarded in schools seem to be rather similar to those indicative of good job performance in the capitalist economy."[1]

We note also that, at least in this instance, the personality trait, creativity, receives a negative rating in both studies.

These studies lend support to the theme which persists throughout this book:

> . . . the educational system's task of integrating young people into adult work roles constrains the types of personal development which it can foster in ways that are antithetical to the fulfillment of its personal developmental function.[2]

Bowles and Gintis go on to say:

> The economic system is stable only if the consciousness of the strata and classes which compose it remains compatible with the social relations which characterize it as a mode of production. The perpetuation of the class structure requires that the hierarchical division of labor be reproduced in the consciousness of its participants. The educational system is one of the several reproduction mechanisms through which dominant elites seek to achieve this objective. By providing skills, legitimating inequalities among individuals, and facilitating certain types of social intercourse among individuals, U.S. education patterns personal development around the requirements of alienated work. The educational system reproduces the capitalist social division of labor, in part, through a correspondence between its own internal social relationships and those of the workplace.[3]

Thus, in reply to the question: Why is it that the importance of creativity is not supported to any great extent in

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[1]Ibid.   [2]Ibid., p. 126.

[3]Ibid., p. 147.

education in general and elementary music education in particular?, Bowles and Gintis conclude that "the tendency of the social relationships of economic life to be replicated in the educational system . . . lies at the heart of the failure of the liberal educational creed."[1] It would be reasonable to assume that this explanation, although it refers to American society, would also relate to some reasons why creativity is not an integral part of education in capitalistic England.[2]

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[1] Ibid.

[2] The great American historian, Arnold Toynbee, writes that "an excessive anxiety to conserve vested interest in acquired wealth" is one of the "present-day adverse forces that is conspicuously deadly to creativity." "Is America Neglecting Her Creative Minority?" in Widening Horizons in Creativity, Edited by Calvin W. Taylor (New York: John Wiley and Sons, 1964), p. 4.

CONCLUSION

The case for creativity in elementary music education has been placed in a broad perspective: historical, psychological, philosophical, and to a lesser extent socio-economic views have been presented. It was, however, the brief socio-economic excursion that highlighted the extent to which the issue of creativity and music education pertains to more than just music education. This issue is actually premised upon some of the deepest views which are held by people concerned with a humane and just society.

To begin to understand why it is that education in the United States, and perhaps England, neglects to include creativity as an essential aspect, is to begin to understand why it is necessary to make a case for creativity in elementary music education. Attempting to bring about change entails examining the problems faced in the process of change and the reasons for the resistance to change. Problems such as these require the urgent attention of music educators and all whose concern is education.

It is hoped that the case put forward in this thesis will encourage more music educators to move towards the inclusion of creativity as being fundamental to their philosophy and process of elementary music education. By recognizing the essential part that creativity plays in education in general and in elementary music education in particular, we might conceivably develop individuals who are able to create a better world in which the courage to be human is the creative motivation.

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Appendix A

THE NATURE AND NURTURE OF CREATIVITY

Members of the committee on The Nature and Nurture of Creativity: Karl D. Ernst, Chairman; Frank Churchley, John Davies, Ernestine Ferrell, Charles B. Fowler, E. Thayer Gaston, O. M. Hartsell, Gerard L. Knieter, and Dorothy Maynor.

In its most fundamental sense, "to live" means that life is continually creating and re-creating itself. A hypothetical status quo world would be static and dead, a negation of creativity. "To be alive" means that man continually reconstitutes his environment into new and more satisfactory formulations. To place value on creativity is to embrace change as an inevitable and ubiquitous fact of twentieth-century American civilization.

Certain other social dimensions of life in the United States also point to a need for the development of each citizen's creative potential. The automation and over-organization of life, and the stifling and inhibiting socialization process tend to robotize and dehumanize man. In a democracy, strength lies in diversification. Each citizen must be provided the opportunity to develop his individuality, to discover his humanness, and to achieve self-confidence in his special role.

The United States is a mobile, but not completely integrated society. Acceptance of differences and respect for the dignity of others are traits related to creative behavior. Flexibility and adaptability, openness to new ideas, and freedom of artistic expression, are necessary national characteristics that, at least in part, assure that democracy will not only survive, but flourish.

Man largely makes his civilization. He creates himself. Quality in life requires imagination. Traditional forms of life demand periodic refertilization; existing institutions require constant rejuvenation, and new social problems call for continual invention of appropriate social agencies. Creative thinking is needed in every area of American life, from the making of new laws to the tasteful decoration of the home. Man's full use of his creative potential will inject vitality and meaning into every facet of American society, bringing a degree of cultural richness never before achieved. An education in music that emphasizes creative development will make a major contribution to the realization of these potentials in American society.

NATURE OF CREATIVITY

The culture of man begins when he is born. Most of his growing years are spent learning the ways and skills of his culture. He must attain a sufficient amount of conformity in order not to come into conflict with his fellow man. But, his culture in no way excludes individual creativity. Creativity is a valued ingredient of life, particularly in this present age. Hence, we will do all we can to promote the development of every child's creative activities. Creativity leads to peak experiences which highlight life. For these reasons the school and community will provide an environment which induces creative behavior.

Of all life on this earth man is the only creative animal, and superbly so. It is this creative ability that has enabled him to survive and to come to his present state and it is this creativity also that makes possible the democratic process. Because of the necessity of creativity to man's life, we will do all that is possible to encourage its expression in the home and in the school. Therefore, it is appropriate for teachers to identify and to stimulate creative musical behavior.

Creativity comes into existence in many different ways. It is a human characteristic existing in all, but varying only in degree. It may result from a unique way of looking at a problem - musical or otherwise. It may be simple or it may be complex. The same creative behavior may be observed in children as well as in composers. The difference is in degree of complexity.

The creative student is one who, at times, may not conform. It is this lack of conformity which so often distresses the teacher. The teacher has to decide whether the nonconforming student is one seeking to express himself creatively, or one who is acting out grievances. Certain personality traits of the creative student may not endear him to his peer group or his teacher. The creative child who is quite flexible in some areas may be rigid in others.

He is ordinarily not the most intelligent child in the class. Studies have shown that 70 percent of our most creative children would be excluded if they were evaluated solely on the basis of IQ tests. The creative child is divergent rather than convergent in his thinking. Such a student is independent and seeks his own style.

What should be understood is that although the individual requires a structure in which to grow, this structure must be sufficiently flexible so that it does not inhibit creative development. Since children and teachers are unique, each situation requires individual interpretation. In critical situations - where there is doubt - thorough consideration should be given to the behavior to determine its nature.

PROVIDING AN ENVIRONMENT FOR
CREATIVE EXPRESSION IN MUSIC

Living life to the fullest suggests providing an environment for acquiring the skills needed for creative living. Whether or not parents realize it, they play a significant role in establishing in the home not only an environment for creative development, but equally important, an attitude of interest in and a tolerance for creative expression. Much can be accomplished by the parents prior to the time the child enters nursery school or kindergarten. For example, parents and children can be drawn together through singing, listening, or moving to music.

The point of view that children are born with the capacity for creative response and that such response can be elicited emphasizes anew the responsibility of the school in establishing a classroom environment and planning instructional experiences which are consecutive, continuous and conducive to the many facets of creative expression. In the years ahead, as patterns of school organization become more flexible and place increasing emphasis on individualizing the instruction, music can be the subject area which adds dimension, variety and satisfaction to creative expression. The teacher holds a strategic place in this creative development.

At any level of school organization, the creative teacher possesses many desirable characteristics, some of which are:

A respect for children as individuals

The ability to relate to or establish rapport with children

A flexibility in adapting to the needs of children at all times

An enthusiasm for learning and living, which is reflected in the response of children

The acumen to lead children to experience the wonder of music through personal discovery

An interest in helping children discover the social relevance of music

The ability to recognize some of the earmarks of creativity in children

The capacity to arouse a curiosity about music that won't let go until it is satisfied

A confidence and security resulting from adequate preparation and experience

The knowledge to plan wisely for each stage of a child's creative development

A capability for making the study of music exciting and meaningful

An awareness of the importance of using community resources

The insight to appraise children's work objectively and to provide encouragement for additional experiences

A knowledge of materials and instructional pro-
cedures and the ability to use both for maximum results

An awareness of the importance of being attractive
in both personality and dress

Music is taught and experienced in a variety of
physical settings. The spatial, acoustical, and loca-
tional requirements of the classroom must be in keeping
with the type of instruction being provided. The area
used for instruction in music must be functional in
design, attractive in appearance, and meet the specific
needs for creative musical expression. Just as science
cannot be taught without appropriate equipment, likewise
music cannot be taught effectively without necessary
equipment. Creative teaching demands sufficient instruc-
tional materials and library resource materials for
reference and research. The possibilities of using new
and different technology in teaching music creativity
are limited ONLY by the teacher's imagination and willing-
ness to keep up to date.

PRE-SERVICE AND IN-SERVICE PREPARATION
FOR CREATIVE TEACHING

Creative teaching in the elementary and secondary
schools will not be realized to any great degree until
it is experienced more frequently at the tertiary level.
Teachers usually teach as they have been taught. College
and university teaching often ignores the research which
is beginning to make many elementary classrooms both
exciting and dynamic. Some of the same techniques
utilized successfully there will gradually be implemented
in the college classroom, too many of which are still
dominated by the lecture. Ole Sand, in *Schools for the
Seventies*, said that education must move "from memory,
to inquiry; and from spiritless climate, to zest for
learning." The future will witness greater use being
made of the rich resources outside the classroom. As
Maslow so aptly stated: "The classroom atmosphere must be
changed to include more time for talking about what
students do outside the classroom."

The college music teacher is immersed so completely
in his subject field that he has not taken time to con-
sider more creative ways of bringing to the experience of
his students that which has so deeply engrossed him.
College and university faculties of the future will find
ways of sharing, not only their intellectual and aesth-
etic ideas, but they will also communicate with one
another their methods for motivating learning and for
evaluating the results.

In developing the college music curriculum it is
expected that, as prophesied by Symposium speakers,
more of what is now taught during the first year of
college will be moved into the high school. This will
include music fundamentals, sightsinging, ear training,
music literature, survey, and beginning class piano.
When this is accomplished, it will be possible for

music majors to be educated as broadly in the sciences and humanities as those who major in most other subjects. Present music curricula are notoriously anemic in those general studies which are needed to enable the music teacher to relate his subject to history, literature, anthropology, sociology, and the related arts. Interdepartmental courses, based around the humanities, which will become a more important factor in the secondary school, require not only a superbly trained musician, but one who is also a generally well informed person. Even the conductor of performing groups will be expected to have the ability to include academic and intellectual content in the rehearsal.

In the total music program there will be a trend toward greater synthesis of course. Music performance, both individual and group, will become the laboratory; and its relation to theory and literature will be similar to that of the science laboratory to the lecture hall. Ensembles will plan performances which will illustrate what is studied in theory and literature. Teachers of theory and literature will cooperate with applied teachers in selecting suitable works for this purpose. All teachers will be involved in some way with performance, which is the essence of music.

Contemporary music will receive increasing attention as we move into the last third of the twentieth century. All art is a reflection of the times which produce it. Contemporary music, in all its variety, is the music of our time and will be considered within the common musical heritage. The music teacher's own musicality will emanate from a broad, comprehensive base of musical knowledge and skills so that he will have a full understanding of music of all periods and styles. All musicianship studies will relate contemporary thought and practice with those of former times. Contemporary music will be taught as a part of the same continuum that has produced all other music. The teacher has a responsibility to his students to provide a comprehensive sampling of this total musical heritage. Theory classes will no longer limit themselves exclusively to the study of harmonic practices which have their origins in the music of the eighteenth and nineteenth centuries. The changing musical concepts of the twentieth century will be given the attention which they deserve. Analytic study and performance of representative contemporary literature will be an integral part of all musicianship training. Conducting experiences which involve the metrical and notational problems of this new music will be provided.

Theory and literature will be taught more as one subject, and in a laboratory setting. Students will perform, write, analyze, and discuss music at the same time as they develop a historical perspective. Music

history will become a live and vital part of the education of the music teacher. The studio and practice room will be more than a place to develop technical skills. It will become an exciting kind of laboratory.

There will be opportunities to explore the music of other cultures, and to gain some skill in hearing and playing instruments of those cultures. There will also be provision for contact with the more simple instruments of our Western culture, which are important as recreational instruments in providing creative outlets for the greatly increased leisure time. Fretted instruments, recorders, and other instruments which were common in the period before performance was a profession will be taught.

Student teaching will bring the apprentice teacher into direct contact with young children as early as the freshman or sophomore year. Such early contacts are important and they will be more than detached observation. They will be more like the kind of clinical supervision which is a part of medical education. Early teaching efforts will utilize tape recordings and other new technological means which might make it possible for the young teacher not only to hear, but to see his strengths and weaknesses. Ways will be discovered for him to have a laboratory teaching assignment which will make possible some kind of innovative teaching without the discouraging and pessimistic attitude of a tired master teacher.

The rapid changes that are affecting our schools and society make it evident that teachers educated ten to fifteen years ago are already in need of updating their education. Those now being prepared as teachers will even more rapidly find themselves unable to meet the new challenges, which we cannot now anticipate. Schools and colleges will work together to provide creative ways for a continuous program of in-service growth. Teachers in elementary and secondary schools will be given leaves of absence at frequent intervals and be expected to obtain the added training which is necessary in order to meet the changes in the explosive years ahead. Those who teach at the tertiary level will be expected to have sufficient direct contact with both elementary and secondary schools to insure that their objectives and techniques in methods and procedures classes are fresh and timely. The constantly changing society will necessitate new approaches each year, with new and innovative materials.

From Robert Choate, ed., Documentary Report of the Tanglewood Symposium (Washington: Music Educators National Confe Conference, 1968), pp. 128-130.

Appendix B

THE TANGLEWOOD DECLARATION

The intensive evaluation of the role of music in American society and education provided by the Tanglewood Symposium of philosophers, educators, scientists, labor leaders, philanthropists, social scientists, theologians, industrialists, representatives of government and foundations, music educators and other musicians led to this declaration:

We believe that education must have as major goals the art of living, the building of personal identity, and nurturing creativity. Since the study of music can contribute much to these ends, *we now call for music to be placed in the core of the school curriculum.*

The arts afford a continuity with the aesthetic tradition in man's history. Music and other fine arts, largely nonverbal in nature, reach close to the social, psychological, and physiological roots of man in his search for identity and self-realization.

Educators must accept the responsibility for developing opportunities which meet man's individual needs and the needs of a society plagued by the consequences of changing values, alienation, hostility between generations, racial and international tensions, and the challenges of a new leisure.

Music educators at Tanglewood agreed that:

(1) Music serves best when its integrity as an art is maintained.

(2) Music of all periods, styles, forms, and cultures belongs in the curriculum. The musical repertory should be expanded to involve music of our time in its rich variety, including currently popular teenage music and avant-garde music, American folk music, and the music of other cultures.

(3) Schools and colleges should provide adequate time for music in programs ranging from preschool through adult or continuing education.

(4) Instruction in the arts should be a general and important part of education in the senior high school.

(5) Developments in educational technology, educational television, programed instruction, and computer-assisted instruction should be applied to music study and research.

(6) Greater emphasis should be placed on helping the individual student to fulfill his needs, goals, and potentials.

(7) The music education profession must contribute its skills, proficiencies, and insights toward assisting in the solution of urgent social problems as in the "inner city" or other areas with culturally deprived individuals.

    (8) Programs of teacher education must be expanded and improved to provide music teachers who are specially equipped to teach high school courses in the history and literature of music, courses in the humanities and related arts, as well as teachers equipped to work with the very young, with adults, with the disadvantaged, and with the emotionally disturbed.

Members of the Committee: Allen Britton, Arnold Broido, and Charles Gary.

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