ATTITUDES OF TEACHERS AND STUDENTS TOWARDS VOCATIONAL EDUCATION

N.S. NONCOLELA

Submitted to the Faculty of Education - University of Durban - Westville in Fulfillment of the Requirements for the Degree of Magister Educationis.

Supervisor: Prof J.Jansen

Date of Submission: 15-01-1999

University of Durban - Westville

Declaration Form

I, Nathaniel S. Noncolela, of the Faculty of Education, Department of Curriculum Studies, University of Durban-Westville, solemnly declare that the copy of the project submitted by me on the 15th day of January 1999, is original. It is in no way the work of someone else, but the result of my own efforts under the professional guidance of the supervisor whose name and signature appears below.

CANDIDATE:

Name : Nathaniel S. Noncolela

Signature :

DATE : 15-01-99

SUPERVISOR

Name : Prof. Jonathan D. Jansen

Signature :

Date : 15-01-1999

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

LIST OF MAPS

Table of Contents

ABSTRACT

The purpose of the study is to determine the attitudes of teachers and students towards vocational education in the Senior Secondary School phase.

The population for the study constituted senior secondary school teachers and standard eight (Grade ten) learners of the Kokstad region in the Eastern Cape Province.

270 teachers and 540 students in the nine districts of the Kokstad region, made up the samples for this research which was conducted in 27 schools. Three schools per district were purposively drawn. The use of questionnaires and interviews provided findings on attitudes towards vocational education.

The research was pilot tested in two schools.

The objectives of the pilot test were two fold:

- to test the appropriateness of the items in the questionnaire and clarity of the wording;

- to test the relevance of the open-ended questions, and whether their purpose in eliciting from teachers and students the reasons for their attitudes towards vocational education, was achieved.

After each pilot testing session, items in the questionnaire were discussed and rephrased to enhance clarity.

Questionnaires were dispatched timeously to both teachers and students with a fair response. Data analysis led to findings, implications and recommendations. One of the findings was that both teachers and students had positive attitudes towards vocational education in secondary schools. They recommended greater inclusion of vocational subjects in the curriculum.

Semi-structured interviews were conducted with key officials in the Department of Education in the Kokstad Region.

Findings from the interviews indicate that the educationists that were interviewed favoured more curricular inclusion of the vocational subjects. Career guidance was recommended as a necessity by the head of the Psychological Services so as to help students in the choice of subjects for their future careers.

A significant recommendation about the role of guidance teachers was noted, as a high percentage of students expressed a need for guidance teachers in each school. Subject choices, according to the findings, should further, be coupled with occupational choices. This led to a recommendation that learners should get together and form vocational subject societies. The findings of the research indicate that the attitudes of students and reachers towards vocational education were generally positive.

Acknowledgments

My sincere gratitude is hereby, expressed to all the people who contributed towards the success of this piece of work.

My special and heartful thanks goes to Professor Jonathan D. Jansen, who more than anybody else, guided this research up to completion in a most singular way. He showed great expertise, and his guidance, advice and patience, were immeasurable.

My sincere gratitude goes to a special lecturer in the Department of Curriculum Studies, Sbu Bayeni for his encouragement and help.

Many thanks are also extended to Veronica Hogg for the strenuous work of typing.

My heartfelt thanks goes to my family, my wife Mafanie and twins Sipelele and Sisonke, who all endured the absence of their dad for the duration of this project.

My gratitude is finally extended to Dr A. Chohan, who provided help with the statistical aspect of this study.

To Juliet Perumal, who despite her tight schedule, set aside time for editing this manuscript, to her I say "bravo" and keep up the good work.

CHAPTER 1
AN OVERVIEW OF THE STUDY

Purpose of the study

The purpose of this study is to determine the attitudes of teachers and students towards vocational education in the Senior Secondary School.

The study sets out to determine whether teachers and students see the need for, and importance of, technical-vocational education, and whether teachers would include technical-vocational subjects in their secondary school programmes. These vocational subjects include catering, travel, tourism, horticulture, sailing and navigation, farming for small holders.

Rationale

It is widely accepted that there should be a link between education provided to the youth and the world of work. Moreover, there should be a link between subjects taught in school and industry. Education has the purpose of improving the economy of the country.

Kluczyn'Ski (1985 : 23) argues that education must stimulate economic growth, cultural change and personal development of the individual. The formulation of educational goals must be based on the conditions that will confront the school leaver. After schooling educational planning has to keep ahead of economic planning.

However, whether education curriculum planners know the economic plans or have access to economic plans is a relevant question. Students should be trained to become active agents of production, according to **Kluczyn'ski (ibid : 19)**

A comprehensive cultural education will be increasingly important as a qualification for trained personpower. Comprehensive education would provide the right mix for both education and training for school goers. While numbers of students attending schools have increased, there is the possibility of a stream of unemployed graduates after completion of their senior secondary school level.

Schools would be more attractive to more children if their studies are more closely related to the world of work. Education should train people for work. The equation laid down by **Streonach (1991 : 162)** argues that good education and training will lead to higher worker productivity, which in turn will lead to economic success. The accomplishment of our society's social and cultural goals requires public education to develop both intellectual and manual skills of the individuals. The first set of goals is to provide specific job skills, while the second is to prepare people for participation in economic, working and community life.

As specified by **Kluczyn'Ski (1985 : 31),** the education we have just described calls for radical change for both economic and social reasons. A new student who would be a new worker, and who can bear the new challenges of technology, is needed. Schools should not be exonerated from training students in such a way as to make the process of attaining and sustaining working

life, effective. The present education system further intensifies the mismatch between the individual student and economic and social demands.

The Minister of Education, Prof. Bhengu, (Daily Dispatch, June 1997) has urged educationists to consider vocational education. Most matric students are not employed because education is weighted towards the academic rather than the vocational. It is assumed that if they had access to more vocational education, they could be absorbed more easily into the world of work.

The figure below shows the number of technical vocational schools in the Kokstad region.

Table 1

TOTAL NUMBER OF SECONDARY SCHOOLS PER DISTRICT, KOKSTAD REGION

PRIVATE DISTRICT	TOTAL NO. OF SENIOR SECONDARY SCHOOLS	TOTAL NO. OF TECHNICAL-VOCATIONAL SCHOOLS
Lusikisiki	18	1
Flagstaff	7	1
Tabankulu	9	-
Mount Frere	14	1
Mount Ayliff	6	-
Matatiele	13	-
Umzimkulu	13	1
Bizana	11	1
Kokstad	3	

"MOBILISATION FOR A LEARNING NATION" JANUARY 1998

This Table shows that in each district there are very few technical-vocational schools as compared to the number of pure academic schools. In some districts like Matatiele, there are thirteen academic schools but not a single vocational school.

The Table explicates the need for the reconstruction of education by building more technical-

vocational schools in the region. One argument which accounts for the imbalances shown in the Table, is that at grades 7 - 9, pupils not yet mature enough to make any career choices. This means that it is only in post matric level, that they start to specialise and concentrate on the fields they wish to pursue. It is desirable that specialisation should be introduced and encouraged at an earlier stage.

Carnoy and Samoff (1990) find that in Jordan and Tunisia, vocationally trained students use their specialised skills in industry and that these skills had been acquired at school. It will take time to test far and wide the best mix of work, learning, and community service to satisfy the needs of all young people. In the meantime, youth unemployment remains very high. Most readers will agree that youth unemployment is both a local and a national problem. However, the seriousness of the problem has not yet been given adequate recognition. As researcher, it is my considered opinion that the nation needs to acknowledge that academic education is not the panacea, and that other avenues need to be explored.

Students face intensive competition when trying to gain entry to teacher training colleges and universities. Many students obtain senior certificates, not matriculation exemptions, and are thus disadvantaged by being excluded from universities. They therefore, stay idle without a job.

Physical and human resources have also been significantly reduced. The explosion of youth unemployment, growing inadequacies in schools and the demands made on our youth have increased enormously. There is a dire need for the improvement of education provided to the

youth. The main aim of this study is therefore to draw attention to youth unemployment by investigating attitudes towards vocational education.

Development in youth work over the next ten years will crucially be determined by how adequately concepts can be translated into effective practice.

There is today widespread dissatisfaction with most subjects provided by our secondary schools. Political parties, educational correspondents, educational researchers, employers and a large number of parents, seem to have reached consensus that there is something amiss with the education provided to the youth, which results in unemployment. They claim that radical changes are essential, and urge schools to "do something". They demand a broader approach to the present curriculum. Some put it in blunt terms and demand "a relevant education".

This study attempts to show that "relevance" is lacking in the present educational system. Students, it is argued, study just for the sake of studying and get no explanation for why they must study those selected subjects. I assume that if technical-vocational education could be included in the curriculum, so as to clarify which fields still lack specialists, then the youth could be more orientated towards the right direction.

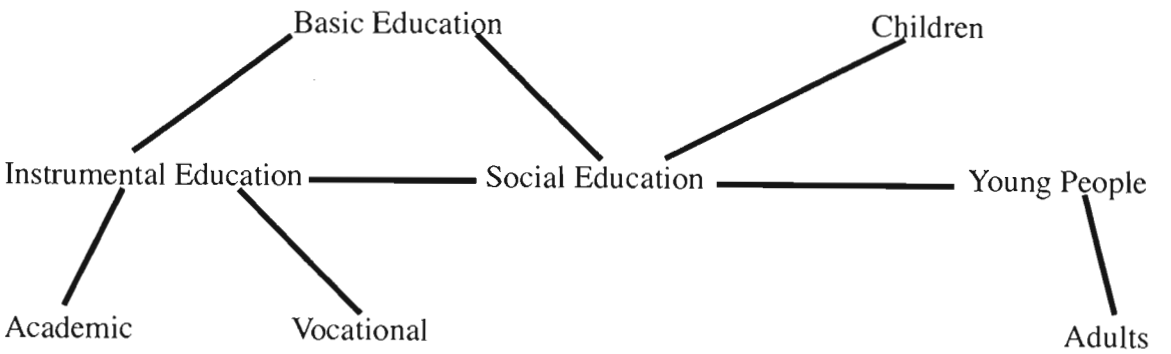
There is, moreover, a feeling that our young people are not being well prepared for life. The schools, as they are, without special assistance by counsellors, simply cannot cope with social education. At the same time, effective social education of the young is absolutely essential. If pupils are purposeless, unguided vocationally and lack confidence, they will not achieve good

results. Schools and the present curriculum cannot be exonerated for the uselessness, and irrelevance, of much of what is taught. Preparedness for work must be seen as a facet of study that is fully integrated into the present curriculum.

The balance between academic and vocational objectives in schooling is a matter which leaves much to be desired. A sketch from **Marsland (1993 : 30)** explains the educational process :-

Figure 1

SKETCH MAP OF THE EDUCATIONAL PROCESS



Our secondary schools thus far have been far more insulated from the world of work. The current trend towards improving vocational training is overdue and deserves to be supported by all those who have the real interest of young people at heart. Education should equip young people with attitudes and values which will positively assist them in the real competitive world of work.

Certain needs have to be met by young people before they reach adulthood, as **Marsland (ibid. : 29) observes :**

1. the need for new experience.
2. the need for relationship with peers.
3. the need for a coherent worldview.

The third need is considered the most significant because our students should fit in and participate in the world.

It is essential that the issues of work, unemployment amongst the youth, be examined as part of a general analysis of education, leisure and the age structure of life in the post-industrial society. Youth unemployment is likely to persist longer even if general employment is improved.

Whatever the objectives of secondary schools and colleges, the role of vocational education should be complementary and supportive. Instead of blaming schools and sabotaging them, researchers need to get teachers' and students' views. Young people need more effective preparation in the practicalities underlying new technologies and in vocationally relevant skills. As we are living in a computerised world, students need also be technologically proficient.

After five years of teaching in a senior secondary school, I observed that most of the grade 12 students who passed academic subjects remained at home for about two years before they were absorbed into colleges or got jobs. Others remained unemployed. This prompted the need to investigate the attitudes of teachers and students towards vocational subjects in school. My assumption is that students taking vocational subjects are more likely to find employment after school. It is important, therefore, to understand why such subjects are not taken at high school.

The findings from this research could be useful to the following personnel:-

1. curriculum development specialists who design curricula for senior secondary phase;
2. vocational subject advisers;
3. policy makers in educational and employment sectors;
4. learners who would start the senior secondary phase; and
5. career guidance teachers.

The statistics provided by the following Table showing the unemployment rates by age group in one of the Kokstad districts i.e. Mount Frere, reveal a mismatch between what is learnt at school and working opportunities. In 1995 out of 1500 students between ages 18-29 who passed grade 12, 57%, remained unemployed. Out of 2000 students between ages 20-24 who passed grade 12, 60,6% remained unemployed and not absorbed in tertiary institutions. Out of 2100 students between ages 25-30 who passed grade 12, 59,8% remained unemployed and not absorbed in tertiary institutions.

Table 2

Year	Age	Males Unemployed	Males Employed	Females Unemployed	Females Employed	Total Employed	Total Unemployed
1995	Under 18	-	-	-	-	-	-
	18 - 29	502	400	363	235	865	635
	20 - 24	712	480	501	307	1213	787
	25 - 30	749	500	508	343	1257	843

UNEMPLOYMENT/EMPLOYMENT RATES BY AGE GROUP IN MOUNT FRERE DISTRICT

Neubeck (1986 :157) specifies unemployment as a macro social problem in United States of America which reached a high percentage of 10,8% in 1982. The government was criticised for such a high percentage of unemployed. Neubeck attributed the two main causes of unemployment be the introduction of computers to cut down labour costs, and firms closing and moving abroad. The USA had moved from an agrarian state to a highly industrialised country after the industrial revolution.

The age group stipulated in the Table explicates that school leavers are adversely affected by unemployment. The consequences could be poverty, mental health or physical illness. It is thus imperative that educators and students take cognisance of the fact that at some stage or the other in the future, students may find themselves without a job.

According to the Department of Education Annual Report of 1992, only 75 schools out of 258 in the former Transkei were taking commercial subjects. Out of the 258 schools, only 10 were vocational schools. Many elements of the existing school programme are unacceptable, necessitating reconstruction and development in education. Research conducted by **Le Roux (1985 : 3)**

makes it obvious that South African education has primarily been geared to preparing students for study at university. The effect of the "academic" value system can be seen in the neglect of technical-vocational training. It is quite evident that not all students are capable of reaching university standards hence some will leave school as job-seekers. **Le Roux (ibid : 28)** quotes the De Villiers Commission of 1948 which emphasised the provision of technical-vocational education and training for industry, to students.

The explosion of youth unemployment, indicated by the widespread dissatisfaction of political and community leaders, could be solved by introducing a more technical-vocational curriculum. The abandonment of unemployed young people is likely to produce damaging and dangerous secondary effects. South Africa cannot rest on its laurels and say "jobs for all". Other means have to be taken. (Again a motivating factor for this study.) The answer to the problem is that individuals have to play an active role in job creation or to increase opportunities in the job market.

Ntshoe (1993 : 12) discusses that diversification and vocationalisation of the curriculum would prepare pupils for specific occupations in the labour market. This would be more effective than the current general academic programme. The dramatic rise in youth unemployment and underemployment, shortage of personnel in technical and skilled occupations and rising demands for new educational opportunities, have all focused public attention in technical-vocational education. It is hoped that occupationally-oriented education could manage or overcome previous and existing shortcomings.

Harold et al (1981 : 74) argued that there is interaction between curriculum development and societal change. Senior secondary curricula channel young learners towards college and university preparation. Educators need to study contemporary social indicators that anticipate the future in order to design learning experiences that will enable young people to live effectively in the technological, economic and social future.

Harold et al (ibid : 77) refer to increasing competition among teenagers as a social indicator which requires immediate reaction. They see the role of curriculum theorists as one which proposes alternative practices. The holistic development of the learner is recommended, and the curriculum is viewed as the sum of those skills that the individual would select and assimilate for use in subsequent experience. The content should be learner-centred in order to be relevant to learners. The question facing the researcher is how to structure a curriculum which will sustain a planned, learner-centred approach.

With reference to education, the writing on the wall is clear, but the message has to be interpreted properly. **McGregor (1992 : 360)** says in no uncertain terms that the unemployment of people who have attended school, and who have even matriculated, is rising rapidly. One does not need to be an expert in education to realise that something must be seriously wrong with an educational system where such discrepancies between the supply and demand for educated and trained people have existed for so long without being rectified. The HSRC (De Lange) Investigation of 1989 into the provision of education was a watershed on education in general and technical, and vocational education in particular. It further emphasizes that general formative education should

end at standard seven (grade 9) and that technical-vocational education should form a major stream at senior secondary level.

The reality, therefore, is that feeder institutions for technikons and universities will have to be restructured to achieve a balance between academic and technical vocational education at tertiary level. This does not mean that good programmes that have been developed in the past are discarded, but that recommendations have to be formulated for a new and better South Africa. Problems in technical-vocational training at secondary level are more distressing than those at tertiary level. Research **by McGregor (1992 : 361)** has shown that only 11% whites and 0,4% Blacks receive technical-vocational education at senior secondary level. In recent years, greater importance has been attached to education as a passport to employment, a symbol of social status, and a means to the social and economic advancement of the individual.

In the government of the new era, the financial barriers to secondary and higher education are gradually being removed because education is subsidised, though not yet free. Stationery, textbooks and study fees are free, which will raise the number of students getting into secondary level, and ultimately to the world of work. There will however, be a blockage in the work world as not all school graduates will be absorbed into the job market. If students are differentiated or streamed at secondary level, they would fit into various job categories. The ostensible aim is to encourage education in educationally backward areas, and to reduce under-employment and youth unemployment.

Rapid population growth also increases the demands for schooling. Gone are the days when

both students and teachers were the victims of rote learning, which perpetuated the vicious circle of under-development and was a direct outcome of colonialism. The technology of the indigenous people has been damaged, to the extent that colonial powers acquired colonies as captive markets for their industrial products and used other people for unskilled and semi-skilled jobs. It is not surprising now that the colonised people opted for academic education after their independence because technical-vocational education was esteemed lowly and considered fit only for the subjects, those people who would be useful for manual labour. Today, in contrast, it is quite obvious that there is a great need for technical vocational training.

1.3 Significance of the Study

Teachers need to be involved in voicing their opinions on the present, more academically inclined curriculum. An alternative technical-vocational education needs to be investigated to determine whether it cannot solve the problem of youth unemployment.

Jansen (1990 : 333) comments on the need for teachers to be included in the planning of the curriculum. He encourages the empowerment of teachers through a direct participatory role in curricular decisions, which would lead to greater instructional effectiveness of teachers in a post-apartheid system. Educational goals should be redefined, educational relationship reconstituted, African history re-interpreted and curriculum content reconstructed.
The significance of this study would be to recommend that schools include more vocationally inclined subjects. Technical-vocational education, is believed to have an important socialising

task in bringing about harmony and economic stability in the country. It could alleviate the critical shortage in person power currently experienced in the country.

The study would therefore enhance teachers' and students' involvement in curriculum design. The awareness of students about vocational subjects would be improved. The study would provide insight, and direction to curriculum designers and career guidance teachers in schools.

Pienaar (1985 : 100) in his article on the aims, nature and content of basic education, acknowedges that basic education did not meet the present and anticipated needs of the country. It stands to reason, therefore, that specialised education is essential. Education would then concentrate on meeting the diversified needs of the people and the technological and economic development of the country, while at the same time catering for overall development.

1.4 CRITICAL QUESTIONS

1. What are the current attitudes of teachers towards vocational education (ve)?
2. What are the current attitudes of students towards vocational education?
3. What are the underlying reasons for teacher and student attitudes towards vocational Education?

1.5 The Meaning of Key Terms

The following operational terms will be defined for the purposes of this study:-

education (informal, formal and non-formal)

technical (vocational education)

attitudes

training

curriculum

youth unemployment

career guidance and counselling

Informal Education

This type of education occurs within the family circle, the neighbourhood and the community. Learning takes place in the family through books, pictures, television and radio. The type of learning experience at home determines either the strong or poor usage of formal education. **HSRC (1981:92).**

Formal Education

Education as defined by **Verma (1990:1)** is the process designed to inculcate the knowledge, skills and attitudes necessary to enable individuals to cope effectively with their environment. The ultimate aim is the individual's self-realisation. Education is a primary instrument for social and economic advancement. Verma states that the aim of education is to develop capacities which will enable people to actualize themselves in the most effective manner.

Corson (1988:51) emphasises the careful selection of aims for a worthwhile form of life. He further states that any process of schooling designed by people who view education as initiation into some worthwhile form of life, will show regard for work as a component of that form of life, because work is part of the normal and necessary range of human activities.

Formal education takes place in a planned way, at recognised institutions such as schools, colleges, technikons, universities. Formal education is recognised by its structured nature according to subjects. It runs from primary to university level. It can also take place in private schools and comprehensive schools. The objective of formal education is a long-term one.

Non-formal Education

Formal education paves the way for non-formal education. Formal education is supplemented by non-formal education. The research by the **HSRC (1981 : 31)** defines it as education which proceeds from a planned, but highly adaptable approach in organisations and

situations outside the spheres of formal education. Inservice training, induction and support programmes are classified under non-formal education.

The De Lange Report (1981 : 28) clarifies that this type of education is ongoing to keep abreast with new knowledge and processes to advance people in their careers. It guides communities through cultural change, and is needed by both adults and youth out of school. The major aim of non-formal education is to eradicate illiteracy and to provide vocational education. It is an unstructured educational service which is not compulsory but which tries to reach people with a fairly prescriptive message. It entails, *inter alia,* agricultural development, consumer education and community development.

Technical Vocational Education

In the context of this study, technical education is defined as the commercial subjects present in the school curriculum. These include subjects like Business Economics, Accounting, and Typing. These subjects lead students to secretarial courses. By vocational education is meant the practical subjects included in the curriculum. These include Home Economics and Needlework, Agricultural Science, Bricklaying and Plumbing, Catering, Tourism, Horticulture and others.

Le Roux (1985:27) sees technical-vocational education as not only training of individuals for a specific job which might be obsolete tomorrow, but also as developing transferable skills

within a broad academic frame of reference for use throughout one's life. It refers to instruction and training in commerce, agriculture, housecraft, or any trade. This definition can be adopted, hence, it expands on my perspective of defining vocational education.

Marsland (1993 : 29) emphasises that education should equip young people with a whole range of general skills, attitudes and values which work and life as a whole require. **Verma (1990:2)** defines technical-vocational education as that part of one's education intended to help one choose an occupation, to prepare to enter income-generating employment, to secure promotion and to change occupations. The development of competencies needed to enter or advance in a vocation as a "call", which should have an economic aspect, is intrinsic to this definition. This definition as defined by **Verma (ibid)** is agreed upon hence he includes the intention to choose an occupation.

Slavery and serfdom in the long centuries before the Industrial Revolution placed technical-vocational education outside in the traditionally respected curriculum of the schools. It took place only through apprenticeship outside the regular school curriculum. It was after World War 2 that education was needed to train mechanics and technicians, who were useful in the war. Education as designed at the secondary level should prepare middle level personnel such as technicians, for industrial establishments.

Attitudes

In this study, attitudes are defined operationally as scores obtained in an attitude rating scale in a prepared questionnaire. A subject's response to a questionnaire statement was taken as an

opinion. These scores show the point of view the subject has on a particular matter of interest. A set of opinions held was taken to indicate an attitude held by that subject. These scores show how somebody perceives a certain topic in question. Attitudes favourable towards the object were coded "positive" and attitudes unfavourable were coded "negative".

Training

This term refers to the practical education provided to enhance practical skills to be used in the future. **Corson (1988 : 49)** clarifies training as being associated with the mastering of physical skills. No mental skills are required during training because psychological conditioning takes place.

Curriculum

In this study, the school curriculum is defined as the subjects that are prescribed by the Department of Education and Training. Conceptually, curriculum is defined as a race-course or a prescribed course to follow, and that which the student is supposed to encounter, study, practice and master. It is also defined in simple words as "what the student learns". **Beach et al (1989:97)** state that curriculum includes reconstruction of knowledge and experience, systematically developed under the auspices of educational institutions, to enable the learner to grow in gaining intelligent control over subsequent knowledge and experience.

Curriculum must be designed according to:

1) the aims and objectives of our pupils;

2) the values of our culture, and

3) the resources at our disposal.

Each country must discover its own unique system for curriculum development which suits its own particular needs and aspirations.

Youth Unemployment

The regular definition of youth unemployed refers to a post school youth who has obtained a certificate for job seeking but cannot find a job.

The modified definition of "unemployed" is being used here, which means that a person has taken steps to obtain work or has not undertaken self employment but must have had the desire to work. This study includes only persons below thirty years of age.

Career Guidance and Counselling

This term will be discussed more conceptually as it is not a variable in this study but is important nonetheless. The aim of career guidance is to enable the school leaver to find him/ herself in possession of "marketable skills". It involves the idea of guidance towards a

career which will be completely absorbing, to a life that will be fulfilled by work. Choosing a career cannot be done after schooling. Early guidance is important. Career guidance therefore, should be concerned with somebody's subject specialization at an early age, before his/her transition from school to work.

Vaughan (1970:12) observes that adolescents should be guided and encouraged to choose subjects they wish to study in accordance with their own aptitudes and interests, and not to meet the dictates of any pre-arranged curriculum. Counsellors should explain the significance of subjects with reference to future patterns of life. There should be a world-wide spread of comprehensive schools which would provide a range of subjects to pupils once they reach the stage of specialisation.

CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

This chapter explores research on the attitudes of teachers and students towards vocational education.

The development of vocational education in other countries like Britain or America will be outlined, focusing on how these models could be applied in developing countries like South Africa. Curriculum relevance, geared to help post school youth in the work place, will also be reviewed. Some mention will be made on vocational education in Africa, and its developing countries.

The significance of educating/training a child towards a career is emphasised by **Coggin (1979:41),** who notes, that one who does not teach his son a trade is in effect giving him a fish and not teaching him how to fish. Vocational education may go as far back in history as Biblical times : Jesus himself was a carpenter, and Paul was a tentmaker, suggesting that vocationalism is as old as Methuselah. The medieval grammar schools followed and provided a successful technical education to students. Coggin further argues that students, parents, educators, employers, legislators and others agree that education in general has failed to prepare students for the transition from the world of schooling to that of

work. Given the high unemployment rate, ample evidence confirms that what is done at school does not match the workworld.

Coggin (ibid : 13) stresses that schools and education are to blame : they are not delivering what society is expecting from them. Many students had received an education that was irrelevant to the life they would lead in Britain. He further states that industry and education are twins, and that the country should relate its educational activities to its economic future.

2.2 IMBALANCED EDUCATION - OVER CONCENTRATION ON ACADEMIC EDUCATION

Andre le Roux (1985:8) states unequivocally that there has been an over-concentration on academic subjects in schools, to the exclusion in some cases of vocational subjects. He clarifies that the De Lange Report contended that vocational education could be more appropriate for a greater number of pupils in South Africa. There is a possibility of the market being overflooded with academically qualified students only. Vocational education should also relate better to the personpower needs of the country. **le Roux** states categorically that among the recommendations of the **De Lange Commission (1980)** was that the education system should promote the economic growth of the country.

Le Roux (1985:4) quotes from the address tabled by **Justice Noruwana** that Blacks need an education which will eliminate hunger and improve nutrition and health. He emphasises the

balance between formative and vocational education. He also states that the government accepts that it is necessary to move towards a balance between general formative academic education and preparatory career education to meet the needs of the country. He recommends strangely that pupils are to be guided towards good citizenship, economic productivity and a well adjusted, civilised style of living **(ibid:16).**

Lauglo & Lillis (1988 : 32) cite that the main objective of vocational education is to influence the occupational choices of pupils away from white collar jobs to which they have traditionally aspired, and to make them somewhat better prepared to work in other types of occupations. The major function of schooling is the development of appropriate skills and attitudes that are needed to make the economic system of society function more efficiently.

The industry, in turn, recommends that it be afforded greater opportunity than it is given at present, to influence the content, pacing and balance of the curriculum. However, policymakers are still not sure what role vocational education should have at the secondary level. The idea of a comprehensive school to serve the needs of the entire school population, including those who do not wish to further their formal education has also been explored.

Career choices should be based on good guidance and realistic expectations for the future of our youth. The perception that vocational education is a dumping ground, ostensibly held by parents, students, teachers and school administrators, must change so as to give vocational

education the image it ought to have. In fact, it may meet the needs of the many students who drop out before completing high school.

Minister of Education, Prof. Bhengu, asserts that the teaching of a curriculum that is more critical, reflective and skills orientated would better serve the nation. The launching of Curriculum 2005, after many months of planning and consultation marks a milestone in the education system of South Africa. At the heart of this change is the introduction of Outcomes Based Education (OBE), which places emphasis on the result of the learning process. These outcomes refer to knowledge, skills, values and attitudes which learners will have to demonstrate and show understanding of in various learning situations. Such an education has become the norm amongst the leading nations of the world like Australia and America. This approach to education will integrate education and training, the latter having been neglected in the previous education system of South Africa.

Corson (1988 : 15) distinguishes between education and training. Training is done for a particular vocation. He quotes from the criticism levelled against the English education system, which does not prepare pupils actively for the world of work and industry. **Corson** criticises education systems which are repetitions slanted more towards academic and abstract standards and not towards pragmatic, practical skills which are so necessary in the world of work. He specifies that overemphasis on academic achievement leads to professional and clerical careers only. He argues further that the grammar school tradition (reading, writing and arithmetic) has dominated the secondary education throughout

the country. In ancient times, emphasis on practicals was taken as a betrayal of liberal and academic values.

2.3 Positions of some Educationists towards Technical-vocational education

Corson (ibid : 113) argues for an alternative development of secondary school education in the shape of technical vocational schools designed to prepare pupils for skills in trade and industry. He emphasises the fundamental need for every country to survive economically, and stipulates that people come unprepared to the work-world. The improvement in the provision of technical and vocational education is therefore, necessary.

Corson (ibid : 127) distinguishes between two types of people : those who are able to cope with higher cognitive problems and those who are not. Those who cope academically, apparently do not require vocational training. Vocational training is directed to those that are not able to cope with rational problems and cannot master cognitive skills. It also helps those who lack home support in the quest for university education. I also maintain that we need to take into cognisance of this when providing any type of education to the learners. That is why we cannot only provide academic education but also vocational skills.

Kluczyn'Ski (1985:47) takes up the issue of the kind of human being education should aim to develop. He says such a human being should have the capacity for rational problem-solving through physical skills. **Dias,** in a conference paper **(1988:109)** states that when

trying to "rediscover education" we have to take into account that in all societies there exists an **educational reality** as part of the total **social reality.** The forces that determine the educational systems of the Third World countries did not show understanding or respect for educational conceptions in the societies they had subjected to their military, economic and socio-political rule. The experience of the past years has shown that this educational system, has proved irrelevant to the majority of the population, especially in rural areas. We have then to "rediscover" the practical value of education. **Dias** emphasises that an alternative concept of education should be introduced not theoretically only but practically. Education is dynamic especially in Third World countries. Here, it has emerged out of intrinsically dynamic, societal, cultural economic, and educational development processes. It is high time that education that was borrowed from well-developed countries be reshaped to suit an underdeveloped country, like South Africa.

2.4 Purpose of Secondary School Education

Ngubentombi (1988:252) observes that the general purpose of senior secondary education is to enable students after matriculation to enter employment directly or to proceed to a higher level of vocational training for technical or academic study. He quotes from the report by the Department of Education in 1986, which observes an increase in the growth of senior secondary schools, proving that people are education-conscious. However, he expresses great regret that education is one-sided. Differentiation in the curriculum to cater for widely differing abilities and vocational interests of pupils, is sadly lacking. There is, thus, a call to revise the curriculum. **Ngubentombi** quotes the recommendations of the

Taylor Commission that new facilities be provided on the basis of proven personpower needs, related to the economic development of the country.

According to the **De Villiers Commission of 1948**, there has been little or no correlation between training and the occupational demands of the country. The Vocational Act of 1955 differentiated between three types of vocational education, namely, technical, domestic and commercial. Courses in National Technical Certificate (NTC) as well as in Office Management have been devised. The purpose of secondary school education was to offer a wide choice of school subjects to satisfy as many groups of pupils as possible. This study attempts to link what was discovered in earlier years as theory with the present day technical-vocational needs.

2.5 Attitudes of Teachers towards Vocational Education

Teachers take vocationalization of the curriculum as a means of improving the contribution which education can make to the development process in education. In less developed countries, they supported the general idea that schools should attempt to pass on to their students the practical skills they need, and inculcate in them attitudes which would better prepare them for the kind of economic existence which these societies offer.

In **Lauglo & Lillis (1988)** it is argued that if individuals in a society have the "appropriate" skills they will be more productive than those without such skills. The high cost is a major constraint on the implementation of vocational education. It is an even greater concern

when policies favouring the expansion of such subjects are rooted in conditions which make it harder to meet financial requirements.

Lauglo & Lillis (ibid:235) observe that Kenya's present education policy for secondary schools favours curriculum change in a practical or vocational direction. A number of recent literature reviews and studies have examined the rationale for such policies. The socialist ideal of the polytechnical education system argues for vocational subjects as part of the general secondary curriculum in an immediate labour market context. The goals of "curriculum diversification" in a practical direction often include that of transmitting skills and attitudes which will be useful in gaining jobs and employment.

Stronach (in Esland 1991 : 155) interprets vocationalism as a kind of contemporary magic, a form of reassurance as well as a "rational" response to economic problems. Learning, if it is to be rewarded, should lead to progress for individuals and companies. Thus, the economic problem boils down to national deficiencies in personal attitudes and skills. **Stronach** states that all further qualifications will need to be practical and relevant to employment. Every pupil should be capable and sufficiently adaptable for the technological challenges of employment. This study investigates the change that South Africa has a large ratio of legally academically qualified graduates, lacking in skills necessary for economic growth.

There is, an intermediate "skills gap". Failure in the 20th century to develop technical-vocational education for teenagers at school age would mean failure to guide the teenagers to the right

destination.

Bennel (1991:19) asserts that all governments have tried to increase the vocational content of the school curriculum at secondary level. Initiatives have been taken noting the inappropriateness of the academic curriculum in reducing youth unemployment. It is argued that it is more rational to provide children with vocational skills that will enable them to be self-employed in both rural and urban areas. To link education with production is essential.

2.6 Attitudes of Students towards Vocational Education

Bennel (ibid:22) postulates a reason for both students and teachers perceiving vocational education to be inferior. He says that academic qualifications had determined access to most secondary training colleges and universities. Many students did not gain entrance to these higher institutions because of academic requirements. With increasing unemployment, both teachers and students have become increasingly conscious of the benefits of vocational education. The fact of increasing competition in higher academic qualifications will not remedy the situation of lengthening training and job queues. The weak scholastic background of students has led to high drop out rates. **Bennel (ibid:2)** puts forward the objective of vocational education as the augmentation of the national reservoir of human resources available for economic development in order to facilitate job creation.

Pautler (1990:272) argues that the implication that vocational education for all students should be supported by funds to buy equipment. The government must be aware of the

unique contribution of vocational education to the economic well-being of the nation. The issue of what to offer in vocational education programmes must be carefully examined and content must be designed to cause the transition to the world of work.

Pautler (ibid:265) emphasises that students "at risk", that is; those who fail or are dropouts, could benefit from vocational education at secondary level. Vocational education should not, however, be seen as a dumping ground for these students. It is important for the average and the above average student. When the academic side of the curriculum has clearly prescribed problems, vocational education must be considered as a viable alternative. **Pautler** further states that vocational education is charged with preparing people for work. It constitutes the backbone of the nation's employment, relating education to training.

Edwards & Fogelman (1993) describe the aim of vocational education as the matching of pupils with vacancies which enable the student to develop a positive self-concept and help them become more self directed in dealing, in a very open and flexible way, with new opportunities.

Another concept which could be added here is coaching students to prepare, recognise and make the most of those opportunities.

Vaughan (1970) emphasizes that choosing a career is a very important decision which cannot be done within a short space of time or in one's last year of schooling. Students often do not regard their first jobs as a career. Many students come from homes where education and work are thought of with apathy and where parents' knowledge of these are very limited. The late choosing

of a career at school leaving age has disadvantages and limits career choice. What a student has already learnt will consequenlty, not match his/her career. Vocational education should therefore be concerned with identifying a student's special subjects at an early age, that is, before his transition from school to work. That is one of the gaps that this study would like to bridge. Our students are misguided from the start.

Adolescents should be given more freedom to choose the subjects they wish to study in accordance with their own aptitudes and interests, and not have to meet the dictates of any pre-arranged curriculum. There should be a world-wide spread of comprehensive schools which would provide a range of subjects to pupils once they reach the stage of specialisation.

The National Minister of Education, Prof. **Bhengu**, in a speech delivered in East London and reported in the (Daily Dispatch, (June 1997) invited parents, teachers and students to criticise the curriculum to facilitate reconstruction. The minister announced plans to concentrate on vocational education by the insertion of Grades 1 - 9 pure academic level, and thereafter the streaming to either vocations or academic levels, until Grade 12. In support, the MEC for Provincial Education in the Eastern Cape Nosimo Balindlela (Daily Dispatch June 1997), stressed the need for the reshaping of the curriculum to suit the needs of the country.

The Green Paper on Education which outlined South African Policy has the goal of lowering the population growth rate. South Africa will soon run out of resources. It is argued that the population growth rate needs to be equal to or lower than the economic growth rate for the economy to keep pace with the needs of the people. Higher numbers will no doubt result in high unemployment rates.

2.7 Vocationalization in Under-developed Countries

The vocationalization of education in the economically under-developed countries, refers to efforts by schools to include "practical" subjects which are likely to provide students with basic knowledge, skills and dispositions that would prepare them for the prospect of skilled work. In most developing countries which have limited secondary educational facilities, pupils ordinarily receive only a few years of elementary or primary education.

According to **Lauglo (1988)** traditional knowledge and culture came to be de-emphasized by schools offering western type of education, which was considered necessary to equip students eventually to become clerks in government departments, or for jobs in the private sector. Later the number of "educated" individuals outstripped the demand for these white-collar jobs in less economically developed countries. Practical subjects began to be taught as part of the programme of vocationalizing the curriculum in schools.

Lauglo (ibid) argues that vocationalization of the curriculum as a means of improving the contribution which education can make to the development process, has deep historical roots, and has continued to persist despite the fact that traditionally these practical subjects have had little or no appeal to students and parents in under-developed countries. It stands to reason that both boys and girls should be given enough skills and knowledge about, for example, construction, in order to build their own houses. Similarly, they need to be taught other vocational skills that could increase their economic contribution to their societies. Schools should attempt to pass on to their students the kind of practical skills they need and inculcate in them

those attitudes which would better prepare them for the kind of economic existence which society offers.

Lauglo (1988) also emphasizes that policy-makers should believe that in under-developed countries one of the major functions of schooling is the development, in the young, of appropriate skills, attitudes competencies, and commitments that are needed to make the economic social system function more efficiently. Policy-makers in under-developed countries should acknowledge that if individuals in a society have the appropriate skills, they will be economically more productive than those without such skills.

Findings from **Lauglo (ibid)** research in Britain, France and Germany concerning the involvement of business and industry in education, show that employers in these countries make similar criticisms of schools. These include, inter alia, the lack of connection of school curricula with the world of work, the school's preoccupation with academic study, inadequately basic skills training, and the consequent unpreparedness of school leavers for work. This is a reality which adversely affects the underdeveloped countries, as well.

Recommendations for change aim at repairing these deficiencies. They include the design of a more "pratical" curriculum, greater knowledge and appreciation of the world of work on the part of both teachers and students, and more efficient management of schools.

As a summary, I would concur with these authors, concur to the fact that there is a gap that is to be filled. That gap exists between the two worlds: the world of schooling and the world of work. This study therefore, attempts to close that gap after having determined the attitudes of students and teachers towards vocational education.

CHAPTER 3

METHODOLOGY

3.1.1 CHOICE AND DESCRIPTION OF THE RESEARCH AREA

This research was conducted in Kokstad, one of the six new educational regions in the Eastern Cape. The Kokstad educational region consists of nine magisterial districts with a total of 94 high schools. Three high schools from each of the nine districts were selected purposively bringing the total to 27. The following sampling plan was used :

POPULATION		SAMPLE
District	**Total No. of High Schools in the District**	**Selected High Schools**
1. Bizana	11	3
2. Flagstaff	7	3
3. Mount Ayliff	6	3
4. Mount Frere	14	3
5. Tabankulu	9	3
6. Lusikisiki	18	3
7. Kokstad	3	3
8. Mzimkulu	13	3
9. Matatiele	13	3
TOTAL	**94**	**27**

A sample of 27 schools situated in different parts, were selected so that the teachers in these schools would be representative of the teacher population in the region. Consideration was given to the area in which the school was situated, that is, rural or urban, One rural, one urban and one farm school was included in the sample. The names of selected schools appear in the chapter 4 on data collection.and in Table 5 in the list of tables.

3.1.2 SELECTION OF SCHOOLS

Purposive sampling was applied in this research is. This method was chosen because it ensured that the urban, rural and farm schools were represented.

Furthermore, all the districts were represented. Most schools are Black although a few are racially integrated. The sample of schools in the nine magisterial districts was constituted in the following manner. Firstly, the nine districts were serially numbered. A list of schools in each district was obtained and were further classified into urban, rural and farm schools.

As the average number of schools in all districts was ten, thirty percent of the schools in each district was taken to be a representative sample.

Three schools were thus chosen to represent each district. The total number of schools was therefore 27.

3.1.3 SELECTION OF TEACHERS

In the 27 schools representing the districts, the number of teachers in each school ranged from 15 to 20. It was deemed fit that 50% of teachers in each school would suffice as a sample. Therefore, the total number of 270 teachers was considered representative, and for the goal of obtaining meaningful results. In each school, teachers in managerial positions were also included in the investigation. Principals, deputies and heads of departments were requested to be among the educators who would respond to the questionnaire.

Their knowledge of the curriculum was also considered useful. Other teachers were requested to respond to the questionnaire to provide information on the guidance and counselling of students within the school situation.

Both sexes were also represented. The rating of categories of teachers included in the research was as follows :

Rating categories for teachers

	CATEGORY	RELATIVE EDUCATIONAL QUALIFICATION VALUE	EXPLANATION
A 1	Std 8 + 2 years	10	Professional qualification
A	(M + 1) S.C. + P.T.C.	11	1 year professional qualification
B	(M + 2) S.C. + 2 years	12	2 year professional qualification
C	(M + 3) S.C. + 3 years	13	Professional qualification
D	(M + 4)	14	i) 5 school-directed courses, with one at second year level + a 3 year professional diploma.
E	(M + 5)	15	ii) An approved B. degree + a 3 year professional diploma
F	(M + 6)	16	Bachelor of Education or Master of Education
G	(M + 7)	17	Doctorate degree

(Educamus 1988 : 7)

3.1.4 SELECTION OF LEARNERS

As there were 27 schools in the sample, each school had an average of 100 standard eight (grade 10) learners. 10 Learners were randomly chosen from the academic class and 10 from the vocational class. 20 Students chosen from 27 schools constituted a sample of 540 students. Questionnaires were sent to principals to reach the 540 students in 27 schools.

Principals were asked to ensure that the Heads of Department knew both the academic and the vocational stream, in order to distribute the questionnaire appropriately. The heads of department (HOD) in sampled schools were required to distribute questionaires. They had to first sample students in both classes randomly. They were requested to guide the sampled students through during the filling in of the questionaires. Teachers and the principal were requested to send the completed questionaires back to me.

3.2 METHOD OF COLLECTING DATA

3.2.1 THE QUESTIONNAIRE

Questionnaires and attitude rating scales are instruments that present information to a respondent in writing or through the use of pictures and then require a written response, a circle, a word or a sentence. Questionnaires are generally used in cases where the evaluator needs answers to a variety of questions. They are frequently designed so that each question represents a discrete concern and can yield a score specific to that concern. They can also be designed so that answers to several questions can be summed to yield a single score.

The mail questionnaire was chosen because it offered the following options:

1. lower cost.
2. greater anonymity, therefore greater response.
3. accessibility - it permits administration over a wider geographical area.
4. a considered response (not immediate one, is required) time is allowed for respondents to think through open-ended questions.

There were two types of questionnaires, one to teachers and the other to students. The Likert type questionnaire in Section A was a closed one, in which a tick was required under 1, 2, 3, 4 or 5 representing a scale varying from **strongly agree** to **strongly disagree**. The questionnaire was adopted but modified from the existing questionnaire specifically ordered for the purpose of this study. In both questionnaires, Section A consisted of 20 checklisting items and 6 open- ended questions. Section A was Likert type questionnaire rating attitude with items grouped according to certain attitudinal areas including, inter alia, the following :

1. job opportunities for vocational students.
2. feasibility of vocational programmes at high school level.
3. economic considerations of vocational education programmes.

The questionnaire appears in **Appendix 1.** Some items were written in a positive direction and some in a negative direction. The reason for reversing items was to accommodate persons in favour of, and those opposing vocational programmes at secondary school level. The persons favouring the programmes would agree with positive items and disagree with

negative items and vice-versa. The reason for writing items in both a positive and negative direction in the questionnaire, was to avoid response bias. This questionnaire was mailed to 270 teachers of the 27 schools. 540 questionnaires were mailed to students in the selected schools. A response rate of 80% for the teachers and 58,3% for the students was achieved. The percentages per school is reflected in the section on analysis. The fact that the student rate was lower, somehow impaired the results, findings and recommendations of the study. This low response rate suggests that our students are not used to being involved in research studies and took it in a playful manner.

3.2.2 INTERVIEWS

An interview is a face-to-face meeting between two or more people in which the respondent answers questions posed by the interviewer. An interview may involve predetermined questions, but the interviewer is free to pursue interesting responses if he/she feels it is useful. The interviewer records the respondent's answers in some way, usually by taking notes. The interviewer then develops a more complete summary after the meeting has been concluded. **Manion (1980:241)** defines research interviews as a two-person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information focussing on content, and specified by research objectives of systematic description. There is verbal interaction between the individuals.

The purpose of the interviews was to explore what other educators believe students' attitudes towards vocational education might be, and why those attitudes exist. Early in the interview, I

informed the subjects briefly on the purpose of the research to reassure the interviewee that was said in the interview would be treated as confidential.

Many interviewees felt self-conscious at first. Some challenged and questioned the soundness of the study. With a structured schedule I was confident of getting comparable data across the spectrum of subjects. Group interviews were held with students. Tape recording and photographing was done to enhance recall during analysis.

I collected the responses personally, and did the analysis during my spare time. Items in the interview schedule were intended to determine the perceptions, opinions, views and attitudes of teachers and learners towards the present curriculum in relation to vocational opportunities. The semi-structured interview schedule appears in **Appendix 3.**

Interviews were held with key officials in education, as noted in Chapter One. These are people who could provide valid information on vocational education in the region. Results of the interviews are discussed in the next chapter.

3.3 PILOT STUDIES

The main purpose of the pilot studies was to determine how the design of the research could be improved. I conducted a pilot study to test questions for, inter alia, clarity, vagueness, ambiguity and structure. Space was provided at the end for the respondent to make any appropriate comments. After each pilot session, a discussion was held with the subjects who were pilot-tested.

The questionnaire was pilot-tested in two schools. The objectives of the pilot test were to check the appropriateness of the materials and the clarity of wording used. It was to check if the Likert scale numerical scoring was appropriately assigned to options. Subjects were asked to indicate any lack of clarity in the words and expressions used.

The questionnaire was tested by teachers and students at the school in which I was teaching. Another pilot testing was done in a neighbouring senior secondary school. Reshaping and reframing of items was suggested by teachers and students after the pilot study. Some items were eliminated and others were reshaped.

3.4 VALIDITY

The questionnaire was validated in different ways:

1. it was presented to a group of researchers for scrutiny and commentary;
2. it was also presented to the regional career guidance counsellor and the supervisor of this research to check on the items. They both commented and provided advice on items to be reshaped, eliminated or added.
3. the questions themselves were made interesting so as to sustain, respondents attention and interest.

3.5 PILOT TESTING

Pilot testing was done in *distraction free* classrooms in two schools during the regular school hours. This was done in the neighbouring school and in the one I was teaching. The student attitude scales were administered by me. Subjects were assured that the measures were not tests and that all answers that were given, neither parents, teachers nor their principal would have access to.

At the beginning of each viewing session, rapport was established and instructions on how to complete the scale were given. Instructions were given in English and Xhosa when required. Test items which were not easy to grasp were explained. Subjects would leave their questionnaires on the desk near the door when going out. After everyone was finished, objects were called back for rediscussion of the questionnaire. A thirty minute discussion was held with each pilot tested group and reshaping, reframing, rephrasing of questions was done to ensure a good questionnaire.

3.6 DATA COLLECTION

Once the questionnaires were collected from both teachers and students, a score sheet was prepared. The areas of interest in the content of the terms was nearly the same for teachers and students. There was no need therefore, to separate the items during the item analysis stage.

Only the similarities and differences were noted. The score sheet consisted of recording frequencies in the responses of teachers and students who strongly agreed on each of the twenty items. It also consisted of frequencies in the responses of teachers and students who strongly disagreed on each of the twenty items. Percentages were calculated to determine whether the highest percentage disagreed or agreed with the content of one item.

The questionnaires were mailed to the 27 schools with an 80% return rate. There was about 43% response rate for students. The list of schools from which the 27 schools were chosen, appears in Table 3.

Mailed questionaires were sent to the following schools:

DISTRICT	SCHOOLS	RETURN RATE FOR TEACHERS	RETURN RATE FOR LEARNERS
Bizana	Bizana Village SSS	30%	26%
	Ntukayi SSS	60%	53%
	Marelane SSS	50%	42%
Tabankulu	Tabankulu SSS	60%	51%
	Tolweni SSS	80%	62%
	Zwelake SSS	30%	24%
Maluti	Moshoe Shoe SSS	70%	61%
	Mt. Hargreaves SSS	40%	35%
	Magadla SSS	55%	47%
Flagstaff	Mfundisweni SSS	50%	44%
	Langa SSS	40%	40%
	Vukayibambe SSS	32%	29%
Lusikisiki	Palmerton SSS	42%	38%
	Mqikela SSS	40%	40%
	Ngqungqushe Tech	70%	64%
Mount Ayliff	Rodes SSS	25%	22%
	Mt. Ayliff SSS	55%	48%
	Jojo SSS	40%	36%
Mount Frere	Makaula SSS	40%	39%
	Madzikane SSS	25%	21%
	Mt. Frere	50%	45%
Mzimkulu	Clysdale SSS	60%	52%
	Rietvlei SSS	40%	31%
	Loods SSS	30%	28%
Kokstad	Kokstad College	63%	56%
	Carl Malcomess SSS	54%	49%
	Mount Currie SSS	43%	38%

CHAPTER 4
DATA ANALYSIS

4. CRITICAL QUESTIONS

4.1 What are the attitudes of teachers and students towards Vocational Education?

The purpose of this chapter is to report on the main findings on attitudes of teachers and students towards vocational education. One may suspect that these ratings and percentages are subject to bias in favour of what teachers think the Ministry of Education would like to see. If so, vocational education could still be a "soft option" which as examination subjects would tend to attract students.

The table below is an analysis table. Totals for each of the 20 items were done. All the reponses for learners which strongly agree (SA) undecided (U) and those which strongly disagree (SD) were batched together. Totals for each item were calculated and percentages for each response were calculated. For example if in the item - self employment leads to more success after studying vocational subjects, then if the majority strongly agree. Then 93,7% of the responses strongly agree. The table itself explicates that many higher percentages support the inclusion of vocational subjects in most schools which responded to the questionnaire.

4.2 ITEM ANALYSIS TABLE

ITEM	SA	U	SD	%
1. VE not useful	15	0	18	54,5%
2. VE too difficult	7	22	9	57,8%
3. VE interesting	28	0	10	73,6%
4. VE waste of time	12	0	20	62,5%
5. Emphasis	21	0	9	70%
6. Money saving at home	34	0	6	85%
7. Encouragement	9	9	10	35,7%
8. Prefer mental to manual	7	23	10	57,5%
9. Like white collar jobs	20	0	9	68,9%
10. Like working outside	8	0	26	64%
11. Teaching for University more than careers	12	0	18	60%
12. Dirty work	24	0	14	63,1%
13. To be employed by somebody	2	0	30	93,7%
14. Self-employment more success	32	0	3	91,4%
15. VE to be included	26	0	3	89,6%
16. Could enrol in Technikons	38	0	1	97,4%
17. Include VE in their subject combination	10	0	1	96,8%
18. Cannot develop leadership skills	0	26	8	76,4%
19. Exposure to VE	20	0	01	100%
20. Not money saving	0	16	17	51,5%

SA - strongly agree
U - undecided
SD - strongly disagree

4.3 DATA ANALYSIS

Coding categories were set. This system can be likened to a large gymnasium with thousand of toys spread out on the floor to be sorted. One would start by determining codes to be used to form piles. These codes or categories may be size, country of origin, manufacturer, etc. The

same process was applied in this research. Words or phrases were written down to represent topics or patterns of **strongly agree, strongly disagree,** etc., which are coding categories used in the closed questionnaire. The aim was to distinguish between the responses of students and teachers. Hand tabulation procedures were implemented. Tallies of each category were recorded on a tabulation sheet. Six piles were designated for teachers and students; for male teachers and female teachers; male students and female students. Frequency counts were then done. Since these groups were not equal in number, these frequency counts were translated into percentages.

4.4 ITEM ANALYSIS

54,5% Of both students and teachers indicated that vocational subjects were useful and, strongly disagreed with the item which stated that vocational subjects were a waste of time.

When both teachers and students revealed their attitudes towards the difficulty of vocational subjects, the highest percentage was uncertain but with the item of interest, the higher percentage **(73,6%)** showed that they are more interesting than academic subjects.

Questionnaire items canvassing attitudes on whether vocational education was a waste of time and required more emphasis in terms of both teachers and students indicated that they were not a waste of time and schools should promote vocational subjects.

These items on type of job preferred were very interesting, hence students still show that the people with white collar jobs are fortunate, earn more money and are not dirty, and therefore, strongly disagreed to work outside in the open air.

Both teachers and students agreed that high schools should concentrate on teaching more career orientated subjects.

Item about self-employment - revealed that students strongly disagreed to be employees and preferred to be self-employed, which is a good thing anyway.

A high percentage **(96%)** of both teachers and students agreed that vocational education should be included in a high school curriculum. They stated that learners should be exposed to courses in vocational subjects and make their choice at an early age.

Chi -SQUARE TEST (X^2 TEST)

This statistical technique is generally chosen when dealing with two or more nominal variables, but is commonly used for two. Data in the two variable cases is cast into a 2x2 contingency table.

Out of 540 questionnaires sent to students, 58.3% (315) were returned. Out of 270 questionnaires mailed to teachers, 80% (229) were returned.

Table - Chi Square test (0 - Table)

Table 4.2

	Unfavourable Attitudes	Favourable Attitudes	Total
Students	A = 90	B = 225	A + B = 315
Teachers	C = 69	D = 160	C + D = 229
Total	A + C = 159	B + O = 385	N = 544

O = Observed frequencies

E = Expected frequencies

Table - (E - Table)

Table 4.3

	Unfavourable Attitudes	Favourable Attitudes	Total
Students	$\frac{315 \times 159}{544} = 92$	$\frac{315 \times 385}{544} = 222$	314
Teachers	$\frac{229 \times 159}{544} = 67$	$\frac{229 \times 385}{544} = 162$	228
Total	159	385	N = 544

$$E = \frac{(90-92)^2}{92} + \frac{(225-222)^2}{222} + \frac{(69-66)^2}{66} + \frac{(160-162)^2}{162}$$

$$= 0,23$$

df = 1

X^2 value at 5% significance level = 3,84

X^2 value at 1% significance level = 6,64

The Worksheet formula for a 2x2 contingency table when applied to the sample data yields a X^2 value of 0,23 which, for one degree of freedom, is significantly well below the table values at 5% and 1% levels of significance. The inference that there is no significant difference between the attitudes of students and teachers towards vocational education is justified.

4.4.1 How do the attitudes of teachers compare to the attitudes of students?

4.4.2 **A comparison of 50 scores for teachers and students**

COMPARATIVE TABLE OF SCORES FOR TEACHERS AND STUDENTS

	X	Y	XY	XX^2	XY^2
1	59	59	3481	3481	3481
2	65	64	4160	4225	4096
3	58	60	3480	3364	3600
4	72	72	5184	5184	5184
5	60	60	3600	3600	3600
6	68	67	4556	4624	4489
7	62	63	3906	3844	3969
8	58	58	3364	3364	3364
9	68	68	4624	4624	4624
10	66	64	4224	4356	4096
11	66	66	4356	4356	4356
12	57	48	2736	2349	2304
13	69	69	4761	4761	4761
14	69	74	5106	4761	5476
15	74	76	5624	5476	5776
16	66	47	3102	4356	2209
17	66	66	4356	4356	4356
18	57	57	3249	3249	3249
19	59	60	3540	3481	3600
20	65	64	4160	4225	4096
21	72	72	5184	5184	5184
22	69	68	4692	4761	4624
23	64	64	4096	4096	4096
24	76	77	5852	5776	5929
25	74	74	5476	5476	5476
26	62	62	3844	3844	3844
27	64	64	4096	4096	4096
28	48	49	2352	2304	2401
29	52	52	2704	2704	2704
30	72	72	5184	5184	5184
	1937	1916	12 5049	12 6361	12 4224

	X	Y	XY	X^2	Y^2
31	74	78	5772	5476	6084
32	73	76	5548	5329	5776
33	70	71	4970	4900	5041
34	71	72	5112	5041	5184
35	71	76	5396	5041	5776
36	77	78	6006	5929	6084
37	66	64	4224	4356	4096
38	62	62	3844	3844	3844
39	69	58	4002	4761	3364
40	63	62	3906	3969	3844
41	59	58	3422	3481	3364
42	70	70	4900	4900	4900
43	74	76	5624	5476	5776
44	69	75	5175	4761	5625
45	63	64	4032	3969	4096
46	70	83	5810	4900	6889
47	68	64	4352	4624	4096
48	66	67	4422	4356	4489
49	70	72	5040	4900	5184
50	70	70	4900	4900	4900
50	3312	3312	22 1506	22 1274	22 2636
N	≤X	EY	EXY	EX^2	EY^2

Where X is the scores for teachers.

Where Y is the score for students

$$r = \frac{50 \times 221\,506 - 3\,312 \times 3\,312}{\sqrt{[50 \times 221\,274 - (3\,312)^2]\,[50 \times 222\,636 - (3\,312)^2]}}$$

$$= 0{,}85.$$

Where X = Scores for teachers

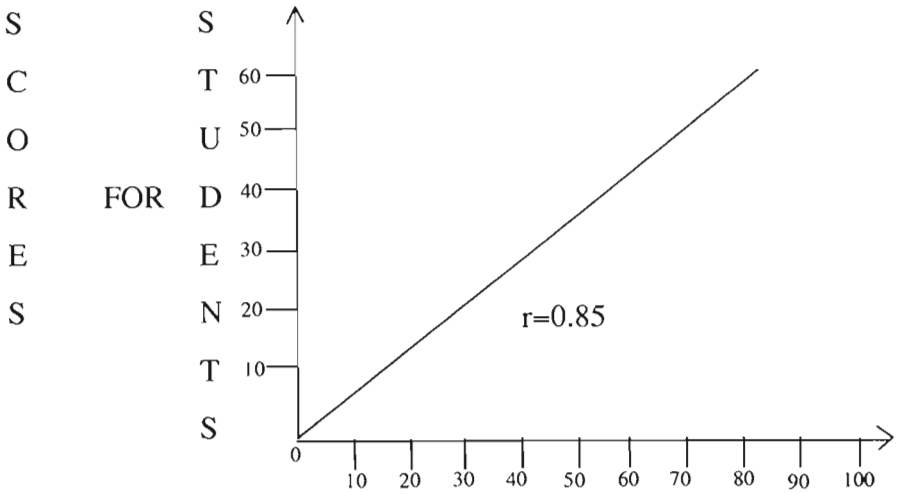
Where Y = Scores for students

Table of Results

Table 4.5

Calculations	**Calculations**
1. N (number of pairs)	50
2. EX	3 312
3. EX^2	221 274
4. EY	3 312
5. EY^2	222 636
6. EXY	221 506
7. NEX^2 - EX^2	94 356
8. NEY^2 - (EY^2)	162 456
9. STEP 7 X STEP	8 1,532 869 834
10. STEP 9	123 809,1206
11. NEXY - (EX) (EY)	105 956
12. STEP 11 **** STEP 10 = r	r = 0,85

Figure 2. SCATTER PLOT FOR SCORES FOR TEACHERS AND SCORES FOR STUDENTS



The plotting of the graph shows that all the scores lie in a straight line which runs from bottom left to top right. The degree of relationship which exists between two sets of scores is called correlation (r). The straight line indicates a perfect positive correlation, hence the value of r=0,85. This step in data analysis provides a clearer picture of the two series of scores of both teachers and students by identifying relationships. Marks were allocated to the coding categories where **strongly agree** was given 5 marks and **strongly disagree** was given 1 mark. The mark allocation, was as follows: SA=5, A=4, U=3, D=2, SD=1. Marks for each student were calculated and a total was provided for the closed questionnaire. The total marks appear in **Fig 4.2** above as reflected by the comparative table of scores for teachers. A set of scores from 50 teachers were then compared to a set of scores from 50 students. The purpose was to reduce to a single number

Key: **SA** **- strongly agree**
U **- undecided**
D **- disagree**
SD **- strongly disagree**

or index, the relationship between the two sets of scores. The degree of relationship between variables varies from +1 which is a perfect positive correlation to -1, which is a perfect negative correlation.

A perfect positive correlation specifies that for every unit increase in one variable, there is a proportional unit increase in the other, and vice versa for the perfect negative correlation.

4.4.3 Discussion

I tested whether there was agreement (correlation) between the two sets of scores to determine whether they were independent or related to each other. The correlation statistics developed by **Karl Pearson** were used. This shows a single value that would indicate the degree of relationship between the two variables (phenomena). Positive values indicate positive relationships while negative values indicate negative relationships. The closer the coefficient approaching +1, the greater the relationship; the closer the coefficient to zero, the weaker the relationship. The value itself is called the co-efficient. Scores for teachers and students are presented in **Figure 4.4** above. As can be seen, a value of **0,85** is obtained. This is, a high correlation as it is closer to +1,0. The guidelines followed to interpret the correlation co-efficient have been adapted from **Mahlangu (1987 : 109):**

0,80	to	+1,00	-	Very high correlation
0,60	to	0,79	-	High correlation
0,40	to	0,59	-	Fair correlation
0,20	to	0,39	-	Low correlation
0,10	to	0,19	-	Very low correlation

The guidelines apply to both positive and negative correlation.

4.5 DISCUSSION OF OVERALL FINDINGS

4.5.1 What are the underlying reasons for teacher and student attitudes towards vocational education?

This critical question was answered by the open-ended section of the questionnaire. Most of the returned questionnaires showed poor responses as far as this section was concerned, primarily because reasons for responses were requested. Where responses required at least three reasons, only one was sometimes furnished. This applied to students response but, not to those of teachers, possibly because in most schools I presented the questionnaire in person and time constraints may have limited thinking on reasons to be supplied.

Some educationists who are not teachers were included in the project. They were interviewed. These subjects were very co-operative and sacrificed their lunch time for the interviews. Responses from teachers, students and educationists were interpreted in the following manner.

4.5.2 Underlying reasons for teachers and students attitudes towards vocational education.

There was a positive response from students indicating that vocational education or vocational subjects be taught at standard eight (grade 10) level. The highest percentage, approximately 60%, stipulated that the reason for inclusion in the curriculum is that they teach students to be self supportive at a post school phase. They are described in no uncertain terms as "profit making" subjects. The selling of vegetables as consequence of Agricultural Science, was one upshot. Dressmaking and tailoring were other possible options of careers or jobs stemming from vocational subjects.

In the open-ended questions about the importance of career exhibitions, the highest percentage, about 70%, had no idea of what career exhibitions were, but were, nevertheless, sure that attending them would be fruitful.

In the question concerning whether there is a guidance teacher in each school, there was a 100% response that there was none. Some students stated that their teachers were too busy with the core syllabus and had no time to advise them on their future goals and plans. They recommended two periods per class per week, for guidance, suggesting further that the Department of Education should provide a vocational guidance teacher in each school.

In the item concerning a career guidance specialist visiting the school to advise students about the future, approximately 60% answered that this was a luxury they did not enjoy. It is clear that there are few career guidance specialists. There are only two for the Kokstad region, who are unable to visit all schools. There was a strong recommendation from students that it would be beneficial to increase the number of guidance counsellors to cover a larger proportion of the region.

Students hinted at the possible waste of time in doing subjects which will not help them in their future career plans. They emphasised that career guidance exhibitions could help avoid such a problem.

There was positive response to vocational education, recommending that all high schools should expose students to vocational subjects through outcomes based education. Since standard eight (grade 10) is a base for what students will do in matric, these subjects should start at that level.

Students made it clear that they required more information about their careers to reconcile studies with their careers. They required a number of different job opportunities but in their own environments.

Students felt that technical vocational subjects should be taught in standard eight (grade 10) because they were not as mentally demanding as general subjects and would therefore, suit the below average students. They encouraged nearly all schools to offer these subjects to avoid the situation where students have to travel long distances and seek accommodation in order to

attend schools offering such subjects. Moreover, the schools often require high entrance fees. Students pointed out that vocational subjects would cater for those students who have no money to go to universities. They added that these subjects are, in fact, required for technikon entrance. Some stated overtly that these subjects would brighten their future.

Attendance at career exhibitions, students pointed out, would arouse overall interest for students in education as a whole. Educationists interviewed showed attitudes similar to those of teachers and students.

4.6 DISCUSSION OF THE OVERALL FINDINGS

It is reasonable to infer that vocational education can influence students towards technical or practical subjects with a future career in mind, and that a change in curriculum can influence students' occupational aspirations. The interest expressed for in Vocational education is strong, even among those with no previous exposure to practical subjects.

The findings reveal, *inter alia,* that the attitudes of teachers and standard eight (grade 10)students were significantly related. There were positive attitudes from both teacher and students towards the inclusion of vocational education at high school level in the region. The study also reveals that career guidance in the region was not adequate leading to students making wrong subject choices for careers in which they were interested. The findings fully support the assertion that vocational education could be used to decrease the problem of youth unemployment.

Educationists who were interviewed emphasised the recommendation that each school should appoint a guidance teacher (officer) to provide direction to students as early as possible in their schooling. They were acutely aware of the dominance of academic subjects resulting in post-school youth unemployment, and recommended that vocational education be taken on board fully by most schools in the region.

FINDINGS

A return rate of 55% was recorded from the mailed questionnaires which were sent to teachers and learners.

A high percentage, about 73% of teachers, favoured the inclusion of vocational subjects in the curriculum. Both teachers and learners responded that vocational subjects were useful in the learner's lives and in the career choice of the child. The teachers and students responded that vocational subjects were interesting hence, they were practical in nature.

FINDINGS ON THE ATTITUDES OF TEACHERS TOWARDS VOCATIONAL EDUCATION

The responses received from the questionnaires administered to the teachers were categorized into strongly agree to strongly disagree. The responses for each item in the questionnaire were expressed in percentage form. The total number of teachers who responded and their percentages appear in Table 4.1 above. Teachers showed by their high percentage responses, like 54,5% and 73,6% that vocational education is interesting and useful to students. They quoted careers which would be open to them like becoming technicians and technologists.

Teachers disagree that teaching vocational subjects at schools is a waste of time. Teachers supported that there should be more emphasis on teaching vocational subjects. They maintained that more teachers should be encouraged to teach vocational subjects. Teachers disagreed that students should be taught for university standards only. They expressed their gratituce in looking forward to the educational changes that would be brought in by the National Qualifications Framework, Curriculum 2005 and Outcomes Based Education.

About 91,4% of the teachers suggested that vocational subjects should be included in the present curriculum.

Teachers argued that students who had taken these subjects are easily absorbed in technikons. Teachers agreed that schools should be exposed to courses in vocational education.

SUBJECT CHOICES

About 91,4% of the students strongly agreed that if they could choose vocational subjects, they could be self sufficient and will be able to create their own jobs instead of being employed by someone else.

A high percentage, 96,8%, strongly agreed that high schools should be changed into comprehensive schools by including vocational subjects in the high school curriculum. Practical subjects like Home Economics, Mechanical and Electrical Engineering should be introduced to schools in the Kokstad region.

APPOINTMENT OF GUIDANCE TEACHERS

About 56% of the students in open ended questions indicated positively that they would be happy if guidance teachers would be placed in each school. If not possible, one guidance teacher per district would suffice, so that students or principals would be able to contact them. They emphasized a dire need to end up the confusion of the students learning subjects that will not match their proposed careers.

CHAPTER 5

5.1 IMPLICATIONS AND RECOMMENDATIONS OF THE RESEARCH FINDINGS

The major findings of this study can be summarised as follows:

There is poor articulation between school curricula and the world of work, given that there is pre-occupation at schools with academic study, the inadequacy of basic skills training and the consequent under-preparedness of school leavers for work prevails.

Teachers' and students' recommendations for change in the need of a more "practical" curriculum was emphasised. Students wanted greater knowledge and appreciation of the world of work. The school must, thus, be seen as both a community building project and a place to nurture individual talent. The school must not produce students who cannot find jobs. School curricula should concentrate both on practical and academic education in order to produce students who are self sufficient and who can contribute to economic growth. These findings are supported by the Minister of Labour, **Sherperd Mdladlana** (Daily Dispatch, October 1998) who emphasized that any programme, aimed at improving productivity should include employment assessment impact. He said that our present world is beginning to understand how central knowledge and skills are to economic and social performance. The proportion of unskilled jobs has declined from 61% to 48% while that of skilled jobs has increased from 10% to 16%. A radical improvement in vocational subjects in schools was important in addition to the development of more technically competent people across a wide range of occupations.

The recommendations which emerged from the study are summarised below:

RECOMMENDATION 1:

Vocational guidance for pupils and learners should be provided through the input of guidance teachers at school level.

This would ensure that learners are oriented towards choosing the type of education and occupation they require. It would help pupils realise their potential with regard to education and occupational choices. Students should continue to have the opportunity to select technical and vocational subjects. They should devote greater study time during examination periods to theory and practice in technical vocational subjects.

RECOMMENDATION 2 :

Each school should be allocated a guidance teacher to disseminate information concerning bursaries, careers and subject choices. Hence, findings stated that there were no guidance teachers at schools, it is recommended that this region could pilot with guidance teachers. Although the Department of Education may be daunted by financial implications the benefit realized in terms of alleviating youth unemployment would far outweigh the costs incurred.

RECOMMENDATION 3 :

Learners should get together to form vocational subject societies.

These would foster awareness of subject and occupational choices. Many of the students are not aware of some vocational subjects which could be chosen at even standard eight (grade 10 level). They start choosing these at technikon level, but if they had vocational subject societies, they would invite specialists to their meetings to workshop them.

RECOMMENDATION 4 :

Career exhibition centres should be more localised so that students have access information. In my findings some students had no idea of what a career exhibition was. It was difficult to be interested in other careers they had no knowledge of.

Students after matriculation continue with tertiary technical-vocational training at technikons and are required to follow careers they are not sure of.

RECOMMENDATION 5 :

Curriculum designers should promote technical-vocational subjects through the media, radio broadcast, newspapers, etc. They should have schools to pilot subjects like Tourism in the Grade 10 (standard eight). A sample of schools could be taken so that before such curriculum is put in place, it is piloted in those schools. Curriculum designers should work closely with industries. Industries should have a meeting with curriculum designers to ascertain what is relevant in industry so that it is taught at schools.

RECOMMENDATION 6:

Youth opportunities Programmes focussing on vocational subjects and careers should be arranged by schools.

These could offer a solution to the problem of youth unemployment. Schooling should be for training in instrumental tasks and practical problem-solving : Vocational education should enjoy the same status as academic education.

RECOMMENDATION 7:

Education regional directors should make provisions for the building of more comprehensive schools. An increase in the budget to finance these schools to purchase equipment, despite the economic turndown, would be necessary. In those comprehensive schools, Math and Science would be offered with Woodwork, Needlework, Home Economics, Metalwork etc., so that brighter students may also be attracted to vocational streams. Female students should be encouraged to offer subjects like metalwork and welding, subjects which were traditionally preserved for male students.

5.2 THE LIMITATIONS OF THE RESEARCH

The fact that there was no personal administration of the questionnaire in some schools somehow hampered the returns although a self-addressed envelope was included. Returns were also hampered by riots in some schools in the region. The atmosphere was thus not conducive for visits to some schools.

Some schools were a long distance away. This in a way hampered the response rate of the questionnaries. The sample, was intended to represent rural, farm and urban schools, but distance at times prevented the smooth running of the project. There were also financial constraints which hindered progress. Finally, I had to simultaneously handle my tasks as school principal and complete this research study.

It is recommended that further research be conducted to investigate the relationship between vocational subjects and job opportunities, so as to refine the curricula offerings at senior secondary schools.

The task of measuring attitudes is a mammoth task. The concept itself is abstract. It was painstaking to see order and consistency in what people say, think and do. Given certain behaviours and utterances, predictions were made about attitudes and future behaviours. I had only to infer that a person has positive or negative attitudes by his/her words and actions. I had to rely on inferences since it is impossible to measure attitudes directly.

BIBLIOGRAPHY

Beach, D. et al (1989). ***Supervision - Focus on Instruction.*** New York : Harper and Row Publishers.

Bennel, P. (1991). ***Vocational Training in Sub-Sharan Africa - Lessons for Post-Apartheid South Africa*** : University of Witwatersrand.

Best, J. (1981). ***Research in Education*** - New Jersey : Prentice-Hall, Inc.
City Press, 18 June 1995.

Bogdan, R.C. & Biklen, S.K. (1992). ***Qualitative Research for Education : An Introduction to Theory and Methods.*** London : Allyn and Bacon (2nd edition).

Borg, W. (1989). ***Educational Research : An Introduction.*** New York : Longman.

Coggin, P. (1979). ***Education for the Future - The Case for Radical Change*** . Oxford : Pergamon Press Ltd.

Cohen, L & Manion, L. (1980). ***Research Methods in Education.*** London : Croom Helm.

Corson, D. (1988). ***Education for Work***. Dunmore Press.

Cunningham, G.K. (1986). ***Educational and Psychological Measurement.*** New York : MacMillan Publishing Company.

Curragh, E. (1990). ***Research in Education***. Vol. 43.
Daily Dispatch, June 1997.

De Lange, J.P. (1981). ***Investigation into Education*** : Technical Vocational Education. Pretoria: HSRC.
Department of Education, ***Annual Report***, (1992). Government Printers.

Department of Education ***Annual Report***, (1994). Government Printers.

Diae, P. (1988). Education for Affirmation - Conference Papers. Johannesburg : Skotaville.
Educamus. Vol. 40 No. 3. Pretoria : Government Printers.

Edwards, J. P. & Fogelman, K. (1993). ***Developing Citizenship in the Curriculum.*** London: Avid Fulton Publishers.

Esland, G. (1991). ***Education, Training and Employment,*** Vol. 2 : The Education Response. Addison-Wesley Publishing Company.
Government Gazette, Education White Paper 4, Pretoria 25 September 1998.
Government Gazette, National Education Policy Act 1996, Pretoria 19 October 1998.
Government Gazeete, South African Schools Act 1996, Pretoria 12 October 1998.

Harold, S. et. al. (1981). ***Education for the New Millennium.*** Phi Delta Kappa Educational Foundations.

Hennerson, M. et. al. (1987). ***How to Measure Attitudes.*** Newbury Park, London : Sage Publications, Inc.

Hofmeyer, J. (1995). ***The National Audit of Colleges of Education, Presented at National Conferences on Teacher Development***, Eskom Centre, Midrand-Gauteng.

Kluczyn'Ski, J. et. al (1985). ***Education and Work in Poland.*** **UNESCO.**

Lauglo, J. and Lillis, K. (1988). ***Vocationalizing Education, An International Perceptive.*** New York : Pergamon Press.

Le Roux, A. (1985). ***The Liberal Component in Vocational Education and Non-Formal Education in Britain and its Possible Relevance to the Development of Non-Formal Education in South Africa - An Explanatory Study.*** M.Ed. Thesis.

Mahlangu, D. M. (1987). ***Educational Research Methodology***. Pretoria : Haum.

Marais, P.G. (1992). ***Education Renewal Strategy.*** Pretoria : University of South Africa.

Marsland, D. (1993). ***Understanding Youth - Issues and Methods in Social Education.*** Great Britain : The Claridge Press.

McGregor, et. al. (1992). ***Education Alternatives.*** Kenyan : Juta & Co. Ltd.

Mkize, M.G. (1989). ***The Professional and Academic Upgrading of Black Teachers in Natal and Kwa-Zulu.*** M.Ed Thesis. University of Durban-Westville.

Moodley, R. (1995). ***Education for Transformation ! Black Access to Higher Education.*** Leeds : Thomas Danby Publications.

Mosha, H. (1993). ***Restructuring The Education System to Suit the 21st Century Needs - Conference Proceedings*** Vol. 1. Pretoria : Human Science Research Council.

Mwamwenda, T.S. (1994). ***Research In Education*** Vol. 51.

Mulder, J.C. (1989). ***Statistical Techniques in Education***. Pretoria : Haum.

Nachmias, D. (1987). ***Research Methods in the Social Sciences.*** New York : St. Martin's Press.

Neubeck, K.J. (1986). ***Social Problems : A Critical Approach.*** New York : Random House (2nd edition).

Ngubentombi, S.V.S (1988). ***Education in Transkei - Some Origins, Issues and Trends.*** Pretoria: Academica.

Njobe, M.W. (1983). ***Effects of the Agricultural Science Curriculum : The School Environment and the student's Home socio-economic Status on Attitudes Towards Careers in Agricultural Production***. Master's Dissertation. Lusaka : University of Zambia.

Nkomo, M. (1990). ***Pedagogy of Domination - Towards a Democratic Education in South Africa.*** New Jersey : Africa World Press.

Ntshoe, T.M. (1993). ***South Africa Conference on the Restructuring of Education - Conference Proceedings.*** Vol. 2 : Vista University.

Pautler, J. A. (1990). ***Vocational Education in the 1990's : Major Issues.*** Michigan : Prakken, Inc.

Pluckrose, H. (1980). ***Education 2000.*** London : Temple Smith Ltd.

Raggatt, P. et. al (1991). ***Change and Intervention : Vocational Education and Training.*** London : Falmer Press.

Sohnge, W.F. (1987). ***EDUCARE,*** Vol. 16.1. Pretoria : University of South Africa.

Steyn, G.H. (1981). ***Research Methods in Education***. Pretoria : Academica.

Stone, H.J.S. (1981). ***The Common and the Diverse : A Profile of Comparative Education.*** Johannesburg : McGrawhill.

Stronach, I. (1991). ***Education, Training and Employment : The Educational Response.*** England : Addision-Wesley Publishing Company.

Taubman, D. (1994). ***Forum.*** Vol. 34, 3.

Torsten, H. (1990). ***Education and the Global Concern.*** New York : Pergamon Press.

Tuckman, B.W. (1988). ***Conducting Educational Research.*** New York : Harcourt Brace, Jovanovich Publishers (3rd edition).

Vaughan, T. (1970). ***Education and Vocational Guidance Today.*** London : Routledge & Kegan Paul.

Verma, D. (1990). ***Administration of Technical-Vocational Education : Principles and Methods.*** Sterling Publishers Ltd.

LIST OF TABLES

Table 3

Enrolment Per District : Kokstad Region - Std. 8 Only

District	Boys	Girls	Total
Bizana	552	1026	1678
Flagstaff	200	362	562
Kokstad	190	335	525
Lusikisiki	662	1 112	1 774
Matatiele	941	1 538	2 479
Mount Ayliff	313	1 024	1 472
Mount Frere	448	1 024	1 472
Tabankulu	372	660	1 032
Mzimkulu	501	900	1 401

TABLE 4

NUMBER OF SENIOR SECONDARY TEACHERS PER DISTRICT : KOKSTAD

REGION			
District	**Male**	**Female**	**Total**
Bizana	54	46	100
Flagstaff	28	31	59
Kokstad	44	42	86
Lusikisiki	85	69	154
Maluti	104	84	188
Mount Ayliff	33	32	65
Mount Frere	81	76	157
Tabankulu	50	75	140
Mzimkulu	65	75	140

KOKSTAD STATISTICAL DEPARTMENT 1995

TABLE 5

KOKSTAD EDUCATIONAL REGION SENIOR SECONDARY SCHOOLS PER DISTRICT FOR PURPOSIVE SAMPLING

BIZANA	FLAGSTAFF
1. Baleni Senior Secondary School	1. Mfundisweni Senior Secondary School
2. Ngalonkulu Senior Secondary School	2. Langa Senior Secondary School
3. Marelane Senior Secondary School	3. Mdutshane Senior Secondary School
4. Stukuthezi Senior Secondary School	4. Vukayibambe Senior Secondary School
5. Greenville Senior Secondary School	5. Walter Cingo Senior Secondary School
6. Bizana Village Senior Secondary School	6. Mayibenye Senior Secondary School
7. Ntukayi Senior Secondary School	7. Mayise Senior Secondary School
8. Nongeke Senior Secondary School	
9. Mpondombini Senior Secondary School	
10. Zamokuhle Senior Secondary School	
11. Ntabezulu Senior Secondary School	

MOUNT AYLIFF

1. Rode S.S.S.
2. Ntsizwa S.S.S.
3. Mt Ayliff S.S.S.
4. Jojo S.S.S.
5. Daluhlanga S.S.S.
6. Senyukele S.S.S.

MOUNT FRERE

1. Dangwana S.S.S.
2. Zibokwana S.S.S.
3. Osborn S.S.S.
4. Mt Frere S.S.S.
5. Makaula S.S.S.
6. Huku S.S.S.
7. Cancele S.S.S.
8. Colana S.S.S.
9. Madzikane S.S.S.
10. Lutateni S.S.S.
11. Mount White S.S.S.
12. Sonqishe S.S.S.
13. Ngwekazi S.S.S.
14. Loyiso S.S.S.

TABANKULU

1. Tabankulu S.S.S.
2. Tolweni S.S.S.
3. Ntsikayezwe S.S.S.
4. Mnceba S.S.S.
5. Zwelakhe S.S.S.
6. Sapukanduku S.S.S.
7. Sukude S.S.S.
8. Dumsi S.S.S.
9. Dumezweni S.S.S.

LUSIKI-SIKI

1. Palmerton S.S.S.
2. Qaukeni S.S.S.
3. Bota Sigcawu S.S.S.
4. Ntafufu S.S.S.
5. Mqikela S.S.S.
6. Ndaliso S.S.S.
7. Ngqungqushe Tech.
8. Zwelibongile S.S.S.
9. Pambili S.S.S.
10. Vulindlela S.S.S.
11. Jikindaba S.S.S.
12. Hilbrow S.S.S.
13. Lutshaya S.S.S.
14. Makukukhanye S.S.S.
15. Bodweni S.S.S.
16. Toli S.S.S.
17. Mgezwa S.S.S.
18. Jiba S.S.S

KOKSTAD

1. Kokstad College
2. Carl Malcomess S.S.S.
3. Mount Currie S.S.S.

MATATIELE

1. Mariazel S.S.S.
2. Moshoeshoe S.S.S.
3. Mt. Hargreaves S.S.S.
4. Lupindo S.S.S.
5. Magadla S.S.S.
6. Zibi Meyer S.S.S.
7. Mosa Sibi S.S.S.
8. Ludidi S.S.S.
9. Mvenyane S.S.S.
10. Maluti S.S.S.
11. Nyaniso S.S.S.
12. Ntlangwini S.S.S.
13. Mnukwa S.S.S.

MZIMKULU

1. Clysdale S.S.S.
2. Rietvlei S.S.S.
3. Loods S.S.S.
4. Mabandla S.S.S.
5. Zwelinzima S.S.S.
6. Jozana S.S.S.
7. D.R.C. S.S.S.
8. Engwaqa S.S.S.
9. Entsikeni S.S.S.
10. Ibisi S.S.S.
11. Ladam S.S.S.
12. Msudukeni S.S.S.
13. Nompumelelo S.S.S.
14. Emaur S.S.S.
15. Mthwane S.S.S.

MOUNT FLETCHER

1. Bethania S.S.S.
2. Lehana S.S.S.
3. Mhlontlo S.S.S.
4. Ramafole S.S.S.
5. Sidinane S.S.S.
6. Ralebitso S.S.S.
7. Tinana S.S.S.
8. Khorong S.S.S.
9. Mokheseng S.S.S.

SKETCH MAP OF THE KOKSTAD AND EASTERN CAPE

SKETCH MAP OF THE KOKSTAD REGION

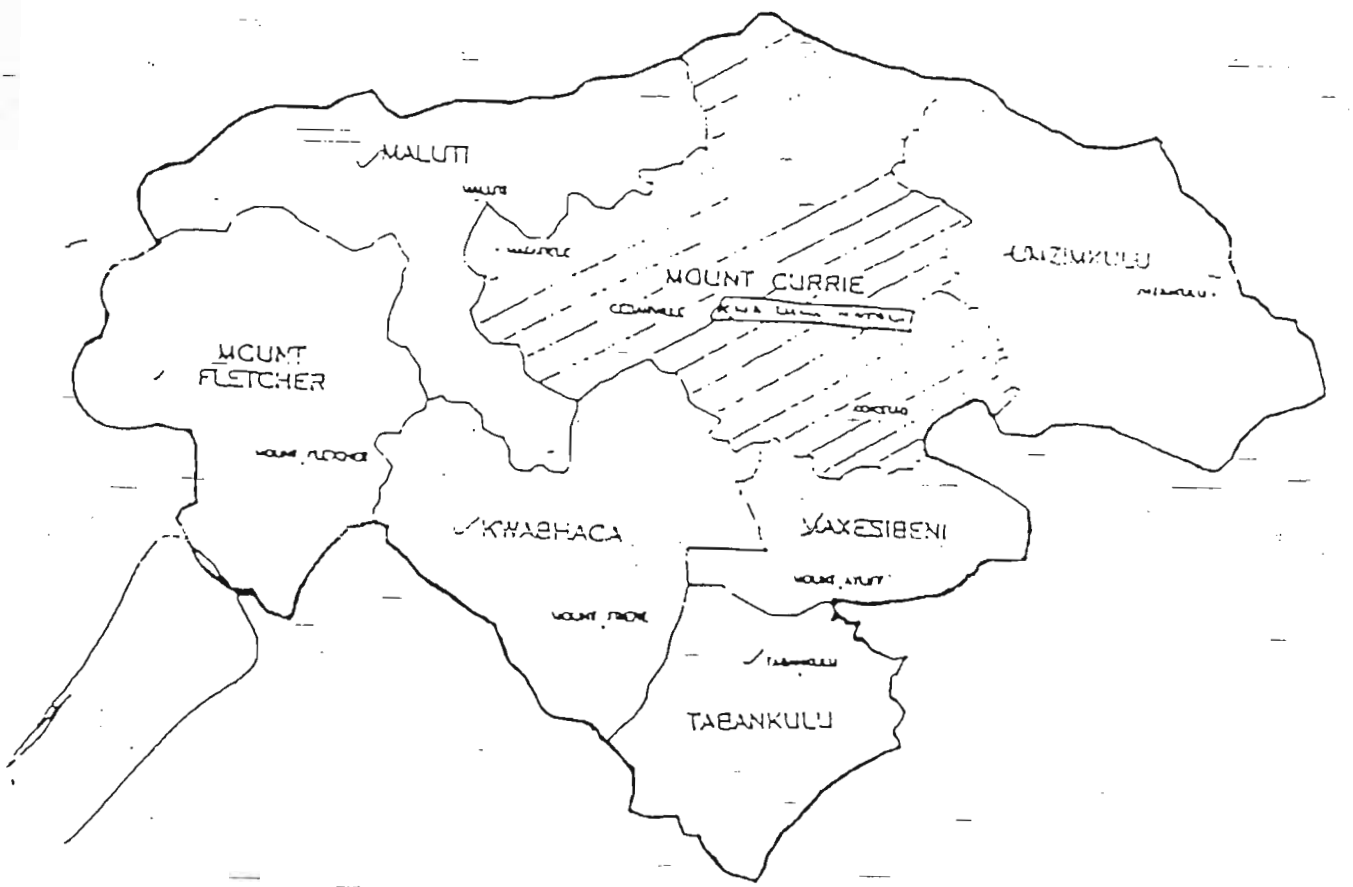


TABLE 6

SUMMARY OF THE SCHOOLS IN THE KOKSTAD REGION

DISTRICT	TOTAL SCHOOLS	TOTAL STUDENTS	TOTAL TEACHERS
BIZANA	170	17,832	1,748
FLAGSTAFF	118	9,020	1,071
LUSIKI-SIKI	191	21,089	1,971
MALUTI	162	20,268	1,691
MT. AYLIFF	100	8,965	927
MT. FLETCHER	147	10,606	1,180
MT. FRERE	164	14,761	1,554
TABANKULU	141	14,275	1,261
UMZIMKULU	168	18,558	1,613

KOKSTAD STATISTICAL DEPARTMENT 1995

APPENDIX 1

TO WHOM IT MAY CONCERN

This questionnaire provided to you is not a test. Its aim is to find out what you think about vocational subjects at secondary school level. Vocational subjects, here, mean the practical subjects taken in schools, like Agricultural Science, Home Economics, Needlework, Clothing, Bricklaying, Plumbing and commercial subjects. You are not required to furnish your name and your opinions would be treated as confidential. Please indicate if you are a teacher or a student.

The information is only for research purposes. You will get feedback as appreciation for your efforts in the form of thankyou cards.

Thank You

Zibokwana S.S. School

(Principal) [N.S. Noncolela]

Kokstad Region

SECTION A

QUESTIONNAIRE TO TEACHERS

		1	2	3	4	5
1.	Most of what we teach in vocational subjects is not useful ?					
2.	Vocational subjects are too difficult ?					
3.	Vocational subjects are more interesting than academic subjects.					
4.	I think teaching vocational subjects is a waste of time.					
5.	There should be more emphasis on teaching vocational subjects in our school.					
6.	After studying Home Economics, housewives would be more efficient.					
7.	All teachers should be encouraged to teach vocational subjects.					
8.	I prefer mental to manual work.					
9.	Fortunate people are in white-collar jobs which do not make them dirty.					
10.	I like working outside in the open air.					
11.	Our secondary schools should prepare students for universities rather than careers.					
12.	Educated people should not be given work that will make them dirty.					
13.	I prefer to be employed by somebody to being self employed.					
14.	Self employment should lead to more success than being employed					
15.	Vocational subjects should be included in a high school curriculum.					
16.	Students enrolled for a vocational course are well prepared to enrol in Technikons.					

17.	High schools should provide a general education which includes vocational subjects.				
18.	Vocational education students do not have a chance to develop their leadership skills.				
19.	Each high school student should be exposed to courses in vocational education.				
20.	Vocational education is not more economical (money saving) when both academic and vocational facilities are included.				

KEY

1 = Strongly Agree

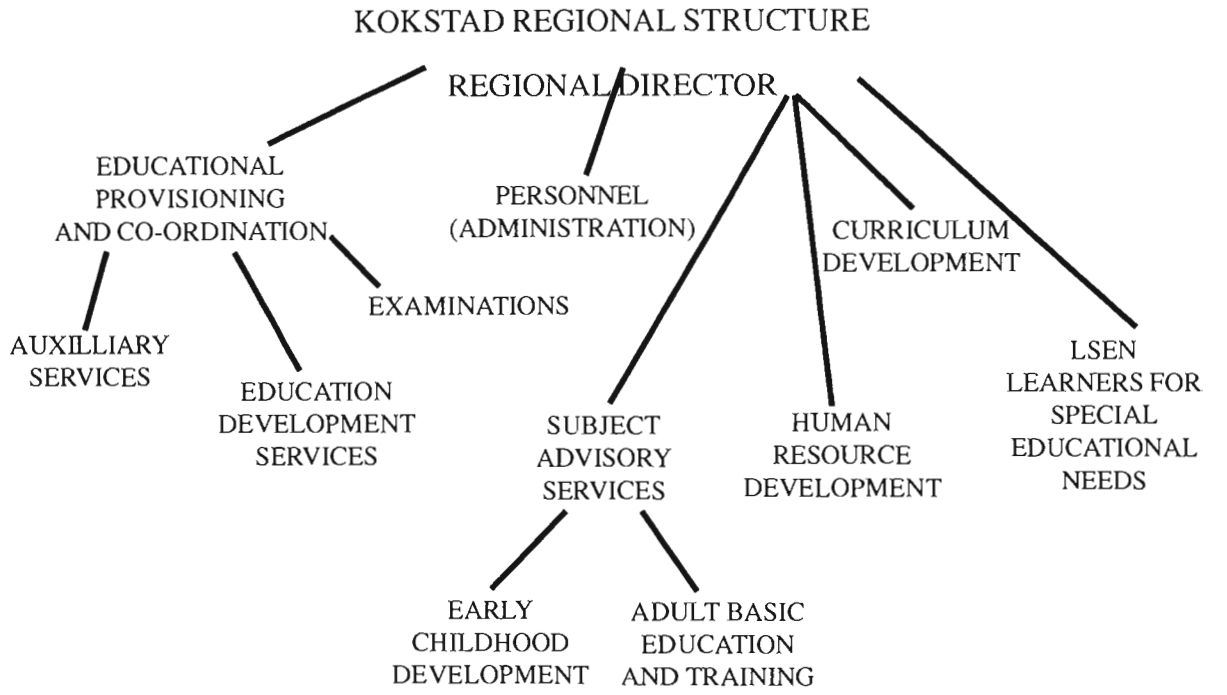
2 = Agree

3 = Undecided

4 = Disagree

5 = Strongly Disagree

FIGURE 3


KOKSTAD REGIONAL STRUCTURE
REGIONAL DIRECTOR
EDUCATIONAL PROVISIONING AND CO-ORDINATION
PERSONNEL (ADMINISTRATION)
CURRICULUM DEVELOPMENT
EXAMINATIONS
AUXILLIARY SERVICES
EDUCATION DEVELOPMENT SERVICES
SUBJECT ADVISORY SERVICES
HUMAN RESOURCE DEVELOPMENT
LSEN LEARNERS FOR SPECIAL EDUCATIONAL NEEDS
EARLY CHILDHOOD DEVELOPMENT
ADULT BASIC EDUCATION AND TRAINING

SECTION B

UNDERLYING REASONS FOR TEACHERS' ATTITUDES TOWARDS VOCATIONAL EDUCATION.

1. Do you think vocational education should be taught to Std. 8 students? Give at least THREE reasons.

YES **NO**

2. Do you think that all senior secondary schools should be exposed to courses in Vocational education? State at least TWO reasons.

YES **NO**

3. Many people take Vocational subjets as time consuming and wasteful. Do you agree or disagree with the statement? In both cases, furnish TWO reasons?

AGREE **DISAGREE**

4. Do your students attend a career guidance exhibition?

YES	NO

If YES, state TWO advantages. If NO, state the reasons.

YES **NO**

5. Are Vocational subjects taken in your school? If YES, give TWO advantages, if NO state reasons.

YES **NO**

STUDENT QUESTIONNAIRE

NAME OF INSTITUTION : _____

SEX : M F

AGE : 14 - 16 yrs

17 - 19 yrs

20 - 22 yrs

23 & over

This scale hase been prepared so that you can indicate how you feel about vocational subjects. By these, we mean the practical subjects taken in school, like Agricultural Science, Home Economics, Needlework, Clothing, Bricklaying, Plumbing and commercial subjects.

Please encircle the letter/s on the right indicating how you feel about each statement (1 - strongly agree, 2 - agree, 3 - undecided, 4 - disagree, 5 - strongly disagree.)

Leave the questionnaire where you are for collection to avoid disturbing others.

Thank you for your co-operation.

I. QUESTIONNAIRE TO STUDENTS

SECTION A

	1	2	3	4	5
1. Most of what I learn in vocational subjects is not useful.					
2. Vocational subjects are too difficult.					
3. Vocational subjects are more interesting than academic subjects.					
4. I think that learning vocational subjects is a waste of time.					
5. There should be more emphasis on learning vocational subjects in our schools.					
6. After studying Home Economics, housewives would be more economical (money saving) at their homes.					
7. All learners should be encouraged to learn vocational subjects.					
8. I prefer mental to manual work.					
9. Fortunate people are in white collar jobs, which do not dirty them.					
10 I like working outside in the open air.					
11. Our secondary schools should prepare learners for universities rather than careers.					
12. Educated people should not be given work that will make them dirty.					

13.	I prefer to be employed by somebody than to be self-employed.					
14.	Self employment should lead to more success than being employed if one works hard.					
15.	Vocational subjects should be included in a high school.					
16.	Learners enrolled for a vocational course are well prepared to enrol in Technikons.					
17.	High schools should provide a general education which includes vocational subjects.					
18.	Vocational education students do not have a chance to develop their leadership skills.					
19.	Each high school learner should be exposed to courses in vocational education.					
20.	Vocational education is not money saving when both academic and vocational facilities are included.					

KEY

1 = Strongly Agree

2 = Agree

3 = Undecided

4 = Disagree

5 = Strongly Disagree

SECTION B

1. Do you think vocational education should be taught to Std. 8 students? Give at least **THREE** reasons for your answer.

YES **NO**

_____

_____

_____

_____

_____

_____

2. Do you think students should attend career guidance exhibitions? Give reasons.

YES **NO**

3. Do you think that all senior secondary students should be exposed to courses in vocational education? State at least two reasons.

YES **NO**

4. 4.1 Is there a Vocational Guidance teacher in your school?

YES **NO**

4.2 At what time does she/he take vocational guidance?

_____

_____

_____

4.3 How many periods, if any, does he/she use to teach vocational guidance.

_____

_____

_____

_____

_____

_____

5. Has your class been visited by a specialist in career guidance from outside your school? If so, was this useful or not?

6. Many students think vocational subjects are a waste of time. Do you agree or disagree? Give reasons.

AGREE **DISAGREE**

Appendix 2

SEMI-STRUCTURED INTERVIEW QUESTIONS

1. Do you think that most students think/feel that if they had vocational qualifications, they would find jobs more easily? Please explain.

YES	NO

2. Students take it that there is no point in studying vocational subjects when there are no jobs anyway. Do you agree? Give reasons.

YES	NO

3. "Since many schools offer vocational education (courses), students could be encouraged to take those subjects." Do you agree with this statement?

Give reasons.

YES	NO

4. Some people argue that vocational education is only suited for low achieving students. Do you agree? Give reasons.

YES	NO

5. Has your class been visited by a specialist in career guidance from outside your school? If so, was this useful or not?

6. Many students think vocational subjects are a waste of time. Do you agree or disagree? Give reasons.

YES **NO**