

UNIVERSITY OF KWAZULU-NATAL

RESEARCH CAPACITY NEEDS OF ACADEMIC STAFF IN THE  
HUMANITIES AT THE UNIVERSITY OF ZULULAND

SMANGELE PRETTY MOYANE

**RESEARCH CAPACITY NEEDS OF ACADEMIC STAFF IN THE  
HUMANITIES AT THE UNIVERSITY OF ZULULAND**

by

Smangele Pretty Moyane

Higher Diploma in Library and Information Science, B. A (Comm. Sci.), B.A Library  
and Information Science (Hons) (University of Zululand)

Supervisor: Prof. Patrick Ngulube

Submitted in partial fulfilment of the requirements for the degree of Master of  
Information Studies (Coursework 66.6 %) – Information Studies Programme, School of  
Sociology and Social Studies, University of KwaZulu-Natal, Pietermaritzburg.

2007

## DECLARATION

I, Smangele Pretty Moyane, hereby declare that the content of this thesis is my own original work, unless it is specifically indicated to the contrary in the text. This thesis has not been submitted for any other degree to any other university.

Signed: 

Name: SMANGELE MOYANE

As the candidate's supervisor/co-supervisor I have/have not approved this thesis for submission.

Signed: 

Name: PATRICK NGULUBE Date: 28/03/2007

## **DEDICATION**

This work is dedicated to my mother, Gugu Moyane. Thank you for the love, care and support you have given me throughout my studies.

May God bless you.

## **ABSTRACT**

The advancement of knowledge through research has long been a major objective of higher education institutions. Most higher education institutions in South Africa strive for being 'excellent' in research. However, the 21<sup>st</sup> century has brought some challenges to institutions of higher education in South Africa. Among the challenges encountered include the increasing pressure on academic staff to either 'publish or perish', obtain funding and a rating from the National Research Foundation and the need to be promoted. Addressing these challenges calls for institutions of higher learning to reappraise their research and development strategies and create an environment in which research of all kinds can flourish. Building capacity in research is crucial, in that it reinforces the institution's ability to improve its overall impact on research.

The present study was conducted to establish the research capacity needs of academic staff in the humanities at the University of Zululand. The study intended to identify research capacity strategies and policies in place at the University of Zululand, determine the level of research support available for academic staff, establish the level of research competencies and skills of academic staff, examine factors influencing research productivity and recommend possible solutions that could lead to the improvement of the research environment at the University of Zululand.

Due to the nature of the problem investigated, the study used a descriptive survey research design, as well as a knowledge audit process to gain an understanding of research capacity needs of academic staff in the humanities at the University of Zululand. Self-administered questionnaires, focus group discussions and semi-structured interviews were used to collect the data. The collected data was analysed using the computer program SPSS and content analysis.

The overall findings revealed that research support provided to academic staff was not adequate and that correlated with the relatively low research productivity in the humanities at the University of Zululand. The study also revealed that grants for research,

access and publication, research networking, sufficient work time, teaching loads, motivation and rewards were cited as the major factors that inhibited research productivity. The study found that the university did not have formal research policy and strategies in place. It was also found that the university did not have a formal research office or centre.

Based on the findings, the study recommended that academic staff should insist that the institution ensures that policies on research are established and written in black and white. The study recommended that the institution should develop a research rapport with academic staff and provide more research support for academic staff, if the university desires to be excellent in research. This would include the development of the research centre/office that would support academics. The study further recommended a similar study, but extended on a larger scale, to include more universities and make comparative analysis of research needs of academic staff.

## **ACKNOWLEDGEMENTS**

I greatly acknowledge the contributions of people and institutions to the accomplishment of this study. I thank Professor Patrick Ngulube, my supervisor, for his guidance, patience, support and encouragement. Thank you for giving me the opportunity and the resources to pursue this work and for directing my efforts to complete it. I also acknowledge the contribution of Ms Pearl Maponya, for her advice on proposal development and comments on Chapter One and data collection protocols. My thesis would not have been possible without the help of the Knowledge Management Project Team members, namely Prof. Patrick Ngulube, Pearl Maponya, Bongekile Mngadi, Lindiwe Magazi and Biziwe Tembe. I also greatly acknowledge the contribution of the National Research Foundation, for providing research funds.

Many people have directly or indirectly contributed to this work. I express my sincere gratitude to my colleagues and friends, particularly Bongekile Mngadi, with her endless love, compassion and support when things appeared to be complicated. They assisted me in understanding scientific research, through endless discussions concerning knowledge management and its application to research capacity building.

I express my sincere gratitude to the staff of the Information Studies Programme of the University of KwaZulu-Natal, for their contributions and constructive comments.

I thank the Lord my Saviour, who granted me His mercy to finish this study. I thank my mother, Gugu Moyane, my brother, Thulani Moyane, and my son, Manqoba Nzama, for their everlasting love, support and encouragement.

## TABLE OF CONTENTS

<b>DECLARATION.....</b>	<b>iii</b>
<b>DEDICATION.....</b>	<b>iv</b>
<b>ABSTRACT .....</b>	<b>v</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>vii</b>
<b>TABLE OF CONTENTS .....</b>	<b>viii</b>
<b>LIST OF TABLES.....</b>	<b>xiii</b>
<b>LIST OF FIGURES .....</b>	<b>xiv</b>
<b>LIST OF APPENDICES .....</b>	<b>xv</b>
<b>LIST OF ACRONYMS .....</b>	<b>xvi</b>
<b>CHAPTER ONE: INTRODUCTION AND BACKGROUND TO THE STUDY .....</b>	<b>1</b>
1.1. Introduction.....	1
1.2. Contextual background of the study .....	4
1.2.1. The University of Zululand.....	4
1.2.2. Challenges and opportunities.....	5
1.2.3. The faculties of the University of Zululand .....	6
1.2.4. The role of research and challenges faced by the University of Zululand.....	6
1.3. Research problem.....	8
1.3.1. The purpose of the study.....	9
1.3.2. Objectives of the study.....	9
1.3.3. Key questions to be asked.....	9
1.4. Rationale for the study .....	10
1.5. Delimitations of the study.....	10
1.6. Literature review .....	11
1.7. Methodology .....	11
1.8. Definitions of terms .....	11
1.8.1. Capacity building .....	12
1.8.2. Humanities .....	12
1.8.3. Knowledge .....	12
1.8.4. Knowledge audit .....	13
1.8.5. Research.....	13
1.9. Proposed structure of the thesis .....	13
1.10. Summary .....	14
<b>CHAPTER TWO: LITERATURE REVIEW.....</b>	<b>15</b>



2.1. Introduction.....	15
2.2. Research in higher education institutions .....	16
2.3. Research challenges facing higher education institutions .....	19
2.4. Building capacity in research within higher education institutions.....	20
2.4.1. Research capacity building at the University of Zululand.....	22
2.5. Factors influencing research productivity in higher education.....	25
2.6. Promoting a research culture within higher education institutions.....	27
2.7. Theoretical perspective of the proposed study.....	28
2.8. The knowledge audit process.....	28
2.8.1. Defining the knowledge audit.....	29
2.8.2. The role of the knowledge audit .....	30
2.9. Summary .....	32
<b>CHAPTER THREE: RESEARCH METHODOLOGY .....</b>	<b>33</b>
3.1 Introduction.....	33
3.2. Qualitative and quantitative research designs.....	33
3.3. Descriptive survey research design.....	34
3.4. Target population .....	35
3.5. Data collection methods.....	35
3.5.1. Questionnaires.....	36
3.5.2. Focus group interviews.....	37
3.5.2.1. Advantages and disadvantages of focus groups.....	37
3.5.2.2. Procedure for conducting focus group interviews .....	38
3.5.2.3. Response rate .....	39
3.5.2.4. Transcription of focus group discussions .....	39
3.6. Semi-structured interviews .....	40
3.6.1. Administering the interview .....	41
3.7. Pre-testing .....	41
3.8. Administering the questionnaires and interview schedules .....	42
3.8.1. Response rate .....	43
3.9. Data analysis procedures.....	44
3.10. Content analysis .....	44
3.11. Ethical considerations .....	45
3.12. Evaluation of research methodology .....	46
3.13. Summary.....	47
<b>CHAPTER FOUR: PRESENTATION OF RESULTS.....</b>	<b>48</b>

4.1. Introduction.....	48
4.2. Background information of the respondents.....	48
4.2.1. Employment history.....	50
4.3. Research capacity strategies and policies in place.....	51
4.3.1. Research capacity strategies and programmes in place .....	51
4.4. Research support available for academic staff.....	53
4.4.1. Research support received from the institution or departments.....	53
4.5. Level of research competencies and skills of academic staff .....	55
4.5.1. Supervision and number of postgraduates supervised .....	57
4.5.2. National Research Foundation rating system .....	60
4.6. Factors influencing research productivity.....	61
4.6.1. Accounts of how these factors affect research productivity .....	62
4.6.2. Teaching and number of modules taught per semester.....	63
4.6.3. Percentage of time spent in teaching .....	63
4.6.4. Administrative role and hours spent in administrative work.....	64
4.7. Possible solutions that could lead to the improvement of the research environment at the University of Zululand .....	64
4.7.1. Suggestions on measures that could be taken to improve support given to academics.....	64
4.8. Summary of the findings from the questionnaire .....	64
4.9. Focus group interview results .....	65
4.9.1. Pressure to conduct research.....	65
4.9.2. Summary of focus group findings.....	66
4.10. Semi-structured interviews .....	66
4.10.1. Level of research output within the department .....	66
4.10.2. Research problems currently faced by academics in the departments.....	67
4.10.3. Motivation to conduct research.....	67
4.10.4. Collaboration of departments with other institutions.....	68
4.10.5. Summary of the findings.....	68
4.11. Summary of the chapter .....	68
<b>CHAPTER FIVE: INTERPRETATION.....</b>	<b>70</b>
5.1. Introduction.....	70
5.1.1. Survey of the academic staff in the humanities at the University of Zululand...	70
5.2. Background information of academic staff.....	70
5.2.1. Demographic information.....	71
5.2.2. Representation by highest qualification.....	71
5.2.3. Representation by rank .....	71
5.3. Research capacity strategies and policies in place.....	72

5.3.1. Research strategies and programmes in place .....	72
5.4. Research support available for academic staff.....	73
5.4.1. Form of research support .....	73
5.4.2. Research endeavours supported by the institution.....	73
5.4.3. Level of research support.....	74
5.4.4. Improvement of research support given to academics.....	74
5.5. Level of research competencies and skills of academic staff .....	74
5.5.1. Involvement in research activities .....	74
5.5.2. Rationale for conducting research .....	75
5.5.3. Research output of academics.....	75
5.5.4. National Research Foundation rating.....	75
5.5.5. Intention to obtain National Research Foundation rating .....	76
5.5.6. Supervision and number of postgraduates supervised .....	76
5.5.7. Years spent in supervising students .....	76
5.5.8. Opinion about training required in supervision .....	77
5.5.9. Further training in research-related skills and the areas where research is required .....	77
5.6. Factors influencing research productivity.....	77
5.6.1. Research network/collaboration.....	78
5.6.2. Administrative work .....	78
5.6.3. Pressure to conduct research.....	78
5.6.4. Publishing .....	78
5.6.5. Research funding .....	79
5.6.6. Research output.....	79
5.6.7. Motivation to conduct research.....	79
5.6.8. Teaching and modules taught .....	80
5.7. Possible solutions which could be implemented in the departments to improve the status of research.....	80
5.8. Summary of the chapter .....	81
<b>CHAPTER SIX: SUMMARY OF FINDINGS, RESEARCH CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>82</b>
6.1. Introduction.....	82
6.2. Conclusions of the study .....	82
6.2.1. Research capacity strategies and policies in place.....	82
6.2.1.1. Research strategies and policies.....	82
6.2.1.2. Research capacity needs .....	83
6.3. Factors influencing research productivity.....	83
6.3.1. Factors that influence research productivity for academic staff.....	83
6.3.2. National Research Foundation rating.....	83
6.3.3. Research collaboration/network.....	84
6.3.4. Training in research-related skills.....	84

6.4. Possible solutions that could lead to the improvement of the research environment at the University of Zululand .....	84
6.5. Recommendations.....	84
6.5.1. Research capacity strategies and policies in place.....	84
6.5.2. Research capacity needs .....	85
6.6. Factors influencing research productivity.....	85
6.6.1. Funding .....	86
6.6.2. Publishing .....	86
6.6.3. Work time and work hours .....	86
6.6.4. Motivation and rewards .....	86
6.6.5. Research collaboration/network.....	87
6.6.6. Training in research-related skills.....	87
6.6.7. National Research Foundation rating.....	87
6.7. Possible solutions that could lead to the improvement of the research environment at the University of Zululand .....	87
6.8. Suggestions for further research .....	88
<b>LIST OF REFERENCES.....</b>	<b>89</b>
<b>APPENDICES .....</b>	<b>100</b>

## LIST OF TABLES

Table 1: National Research Foundation evaluation and rating system based on the quality of research outputs .....	3
Table 2: List of research objectives, key questions and sources of data.....	10
Table 3: Age of the respondents .....	48
Table 4: Highest qualification and the year obtained .....	49
Table 5: Faculty and departments of respondent .....	50
Table 6: Rank and years occupied .....	51
Table 7: Form of research support received from the institution/department .....	53
Table 8: Form of assistance provided .....	54
Table 9: Research endeavours supported and level of support .....	54
Table 10: Involvement in research activities .....	55
Table 11: Reasons for conducting research .....	56
Table 12: Research activities achieved in the period past five years .....	57
Table 13: Areas where research training was required .....	60
Table 14: Factors that influence research productivity .....	61
Table 15: Well-developed research network/collaboration .....	62

## **LIST OF FIGURES**

Figure 1: Gender of the respondents .....	49
Figure 2: Nature of employment and years worked .....	51
Figure 3: Nature of research needs .....	52
Figure 4: Level of research support .....	55
Figure 5: Years spent in supervising student .....	58
Figure 6: Training required in supervision .....	59
Figure 7: Further training in research related skills .....	59
Figure 8: Intention to obtain National Research Foundation rating .....	61

## **LIST OF APPENDICES**

Appendix 1: Rating of institutions by the National Research Foundation .....	100
Appendix 2: Covering letter of the survey instrument for collecting data on the research capacity needs of academic staff in the humanities at the University of Zululand.....	101
Appendix 3: Survey instrument for collecting data on the research capacity needs of academic staff in the humanities at the University of Zululand .....	102
Appendix 4: Covering letter of focus group interview questions for the research capacity needs of academic staff in the humanities at the University of Zululand .....	113
Appendix 5: Focus group interview questions for the research capacity needs of academic staff in the humanities at the University of Zululand .....	115
Appendix 6: Covering letter of semi-structured interviews with the Heads of Departments .....	117
Appendix 7: Semi-structured interviews questions with the Heads of Departments.....	118

## **LIST OF ACRONYMS**

NRF: National Research Foundation.

OECD: Organization for Economic Co-operation and Development.

SAPSE: South African Post Secondary Education.

UNESCO: United Nations Educational, Scientific and Cultural Organization.



## **CHAPTER ONE: INTRODUCTION AND BACKGROUND TO THE STUDY**

### **1.1. Introduction**

Higher education institutions constitute sites for research or knowledge production, referred to as teaching, research and community involvement (Oosterlink and Leuven 2002; Kidwell, Vander Linde and Johnson 2000). In a changing and increasingly competitive environment, the role of higher education in equipping the nation with appropriate and relevant knowledge and skills, in stimulating creativity and innovation in research, is crucial. Through research, institutions of higher learning push forward the frontiers of human knowledge and lay the foundations for human progress.

The advancement of knowledge through research has long been a major objective of South African universities (Walker 2003:1). This advancement may be achieved by engaging academic staff in scholarly activities that deepen their understanding of current issues that challenge government and society. Makgoba (2004:2) stated that “through research, the university is able to maintain and enhance its impact on society and contribute directly to the development and welfare of South Africa and the African continent”. Carnesale (2000:3) pointed out that one of the important tasks in research is to expand the knowledge base. In the context of higher education, research is a crucial academic endeavour and thus it is important that all academics, whether young or old, experienced or less experienced, be encouraged to engage and participate in research activities (Walker 2003:1).

Research is one of the ways in which higher education institutions generate income in order to survive or operate. Therefore there is increasing pressure on academics, in that they are “expected to either publish or perish, in terms of which individual academic staff members are evaluated and promoted on the basis of their research profile” (Maponya 2005:907). On the other hand, many academics feel that the structure of day-to-day life in the university is not designed to encourage, or to make time available for, research (le Roux 2001). Thus, to address these issues and challenges, “institutions of higher learning need to provide and create an environment in which research of all kinds can flourish”

(Walker 2003:1). This could be achieved by establishing research development programmes that would improve the knowledge and skills of academic staff in research and scholarly activities.

Christiansen and Slammert (2005:1047) stressed that “research development is about supporting people in doing research, as well as in learning to do research (better)”. It then becomes very important, and in particular for this study, to understand the research capacity needs of academic staff so that this insight could be fed into the university in terms of which strategies and programmes should be in place in order to improve the research profile of the institution. In addressing the challenges of the 21<sup>st</sup> century, higher education institutions need to provide opportunities for academics to acquire sufficient knowledge and to apply it in practice. They ought to provide the necessary support to academic staff in the generation of new knowledge in their academic research activities.

The Thuthuka Programme of the National Research Foundation conducted an audit study in 2001 on “Women In Research”. The aims of the audit were to establish the position, level of skills and expertise of women researchers, identify the needs of women researchers and identify the barriers faced by women researchers in academic institutions and research organizations. The audit study established, among other things, that there was a need for research training in the areas of report writing, qualitative research analysis and time management (le Roux 2001). This is an indication that the issue of building capacity in research is crucial. It calls for institutions of higher learning to find sustainable ways of improving their capacities and mentoring a number of academic researchers in order to respond to the development priorities of South Africa.

Research is highly regarded in higher education institutions in South Africa. Several higher education institutions use the National Research Foundation’s rating system as a benchmark to determine the quality of the research outputs of academic staff and provide incentives for researchers to obtain high ratings. The rating system thus serves as a benchmarking tool that provides tangible objectives for researchers who aspire to maintain or improve their standing as researchers (National Research Foundation 2005).

According to the National Research Foundation (2005), some of the 2004 ratings per institution across all disciplines were as outlined in Table 1.

**Table 1: National Research Foundation evaluation and rating system based on the quality of research outputs**

<b>Institution</b>	<b>Total Rating</b>
University of Cape Town	227
University of Stellenbosch	205
University of Pretoria	168
University of Zululand	5
University of Limpopo	5
University of Venda	4
MEDUNSA and University of Transkei	3

National Research Foundation (2005)

Table 1 shows that the Universities of Cape Town and Stellenbosch had the highest number of points. The lowest-rated five universities were the Universities of Zululand and Limpopo, which were rated five each, and the University of Venda had a total rating of four. The Medical University of Southern Africa and the University of Transkei had total ratings of three each. Therefore, for an institution such as the University of Zululand to be excellent in research it needs to first understand the research capabilities and skills that its academic staff possess and then to be excellent in research (see Appendix 1 for ratings of other institutions).

This study employed the knowledge audit method to assess the research capacity needs of academic staff in the humanities at the University of Zululand. The knowledge audit is one of the key steps in knowledge management used to identify the knowledge that people possess, the knowledge that is needed to carry out their tasks efficiently, as well as to get a sense of the required knowledge that is lacking (Hylton 2002a:1; Kelleher and Levene 2001; Liebowitz *et al.*, 2001). In other words, the knowledge audit is a review or analysis of the organization's knowledge status.

Wiig (1995) defined the knowledge audit as a:

survey and characterization of the status of knowledge in an organization. It may refer to identifying specific knowledge assets such as patents and the degree to which these assets are used, enforced and safeguarded.

## **1.2. Contextual background of the study**

This section discusses the context of the study and the research challenges and opportunities facing the University of Zululand.

### **1.2.1. The University of Zululand**

The University of Zululand is located in KwaZulu-Natal, South Africa. It was founded in 1959 by an Act of Parliament. It was officially opened in 1961 and was then known as the University College of Zululand. In 1970 the University of Zululand achieved full university status and autonomy (University of Zululand 2006).

The mission statement of the University of Zululand is “to generate knowledge and to excel in research and to disseminate it through publications, teaching and development in partnership with the community” (University of Zululand 2006). In addition, the University of Zululand is the leading rural-based comprehensive university, providing quality career-focused undergraduate and postgraduate education, including research in the social and natural sciences, in partnership with the local and global community.

The University of Zululand has 8 500 students, with a library holding of 303 000 volumes. The university is set to incorporate technikon courses that will eventually constitute 70% of its academic output. The University of Zululand specializes in teaching, research and community service. The university is ideally situated for community-oriented research, especially in the fields of rural development, linguistics, folklore, history, religion, social work, political studies, the natural sciences, education and indigenous law (University of Zululand 2006).

### **1.2.2. Challenges and opportunities**

The National Plan of Higher Education (2001) stressed that “a knowledge society requires appropriate numbers of educated and skilled people to create new knowledge and to translate the knowledge in an innovative way”. To be in line with the National Plan of Higher Education in South Africa (2001), the University of Zululand (2006) stressed that the university is in touch with national and international trends and practices. It is determined to maintain and augment its network of links with peers and partners that include business, industry and government institutions on the home front, but also in Africa and further abroad. For this reason, the University of Zululand has extended its existing links with a wide array of tertiary educational institutions in the United States of America and in Europe, by establishing partnerships with the University of Mississippi, Radford University, Florida Agricultural and Mechanical University and Chicago State University. This might enhance the chances of research funding at the University of Zululand. The university pursues an agenda for scholarly investigation in response to social problems, with community service being systematically integrated into the formal curriculum. The university strives to produce graduates with a high level of research knowledge and skills, who have been educated for citizenship and for active participation in society. Thus it seeks to cultivate relationships with funding agencies at home and abroad.

As an “entrepreneurial university”, the University of Zululand strives to develop a more entrepreneurial and outward-looking culture, in order to take advantage of opportunities, particularly in the business/industrial sector. It strives to expand its academic activities in the fields of research, teaching and community service, to develop the capacity to generate more income and to develop niche areas. By so doing, it might broaden access for youth as well as adults, while emphasizing management and leadership, rather than mere administration - thereby enabling the institution to become more businesslike and research-led (University of Zululand 2006).

The White Paper on Higher Education in South Africa (2003) stated that “universities are under pressure to flourish in a fiercely competitive international climate”. They strive to

enhance their research abilities to compete effectively in a global system. The University of Zululand (2006) affirmed that the university is facing a challenge of competing with other institutions, particularly in research. The university indicated that it strives to capacitate its staff in all fields of education. Therefore the University of Zululand should revitalize its research policies and strategies for it to compete globally.

### **1.2.3. The faculties of the University of Zululand**

The University of Zululand offers facilities for a wide range of studies within the faculties of Arts; Commerce, Administration and Law; Education and Theology; and Science and Agriculture. A wide range of departments within these four faculties offer numerous outcomes-based academic programmes in a modular system aimed at preparing students for a professional qualification and eventual employment.

The humanities at the University of Zululand are made up of African Languages, Afrikaans, Arts and Culture, Communication Science, Criminal Justice, Development Studies, English, General Linguistics, German, History, Library and Information Science, Music and Drama, Nursing Science, Philosophy, Psychology, Recreation and Tourism, Social Work, Sociology and Theology. Humanities have a total number of 146 academic staff (University of Zululand 2006).

### **1.2.4. The role of research and challenges faced by the University of Zululand**

The South African Government has set itself the objective of transforming South Africa into a knowledge society that competes effectively, worldwide (National Plan of Higher Education in South Africa 2001). Research can increase the stock of knowledge in the institutions of higher learning and assist in competing with the global economy (Kaniki 2004:2). Research is the “original investigation undertaken to gain knowledge and/or enhance understanding” (Kaniki 2004:16). Research can play a prominent role in creating new knowledge and translating knowledge in innovative ways.

The University of Zululand (2006) constantly strives for innovation and discovery in all fields, including research. For this reason it is committed to assist in the funding of

various research projects that cover a wide range of subjects. Working closely with local organizations, the university is able to operate the cutting edge of new developments. It is committed to the support of progress, not only in the local community, but also in the country as a whole (University of Zululand 2006).

The White Paper on Higher Education in South Africa (2003) emphasised that it is important for universities to position themselves to be able to contribute to, and benefit from, the opportunities presented by the changing climate and to move towards being research-intensive universities, with nationally recognized and even world-class centres of research excellence. The University of the Free State (2006) stressed that “research does not lend itself easily to control and management – it is dependent on individuals who feel a strong personal ownership of their research”. In addressing some of the issues cited in the White Paper on Higher Education in South Africa (2003), the University of Zululand (2006) indicated that the university has a Faculty of Arts Research Committee, which is dedicated to share knowledge on research activities. The Research Committee is comprised of twenty one members and has an Assistant Research Vice-Chancellor (University of Zululand 2006).

The White Paper on Higher Education in South Africa (2003) stressed that higher education institutions must be “research-led and be expected to research and maintain that level of research excellence that will place them in the front rank of internationally acclaimed institutions”. Similarly, the National Plan for Higher Education in South Africa (2001) stipulated that higher education institutions “must be able to produce research that will build the economy and make South Africans significant players on the global stage”. This lays emphasis on the importance of research production by academics in the institutions of higher learning. In that regard, higher education institutions will make a contribution towards building future generations of intellectual researchers.

The South African government firmly believes that the development of the country and its ability to compete in the global economy requires the involvement of knowledge generators (National Plan of Higher Education in South Africa 2001). The University of

Zululand (2006) is striving to adapt to the changing global climate. It is facing the challenge of becoming competitive within the new structure of higher education in South Africa. This includes curriculum structure and staff development. Effendi (1999:173) stated that academics live in a competitive world, in which the number and perceived quality of publications largely determine their standing in the community. An inadequate publication record can prevent one from gaining promotion or from having a contract renewed. The National Research Foundation (2005) affirmed that the University of Zululand is facing the challenge of being rated. Therefore, for the University of Zululand to be compatible with other institutions it needs to augment its academic staff as the knowledge-producers in the global system.

### **1.3. Research problem**

As discussed in Section 1.1, it is evident that the University of Zululand has a relatively low number of National Research Foundation rated researchers. The National Research Foundation's evaluation and rating of individual academics is based primarily on the quality of their research outputs and is undertaken by national and international peers. Attaining a rating is therefore regarded as a significant achievement (National Research Foundation 2005). There is thus a discernible need for the University of Zululand to continuously nurture its research community and build capacity in all fields of research.

One of the major constraints to research productivity, as identified by Jaensson and Rutashobya (2001), is a shortage of academic staff with adequate exposure to research activities. In order for the University of Zululand to fulfil its mission of "generating knowledge through research and to disseminate it through publications, teaching and development in partnership with the community" (University of Zululand 2006), it is imperative for it to understand and identify the research capacity needs of academic staff. Furthermore, to enhance and strengthen its research, the University of Zululand needs to develop the research capacity of staff to enable it to play a leading role in the provision and creation of knowledge, in all aspects.



### **1.3.1. The purpose of the study**

The purpose of this study was to establish the research capacity needs of academic staff in the humanities at the University of Zululand.

### **1.3.2. Objectives of the study**

To achieve the above purpose the following objectives were formulated:

- To identify research capacity strategies and policies in place at the University of Zululand.
- To determine the level of research support available for academic staff.
- To establish the level of research competencies and skills of academic staff.
- To examine factors influencing research productivity.
- To recommend possible solutions that could lead to the improvement of the research environment at the University of Zululand.

### **1.3.3. Key questions to be asked**

- What are the research capacity needs of academic staff?
- Is there a need to capacitate academics in the area of research? If so, what support or interventions need to put in place?
- What is the level of research skills and competencies of academic staff?
- What are the factors that influence research productivity?
- What possible solutions could be implemented at the University of Zululand to improvement the status of its research?

The objectives of the study and research issues are summarized in Table 2.

**Table 2: List of research objectives, key questions and sources of data**

Research Objectives	Research Questions	Source of data
To identify research capacity strategies and policies in place at the University of Zululand.	What are the research capacity needs of academic staff?	Documents Literature review Questionnaires Focus groups
To determine the level of research support available for academic staff.	Is there a need to capacitate academics in the area of research? If so, what support or interventions need to put in place?	Documents Questionnaires Focus groups Literature review
To establish the level of research competencies and skills of academic staff.	What is the level of research skills and competencies of academic staff?	Questionnaires Focus groups
To examine factors influencing research productivity.	What are the factors that influence research productivity, both positively and negatively?	Literature review Questionnaires Focus groups
To recommend possible solutions that could lead to the improvement of the research environment at the University of Zululand.	What possible solutions could be implemented at the University of Zululand to improve the status of its research?	Literature review Findings Focus groups

#### **1.4. Rationale for the study**

A study of this nature is important in providing solutions that could lead to improvement of the research environment and also to find ways to develop the research capacity needs of academic staff to engage in research and scholarly work. This study may benefit the research planners and policy-makers at the University of Zululand, in that they should have an understanding of the state of the research capacity of academic staff, as well as of how they can formulate research policies that should help improve the research profile of the institution. In addition, the study may inform heads of schools and departments of strategies and interventions that could be implemented to encourage academic staff to engage in the scholarship of research. The study may also create awareness among academic staff in terms of determining where training is needed in research and development.

#### **1.5. Delimitations of the study**

The study will be limited to the academic staff of the humanities. The humanities were chosen because of the focus of the National Research Foundation project, of which this

study forms a part. Due to time constraints and limited resources, the study will not permit the inclusion of all faculties. The study concentrated on the areas of research capacity needs and development, in the context of higher education.

### **1.6. Literature review**

The literature review discussed the research challenges facing higher education institutions and, in particular, South African institutions. The review attempted to provide a deeper understanding of research capacity needs in higher education and examined strategies that influence research productivity. The review focused on how institutions of higher learning can promote a research culture among academic staff. Some aspects of the knowledge audit process were used to gain an understanding of research capacity needs and skills required to engage in research activities examined.

### **1.7. Methodology**

This study used both qualitative and quantitative research approaches. In terms of the latter, the survey research method was used to establish the nature of the research capacity needs of academic staff, to support research activities in the humanities at the University of Zululand. In terms of the former, focus groups were used, as well as semi-structured interviews. Due to the nature of the problem investigated, the study used a descriptive survey research design and a knowledge audit process to gain an understanding of research capacity needs of academic staff at the University of Zululand, in the humanities. Data was collected with questionnaires, focus groups and semi-structured interviews with the nineteen heads of departments, in order to gain in-depth information on research policies and programmes that were meant to support academics in their research.

### **1.8. Definitions of terms**

This section briefly defines important terms that are used in the thesis. By understanding the way these terms are used, the reader will gain a clearer understanding of the nature of the research.

### **1.8.1. Capacity building**

The California Wellness Foundation (2001) defined capacity building as the development of an organization's core skills and capabilities, such as leadership, management, finance and fundraising, programmes and evaluation, in order to build the organization's effectiveness and sustainability. It is the process of assisting an individual or group to identify and address issues and gains the insights, knowledge and experience needed to solve problems and implement changes. Capacity building is facilitated through the provision of technical support activities, including coaching, training, specific technical assistance and resource networking. Trostle (1992: 1321) defined capacity building as a general term for a process of individual and institutional development, which leads to higher levels of skills and a greater ability to perform useful research.

### **1.8.2. Humanities**

According to the *New Encyclopaedia Britannica* (2005:138), humanities are defined as "those branches of knowledge that concern themselves with human beings and their culture or with analytic and critical methods of enquiry derived from an appreciation of human values and of the unique ability of the human spirit to express itself. The humanities include the study of all Languages, Literatures, Arts, History and Philosophy, Religious Studies, Speech and Theatre". According to the University of Zululand (2006), humanities include African Languages, Afrikaans, Arts and Culture, Communication Science, Criminal Justice, Development Studies, English, General Linguistics, German, History, Library and Information Science, Music and Drama, Nursing Science, Philosophy, Psychology, Recreation and Tourism, Social Work, Sociology and Theology.

### **1.8.3. Knowledge**

It is evident from the literature that knowledge is an intrinsically ambiguous and equivocal term. Nonaka (1994), cited in Newell *et al.* (2002:3), defined knowledge as the semantic aspects of information that create knowledge. That is, it is "the way in which information is conveyed and the meaning that the individual infers from the information that creates knowledge". Nonaka (1994), cited in Newell *et al.* (2002:3), stated that what an individual infers from the information is related to their cognitive capacity and

interpretive schema. It is reasonable, therefore, to suggest that different people may infer different things from the same information, which could lead to the creation of new and different knowledge.

#### **1.8.4. Knowledge audit**

Knowledge audit assesses the potential store of knowledge. It is the first part of any knowledge management strategy (Hylton 2002b:1). By discovering what knowledge is possessed, it is possible to find the most effective method of storage and dissemination, which can then be used as the basis for evaluating the extent to which change needs to be introduced to the organization (Liebowitz *et al.* 2001:1).

#### **1.8.5. Research**

Christiansen and Slammert (2005:1051) define research as any systematic inquiry for the purpose of discovering, establishing, substantiating and/or challenging facts and principles.

### **1.9. Proposed structure of the thesis**

Chapter One aims at setting the scene for the entire research study. The chapter provides a conceptual and contextual background to the study. Research activities at the University of Zululand are discussed. It provides contextual background information about the University of Zululand. The rationale for the topic, research problems, purpose of the study, objectives, key questions, scope and delimitations of the study are provided.

Chapter Two presents a review of the role of research and development in higher education and research capacity building. It discusses the research challenges facing higher education institutions. It focuses on how institutions of higher learning can promote a research culture. In order to identify and assess research capacity needs and research gaps of academic staff, the chapter discusses the knowledge audit and its processes.

Chapter Three describes the research design and the methodology underpinning the study. It discusses the rationale for selecting the chosen research method, the population, data collection methods, the development of the questionnaire and the data analysis procedures used.

Chapter Four presents the results. Chapter Five interprets and discusses the results of the study in relation to the literature reviewed. Chapter Six draws conclusions and makes recommendations. It summarizes the main aspects of the research and points at areas for future research work.

#### **1.10. Summary**

Higher education institutions are faced with the challenge of capacitating academics in the discipline of research. They can provide opportunities for academics to acquire sufficient knowledge and to apply it in practice. Higher education institutions can provide the necessary support to academic staff in the generation of new knowledge, thus reinforcing the culture of research.

In view of the above notions, Chapter One introduced the study. Contextual background information about the University of Zululand and research activities were discussed. The chapter presented the research problem, as well as the purpose and the objectives of the study. Key concepts were defined in order to get the reader acquainted with their use in research. The rationale for the topic and delimitations of the study were presented. The proposed structure of the thesis was provided.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1. Introduction

The main focus of this chapter is to review the literature and findings of previous research. A literature review is an in-depth analysis and evaluation of information sources used to gain insight and understanding of the problem under investigation (Busha and Harter 1980:70). Kaniki (1999:17) stated that no research exists in a vacuum but relies on previous studies or writings that put research into perspective. Kaniki (1999:19) pointed out that undertaking a literature review enables one to identify a research problem. It follows, then, that its purpose goes further than merely citing as many sources as possible, as it should highlight pertinent literature and contributions to the field by providing a novel and focused reading of the literature (Kaniki 1999:19).

Leedy and Omrod (2001:70) suggested a number of reasons for the literature review. These include:

- When a researcher knows what others have done, he/she is better prepared to deal with the problem he/she has chosen to investigate with deeper insight and more complete knowledge.
- The literature review reveals sources of data of whose existence one may not have known.
- A review provides researchers with new ideas and approaches that may not have occurred to him/her.
- It enables a researcher to make an evaluation by comparing other, similar efforts, done previously.
- It reveals investigations similar to one's own and can show a researcher how collateral researchers handled these situations.
- It can inform an author about other researchers conducting work in that area – individuals whom the researcher may wish to contact for advice or feedback.

This review begins by discussing the research challenges facing higher education institutions, in particular South African institutions. The review attempts to provide a

deeper understanding of research capacity needs in higher education and examines strategies that influence research productivity. The review focuses on how institutions of higher learning can promote a research culture among academic staff. The knowledge audit is important as it assesses the potential stores of knowledge. Therefore, the knowledge audit process is the method used to gain an understanding of research capacity needs. Skills required to engage in research activities will be examined. In addition, the theoretical perspective of the proposed study will be discussed.

## **2.2. Research in higher education institutions**

The South African research system is by far the biggest in Africa and much of it resides in the university sector (Study South Africa 2004). In the universities, research is part of a national system of research and development, which is a subset of a national system of innovation that covers institutions engaged in formal innovative activities. Academic institutions have for the past several years been charting new directions in pursuing their interconnected missions of scientific research, academic scholarship and publication, teaching and learning and public good, in ways that are responsive to the particular nature of research capacity building in higher education in South Africa (Abrahams and Melody 2004:4).

Hazelkorn (2004) pointed out that “research is the core element of the mission of higher education”. This emphasizes the need for research in the institutions of higher learning. The extent to which higher education institutions are engaged in research and development activities has a key role in determining the status and the quality of these institutions and the contribution which they make to economic and social development. In that regard, certain levels of excellence and recognition by institutions of higher learning should be encouraged for academic staff to be motivated in enhancing their research status (Kaniki 2004:7).

The production and dissemination of knowledge, often referred to as research and development, is viewed as an institutional asset. Research has increasingly been the formative indicator of higher education, arguably playing a critical role in establishing a



new fault-line across higher education institutions and the educational market place. Therefore the contribution and prestige of higher education institutions is being determined more and more by the quality and quantity of their research (National Plan for Higher Education in South Africa 2001).

Glencross and Mji (2001) asserted that research is regarded as a fundamental and indispensable activity. The National Plan for Higher Education (2001) pointed out that higher education institutions have a critical and central role to play in contributing to the development of an information society in South Africa, both in terms of skills development and research. Castells (1993), cited in National Plan for Higher Education of South Africa (2001), stated that “if knowledge is the electricity of the new information to international economy, institutions of higher learning are the power sources on which a new development process must rely”. Therefore the calibre of research and teaching in higher education institutions needs to be reinforced in order to enhance the culture of research.

Cousin *et al.* (2002:1) pointed out that “there has been emphasis in higher education institutions on the need for development in research and teaching to be supported by evidence-based practice”. This should be achieved through increasing the emphasis of research production by academic staff in the institutions of higher learning. There is a need for several institutions to establish their policies and practices to build the capacity for research in teaching and learning (D’Andrea and Gosling 2000). Study South Africa (2004) stressed that research policies should call on universities to be responsive to national goals and development needs.

According to Bawa and Chetty (2006), higher education institutions need to be inventive and innovative so that they may address the most pressing socio-economic challenges. This might create opportunities for industrial base and service sectors to become more competitive. Gumbi (2006) pointed out that research academics at the University of Zululand are encouraged to register their research project with the research committee for

them to be agents of change. This indicated that the University of Zululand is trying its best to increase the numbers of producers of new knowledge.

Higher education institutions in the 21st century are operating in a changed and challenging environment. The emergence of a global knowledge-based economy is dramatically transforming the modes of research production and, thus, advanced higher education institutions (OECD 2005). Institutions of higher learning need to ensure that academics produce sufficient new knowledge for their institution to be identified as one of the leading research institutions. Gumbi (2006) stated that academics at the University of Zululand are required to deliver one academic conference paper per year and publish one academic article, on average, per year, in addition to improving their qualifications up to doctoral level.

Higher education institutions are expected to provide adequate time for academic staff to fulfil the requirements anticipated on research production. This could be achieved through the promotion of sabbatical leave, for academics to have time and space to read and write (le Roux 2001). Furthermore, they should identify and address the main issues and challenges facing higher education institutions. Capacity in research should be built in one way or another. To address some of the challenges faced by academic institutions, academic staff at the University of Zululand taught a balanced proportion of undergraduate and postgraduate students. This should provide sufficient time for academic staff to conduct research (Gumbi 2006).

According to Bawa and Chetty (2006), higher education institutions are expected to have outstanding researchers, with vision and commitment to set up large and complex research groups that can compete nationally and internationally. This is an indication that a good mentorship can play a prominent role in the promotion and encouragement of research productivity in the institutions of higher learning. According to Gumbi (2006), academics at the University of Zululand are supervising and/or co-supervising higher degree students. They identify and groom promising students for higher degree studies. Therefore research productivity would be improved in one way or another.

Building research capacity throughout a research system depends on ensuring that all educational institutions and all professionals in education have a commitment to research and the capacity to engage with it (National Education Research Forum 2000). This includes the development of high levels of specialist expertise amongst career researchers. Gumbi (2006) said that academics at the University of Zululand were functionally computer-literate and were able to communicate electronically. They keep abreast of opportunities for research and development in their disciplines. In addition, they benchmark themselves against national and international norms and standards and meet research criteria for their present post level and work towards doing so within a window period of three years (Gumbi 2006).

### **2.3. Research challenges facing higher education institutions**

According to Taylor (2001), cited in Meyer (2005), the role of research in higher education institutions is vital in the context of how research may improve knowledge creation and research production. South African academic institutions are addressing fundamental challenges of efficiency, excellence and relevance, as they strive to contribute to the knowledge economy (Waghid and Le Grange 2003 cited in Ngulube 2005:5). Waghid and Le Grange (2003), cited in Ngulube (2005:5), argued that higher education institutions are faced with challenges in developing the capacity of research. The challenges encountered include the pressure to secure research grants, obtain rating from the National Research Foundation and the need for individual academics to be promoted.

These challenges have prompted many academics in South Africa to place more emphasis on research than teaching and community service (Waghid and Le Grange 2003 cited in Ngulube 2005:5). With the challenges facing the African continent, higher education institutions, (and, in particular, those in South Africa), may not be in a position to address them without a strong academic and research culture, promoting technological innovation and invention among other disciplines (African Union 2006). Academic institutions should be seen as the core of this imperative, as they are the engines for

producing human resources and pushing forward the frontiers of knowledge (African Union 2006).

Bawa and Mouton (2002:304) emphasised that “the sources of productivity and competitiveness in today’s global economy are increasingly dependent on knowledge and information being applied to productivity”. Kaniki (2004:7) added that “in the academic environment, particularly universities, the promotion process provides a system that in-part ensures quality of an academic or researcher and his/her products.” This is an indication that academics are generally assessed on the basis of their research outputs/or peer-reviewed articles or reports. It is assumed that persons who have gone through the established promotion process have met certain levels of excellence and recognition (Kaniki 2004:7). This demonstrates the importance of the rating system in the institutions of higher learning.

#### **2.4. Building capacity in research within higher education institutions**

According to the National Educational Research Forum (2000), research capacity is enhanced where different parts of the education system are able to communicate effectively with each other about research. This is an indication that academic researchers within the departments, and across institutions, are enabled and encouraged to collaborate. Different kinds of expertise are shared and different ideological approaches are encouraged to engage productively with each other. Therefore, research knowledge, competencies and skills are important in order to encourage flexibility, creativity and innovation and build capacity in research.

The Green Paper for Higher Education in Australia (2001) stated that “knowledge is fast becoming a key factor determining the strength and prosperity of nations”. Hazelkorn (2004) affirmed that research, as a key source of knowledge and new ideas, is central to success in the new knowledge economy. There is an urgent need for academics to generate new knowledge through research, which is the requirement for a nation’s long-term growth and competitiveness. The Green Paper for Higher Education in Australia (2001) stated that higher education institutions play a vital role in the national research

and innovation system. They are the major contributors to the generation and transmission of knowledge in the country at large. Higher education institutions play a prominent part in enhancing the country's reputation as serious and credible contributors to the global development of knowledge.

Through the activities of discovery, shaping, achieving, transmitting and applying knowledge, institutions of higher learning should be in a position to serve society in many ways (Duderstadt 2000). Higher education institutions would need to review their academic programmes and research projects in terms of whether or not they do contribute to the universe of knowledge. The transformation from an industrial society to a knowledge society is characterized by the increased importance of knowledge (Guruz 2003). Therefore it is important to enhance staff research capacity within institutions of higher learning.

The White Paper for Higher Education in South Africa (2003) stated that research in higher education institutions has not kept pace with the rapidly changing demands of the external environment. This might be prompted by observations that have been made, in that "there was a declining of research output over the last few years in research in some universities" (Walker 2003:2; Cooke and Green 2000). As a result, Cooke and Green (2000) identified the need to augment research capacity as a major factor facing academia in institutions of higher learning.

Similarly, the National Plan for Higher Education in South Africa stated that tertiary institutions have:

to secure and advance high-level research capacity which can ensure both the continuation of self-initiated open-ended intellectual inquiry and the sustained application of research activities to knowledge improvement and social development (National Plan for Higher Education in South Africa 2001).

To align with the policy of the National Plan for Higher Education in South Africa (2001), it is important to strengthen the research capacity of academic researchers.

Building research capacity in universities reinforces the institution's ability to improve its overall impact on research. Capacity and competence play a leading role in the enhancement of knowledge in research. Le Roux (2001) emphasized that networking and collaborative research, for sharing information and experience, play a prominent role in research development in higher education. A meaningful interaction and shared strategies with other departments, schools and faculties within an institution can add value in the expansion of research activities.

#### **2.4.1. Research capacity building at the University of Zululand**

Bawa and Chetty (2006) stressed that universities “must develop young researchers and consciously and deliberately induct them into the world of research”. This can be achieved through building research capacity by ensuring that all research academics have a commitment to research and the capacity to engage with it. This should include the development of high levels of specialist expertise among career researchers and in dedicated research institutions.

In order to respond to contemporary society's increasing demand for higher education, the agenda of most higher education institutions has moved on from a desire to simply increase the general education level of the population (OECD 2005). There is now a greater emphasis on harnessing higher education and research to specific scientific research output. In that regard, knowledge and the creation of new knowledge are now perceived as the essential generators of research production for academics. This calls for institutions of higher learning to be more supportive in all ways; as a result, research capacity should be built in one way or another.

Global change and institutional diversification are forcing many institutions to assess their strengths in order to seek competitive advantage, particularly in research production. Similarly, research disciplines are evolving and demands for research relevance and outputs are changing and growing (OECD 2005). For academic staff of the University of Zululand to be more productive, the university provided them with manageable teaching and marking loads, so that they could have adequate time to conduct research (Gumbi

2006). Academic researchers at the University of Zululand are equipped to be competent and skilful in research-related activities. Academics have access to functional computer skills, to be in touch with other academic institutions for the purpose of sharing research knowledge.

According to Gumbi (2006), academic staff at the University of Zululand receive research support as needed. This includes technical assistance and access to equipment. Furthermore, academics are able to take sabbatical or study leave, according to the policy. They are appraised of external offers, invitations and opportunities coming from the outside and assisted to take the opportunities presented. Academics receive positive publicity, as well as structural and systematic recognition for their efforts. While developing as researchers, they have access to effective mentorship, thus building capacity in research (Gumbi 2006).

Bawa and Chetty (2006) stated that universities are expected to guarantee that they have sufficient resources for research. For academic staff to be capacitated in research-related activities, a clear development path is required. This should include flexible entry points as academic researchers, appropriate initial training and induction for them to develop their role as critical researchers. Mid-career development opportunities and an acceptable level of employment should be included in their development path (National Educational Research Forum 2000).

Quality research is the basis for quality human resource development, for the institution and the country (Bawa and Chetty 2006). This is an indication that the quality of knowledge generated through higher education institutions, and its availability to the wider economy, should be increasingly critical to national competitiveness. This poses serious challenges to universities at large, since many institutions have focused on research capacity building as one of the ways of competing with socio-economic challenges (OECD 2005).

Academic staff should participate in relevant research partnerships for appropriate periods (National Educational Research Forum 2000). Gumbi (2006) pointed out that academic staff at the University of Zululand accrued study and sabbatical leave on a day-to-day basis. They took extended periods of leave for work on higher degrees and on research. Sufficient time to conduct research is thus made available. Furthermore, academic staff who improve their qualifications receive, through human resources, a once-off payment equivalent to an annual notch.

Higher education institutions are expected to build a working environment that enables its talented academics to engage fully with the research enterprise (Bawa and Chetty 2006). This should include explicit research planning, supported by funding, for how they propose to develop an appropriate capacity to do and use research. It could include the designation of dedicated research centres in one or other aspect of research and the development of networks between and around those centres. Such centres should have guaranteed additional funding in the medium term, for capacity building activities (National Educational Research Forum 2000).

Bawa and Chetty (2006) emphasized that the “higher education system is chronically under-funded”. The National Educational Research Forum (2000) stressed that, if the system’s capacity for research is to be enhanced, it is important that the funding of research has an explicit capacity-building focus. In addition, a wide range of funding sources should be seen as potentially available to institutions in order to build research capacity. Some funding should be directed towards supporting research partnerships between different kinds of institutions. It should aim at cumulative research programmes, on a longer scale.

Gumbi (2006) revealed that academic staff at the University of Zululand received funding, according to policy, for research and conference attendance. They received two payments from the research committee at the mid-point and, on completion of higher degrees, of R3 000 for a masters and R6 000 for a doctorate. Staff members who register projects with the research committee received funding of up to R20 000 per project per



year, while academic staff members who publish in (SAPSE) journals receive a contribution of up to R1000 towards page fees. Moreover, a proportion of funding generated by publication in SAPSE journals is apportioned to the academic staff member (60%), his/her department (25%), and the research committee (15%) and can be spent on research-related items and activities. Academic staff members who attend international conferences receive up to (40%) of reasonable costs, according to policy. In addition, policy has been approved for academic staff to receive proportions of funding related to higher degree supervision of students (Gumbi 2006).

## **2.5. Factors influencing research productivity in higher education**

Hazelkorn (2004) felt that “defining research activity and measuring output has become an open-debated issue in the institutions of higher learning”. Traditionally, research in higher education institutions has been associated with discovery, or the search for something new, resulting in sustained enquiry via, for example, peer-reviewed publications. The culture of research in the institutions of higher learning is contentiously generated for their benefit. The factors influencing academic staff research productivity have been studied for decades. Section 2.2 discussed the changes and challenges that are facing higher education institutions in South Africa.

A few authors, for example, Finkelstein (1984), Creswell (1985), Dundar and Lewis (1998), Teodorescu (2000) and Brocato (2001), cited in Bland *et al.* (2002), have identified a consistent set of facilitating characteristics that have an impact on academic staff research productivity. These factors have been grouped into three clusters, namely individual, institutional and leadership characteristics. According to Bland *et al.* (2002:228), “individual characteristics are associated with socialization, motivation, content knowledge, basic and advanced research skills, and orientation, autonomy and commitment and work habits”.

On the other hand, institutional characteristics involve factors such as research emphasis, culture, positive group climate, mentoring, resources, sufficient work time, rewards and communication. In addition, leadership characteristics are associated with scholarship,

such as sponsoring, mentoring and the availability of a peer model for other group members; research-oriented, fulfilment of all leadership roles and participative leadership (Bland *et al.*, 2002:228). Dundar and Lewis (1998), cited in Bland *et al.* (2002:226), suggested that individual achievement variables and institutional characteristic variables would predict research productivity across national boundaries. In addition, individual academic staff characteristics such as motivation, professional networks and research training are highly correlated to research productivity (Bland *et al.* 2002:228).

Cooke and Green (2000:60) pointed out that the evidence confirmed that time is a significant factor affecting research productivity. This suggests that academics in higher education institutions require a designated time to undertake research. Wood (1990:90), cited in Cooke and Green (2000:60), stated that administrative duties are considered distractions from the research enterprise, but do not necessarily reduce research productivity. Kiger (1994), cited in Cooke and Green (2000:60), reasoned that it is unlikely that all teaching loads can be reduced, particularly as some departments receive little or no funding for research.

Cooke and Green (2000:60) concurred with Bland *et al.* (2002:228), that motivation could affect the productivity of academic researchers. According to Cooke and Green (2000:60), motivation is “a more critical element in staff development”. Therefore, in order for the academic staff to pursue the culture of research, motivation through departments and/or institutions must be enhanced. This can be achieved through recognition and rewards for their research productivity. As a result, participation in research evaluation by academic staff could be promoted in one way or another.

D’Andrea and Gosling (2002:2) recommended that institutions of higher learning need to encourage and develop a teaching and learning, research-oriented consciousness among academic staff. This could be accomplished through socialisation, particularly by presenting and attending research conferences across and/or within institutions.

Cooke and Green (2000:59) viewed research skills as an inhibiting factor that can influence research productivity. McMahon and Kitson (1997), cited in Cooke and Green (2000:59), was of the opinion that a shortage of research training opportunities is considered a barrier to research productivity. Therefore institutions of higher learning require a mechanism to motivate academics to be more productive in their research.

## **2.6. Promoting a research culture within higher education institutions**

According to Meyer (2005), research is important to the academic component of teaching and learning. Research sustains institutions in the academic field, builds research capacity, and increases research output. Similarly, The Green Paper for Higher Education' in Australia (2001) was of the opinion that the success of higher education institutions' research effort relies not only on the quality of the work of academic researchers but also, vitally, on the institutional environment in which they operate and thus promote the culture of research in the institutions of higher learning.

Promoting a research culture requires higher education institutions to determine their own research strengths and concentrate available resources on creating a critical mass of internationally reputable expertise. Academics need to be encouraged to conduct research and embark on research training that will attract their best chosen fields (Green Paper for Higher Education in Australia 2001). D'Andrea and Gosling (2002:2) stated that "promoting research capacity related to many areas, including teaching and learning, is the priority in developing teaching and learning research-oriented consciousness among academic staff".

In addition, through promotion, academic staff will be encouraged to think of their professional practice as requiring investigation and evaluation, using relevant theoretical frameworks on which to reflect and analyze their teaching. Schools and departments need to be encouraged to form "communities of research", in which academic staff can discuss issues concerning research. At an institutional level, academics need to be encouraged to attend and present papers at conferences. For the institutions to be "fit" in terms of their research output, papers presented at conferences would also need to be published in

accredited journals. As a result, a research culture could be promoted in one way or another (Gosling and Jiwani 1997, cited in D'Andrea and Gosling 2002:3).

## **2.7. Theoretical perspective of the proposed study**

The model of Bland *et al.* (2002), for predicting academic staff and research productivity, informed the study. The model is designed to explain academic staff research productivity at two levels, as suggested in Section 2.4. First, it suggests that there are specific individual, institutional and leadership characteristics associated with academic staff research productivity. Second, it suggests that there is a hierarchical order to these three groups of behaviours. The individual characteristics are essential, but they have more or less power in assuring research productivity, depending on how research-conducive the institution is. Finally, the impact of the institution is mediated by the qualities and style of the leader. In addition, in order to address the importance of research capacity needs, the objectives of the study need the key research framework. This gives the study a strong theoretical framework that can be applied to a range of research issues.

In order to predict the productivity of the academic staff in terms of research, it is of paramount importance to understand the level of research skills and competencies they acquired, as well as that residing in their organization. Therefore the present study employed the knowledge audit method to assess the research capacity needs of academic staff in the humanities at the University of Zululand.

The following section presents the knowledge audit processes that identify and assess research capacity needs and research gaps of academic staff at the University of Zululand.

## **2.8. The knowledge audit process**

One of the critical first steps concerning knowledge management is to conduct a knowledge audit, in order to successfully implement knowledge management (Hylton 2002b; Kelleher and Livene 2001 and Liebowitz *et al.* 2001). It is said that people live in

the ‘knowledge age’ and few would disagree with the proposition that they are bombarded with information on a daily basis (Bowles 2000). Knowledge audits are therefore key activities to ensure that the knowledge gathering and management activities of the organization are relevant and useful for the achievement of the organization’s vision.

According to Bowles (2000), a knowledge audit is a systematic examination and measurement of knowledge and the verification of infrastructural, human and social knowledge, its sources and the capital value of such resources, as part of an organization’s strategic purpose.

Bearing in mind that knowledge is becoming such an important asset, the future and success of organizations will be linked directly to their ability to create, capture, store and disseminate knowledge. Therefore knowing how to do things and being robust in responding to situations guarantees the survival of the organization.

The following sections will focus on the role of a knowledge audit and the processes involved in carrying it out.

### **2.8.1. Defining the knowledge audit**

The knowledge audit is “the all-important first major phase or step of a knowledge management initiative, and is used to provide a sound investigation into the company or organization’s knowledge health” (Hylton 2002a:1; Grey 2000). A complete or detailed knowledge audit offers a wide comprehensive examination, review, assessment and evaluation of an organization’s knowledge abilities, its existing knowledge assets and resources and of its knowledge management activities.

The knowledge audit is a fact-finding analysis, interpretation and reporting activity, which includes a study of the organization’s information and knowledge policies, its knowledge structure and knowledge flow. The audit brings high visibility to the organization’s knowledge assets. According to the National Electronic Library for Health

(2005:1), the knowledge audit helps the organization to identify clearly what knowledge is needed to support overall organizational goals and individual and team activities. The knowledge audit helps the organisation to identify the knowledge that people possess, as well as the knowledge they need to carry out their tasks efficiently (Hylton 2002a:1; Kelleher and Levene 2001; Liebowitz *et al.* 2001).

The knowledge audit is a process of identifying and analysing the way knowledge is used and how it flows within the organization, with verification by difference to both people and existing documents, in order to establish the extent to which they are contributing to an organization's objectives. In other words, the knowledge audit identifies those areas of the organization that are producing knowledge. For this study, the knowledge audit method is used to identify and assess research capacity needs of academic staff at the University of Zululand.

### **2.8.2. The role of the knowledge audit**

The main aim of the audit is to find out how well the organization is using 'knowledge' to meet its objectives. The audit aims to find out how big the gap is between what the organization desires and what is actually happening (Bowles 2000). Henczel (2002) pointed out that knowledge is "universally recognized as the most important strategic asset that an organization has". Liebowitz *et al.* (2002) stated that the objectives of the knowledge audit are "to know what knowledge the company has, what knowledge is missing, who needs this knowledge and how they will use the knowledge to solve the targeted business problem". Therefore, should a company not know what knowledge it has and what knowledge is important, it is not only difficult, but also risky, for the company to implement its knowledge management strategies (Chi Fai *et al.* 2005).

The knowledge audit is a review of the knowledge required by an organization, department or group to carry out its objectives effectively (Abell and Oxbrow 2001:276). The knowledge audit includes needs analysis, information, competencies and communication audits and a review of interactions and knowledge flow. Keller and Levene (2001) stated that "conducting a knowledge audit would show how employees

currently store, access, use and share knowledge that they need to do their jobs”. Similarly, Sallis and Jones (2002:54) stressed that “a knowledge audit can identify key issues within the organization relating to the way knowledge is used and the factors that encourage and inhibit it”. A complete or a detailed knowledge audit offers a wide comprehensive examination, review, assessment and evaluation of an organization’s knowledge abilities, its existing knowledge assets and resources and of its knowledge management. Abell and Oxbrow (2001:276) stated that the knowledge audit is aimed at analysing gaps in order to determine the knowledge needed within the specified field.

The knowledge audit can reveal the knowledge that adds value to the organization (Sallis and Jones 2002:54). The knowledge audit can measure the strengths and weaknesses of the institution. Therefore, when identifying the knowledge that resides within an organization, it is crucial to understand its knowledge environment. This might be done by systematically examining how knowledge is created and how it flows within the organization. Hylton (2002a:1) stated that a good knowledge audit evaluates how knowledge moves through the organization, who has what knowledge and what they do with it.

Rubenstein-Montano *et al.* (2001:308) stressed that, when conducting a knowledge audit, it is important to identify types and sources of knowledge, determine competencies and weaknesses, perform knowledge mapping to identify the organization and flow of knowledge and perform gap analysis. Stevens (2000) explained that a knowledge audit identified the intellectual assets which are of value to the company. The knowledge audit reveals improvements to existing processes and identifies people who have been barriers to knowledge production. In addition, it can clarify what information various people really need and locate the best sources of this information. Stevens (2000) explained that a knowledge audit consists of two major tasks, namely, knowledge mapping and knowledge flow auditing, that is the role of the knowledge audit locates and shows how knowledge flows within an organization.

Hylton (2002b) stipulated that knowledge audit processes include “a structural knowledge audit which facilitates the mapping of internal organizational knowledge sources and the flow of knowledge within the organization and between the organization and its external environment”. The knowledge audit thus charts the formal and informal knowledge and communication networks and the internal and external relationships that exist within the environment and spotlights knowledge flow and knowledge gaps in the organization. Stevens (2000) stated that the audit should be planned and executed using normal project management principles that are planning who will be involved; what the time scales are; what information will be gathered; how the objectives and context of the audit will be communicated; and budget implications.

Bowles (2000) warned that the key to the audit process is to understand that a knowledge audit is only useful when there is a clear understanding of what the overall company objectives are and how the management of the knowledge relates to the achievement of those objectives.

## **2.9. Summary**

It can be argued that the knowledge audit plays a prominent role in most organizations, as it facilitates the transfer of the best knowledge required. The review revealed that, through the use of the knowledge audit process, organizations could understand and know how to do things better and, being fit to respond to situations, ensure the survival of the organization.

Chapter Two discussed the research challenges facing higher education institutions, particularly in South African institutions. It attempted to provide a deeper understanding of research capacity needs in higher education. It examined strategies that influence research productivity. The chapter elucidated how institutions of higher learning can promote a research culture among academic staff.



## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

The main focus of Chapter Three will be on the research design and methodology underpinning the study. The chapter contains information about the population of the study, data collection methods and data analysis procedures. To answer the research questions posed, and also attain the objectives of the study, the descriptive survey research method was employed to gather data. According to Ngulube (2003:194), describing the methods used by a researcher is very important, because it enables another researcher to replicate the study, as well as to ascertain the validity and reliability of the findings.

### **3.2. Qualitative and quantitative research designs**

Qualitative and quantitative research approaches are the major methods used by research methodologies. According to Glesne and Peshkin (1992:7), the purpose of qualitative research is to contextualize and interpret results, using induction to derive possible explanations based on observed phenomena. Qualitative research is conducted in a natural setting and is concerned with viewing experiences from the perspective of those involved. It attempts to understand why individuals react or behave as they do (Creswell 1994:2; Glazier and Powell 1992:6).

The quantitative approach generalizes and predicts findings based on the use of formal instruments such as questionnaires, interview schedules and observation checklists. Ngulube (2005:130) stated that quantitative studies rely on statistical and mathematical techniques. Bless and Higson-Smith (1995:142) emphasised that quantitative research aims at testing theories, determining facts, using statistical analysis and demonstrating relationships between variables and predictions.

Bryman (1988:172), cited in Ngulube (2003:197), constructs a strong case that the differences between the two approaches are technical rather than epistemological. That means that, in practice, researchers can “mix and match” methods according to which

methods best fit the questions under study. In addition, the paradigms can be used together, to demonstrate concurrent validity (Cohen, Manion and Morrison 2000:112).

The present study drew upon qualitative and quantitative research methods. In terms of the latter, the descriptive survey research method was used to establish the nature of research capacity needs of academic staff to support research activities in the humanities at the University of Zululand. In terms of the former, focus groups were used, as well as semi-structured interviews. The studies which utilized qualitative and quantitative research include studies by Maponya (2003), Mosia and Ngulube (2005) and Sinha and Ogilvy and India Associates (2004).

### **3.3. Descriptive survey research design**

Ngulube (2003:200) explained that surveys are concerned with collecting standardised data directly from people about occurrences or incidences of events or instances in varying situations or circumstances. Surveys are descriptive because they seek to make sense of the situation being investigated from a descriptive point of view by measuring variables. People are asked questions and the analysis seeks to examine relationships among variables or possible correlations among two or more phenomena.

Descriptive survey research design presents a picture of the specific details of a situation, social setting or relationship and focuses “how” and “why” questions (Neuman 2000:22). Allison *et al.* (1996:15) stated that descriptive research “sets out to seek accurate descriptions of activities, objects, processes and persons”. Similarly, Wimmer and Dominick (1994:108) revealed that descriptive survey research provides current conditions regarding an identified phenomenon. In most instances it entails enquiring about the respondents’ knowledge, attitudes, practices, current conditions, opinions, perceptions and attitudes about a given situation.

The outcome of the present study is potentially important, as descriptive survey research used to gain an in-depth insight into the phenomenon (Bless and Higson-Smith 1995:42)

showed an understanding of research capacity needs of academic staff in the humanities at the University of Zululand.

### **3.4. Target population**

A target population consists of all the elements or units about whom survey information is collected. Bless and Higson-Smith (2000:84) pointed out that populations are those units or things we examine in order to create summary descriptions of all such units and to explain differences among them. Depending on the size of the population and the purpose of the study, the researcher can study the whole universe or subset of the population, which is referred to as a sample (Israel 1992). For the purpose of the present study, the entire population was studied. The population for this study was 146 academic staff in the humanities, nineteen heads of departments and one research director at the University of Zululand.

The humanities were chosen, as this study is part of the Knowledge Management in Higher Education Research Project, which is funded by the National Research Foundation. Response rate is very important for the success of any survey (Slater 1990:53). A non-response error occurs when a significant number of people do not respond to a questionnaire (Salant and Dillman 1994:20). Therefore, to increase the probability of having a high response rate, the researcher studied the entire population instead of a sample.

### **3.5. Data collection methods**

Triangulation as a mixed-method approach was used in order to enhance the validity and reliability of the study (Babbie and Mouton 2001:275). According to Cohen, Manion and Morrison (2000:112), the use of two or more methods to study a phenomenon is called triangulation. Collecting data from different sources and using various methods augment the chances that the data obtained is reliable and valid. Gay (1996:137) defined validity as the degree to which a test measured what it is supposed to measure. Babbie and Mouton (2001:119) defined reliability as the degree to which a test consistently measures what it sets out to measure, while at the same time yielding the same results. Reliability

is a necessary precondition of validity (Neuman 2000:171). In achieving the objectives of the study, data was collected using self-administered questionnaires, focus group discussions and a semi-structured interview schedule.

### **3.5.1. Questionnaires**

According to Ngulube (2003:34), the term ‘questionnaire’ refers to “a technique of data collection in which each respondent is asked to give answers to the same set of questions and statements in a predetermined order, in the absence of researcher”.

Powell (1997:91) emphasised that the advantage of questionnaires, compared with other data collection tools, is that it is relatively inexpensive and it allows a large number of respondents to be surveyed in a relatively short period of time. In addition, Ngulube (2003:206) stated that questionnaires allow respondents to answer questions at times that are convenient to them.

Questionnaires have limitations, however such as low response rate, reporting errors, completion of the questionnaire by the wrong person and lack of control over how respondents interpret questions or opportunity to correct misunderstandings (Ngulube 2003:206). Despite these limitations, questionnaires have remained popular with many researchers. In this regard, the present study used a self-administered questionnaire to collect data on the identification of research competencies, research capacity needs and research support.

In this study, both open-ended and closed-questions were asked (see Appendix 3). The questionnaire was distributed to respondents using the conventional mail system. According to Ngulube (2003:208), closed questionnaires are easy to code and do not discriminate unduly on the basis of how articulate the respondents are. However, closed-ended questions are criticised in the sense that they can create artificial forced choices and rule out unexpected responses. Open-ended questions provide a frame for the respondent to answer without any restrictions (Ngulube 2003:211). De Vos (1998:160) warned that open-ended questions are time-consuming and their responses are difficult to

code. Furthermore, the coding process often requires that the researcher interpret the meaning of the responses (Ngulube 2003:211).

### **3.5.2. Focus group interviews**

According to the Bureau for Social Research (n.d.), focus groups are carefully planned discussion groups designed to obtain perceptions on a specific area of interest, conducted with six to eight participants, using a skilled moderator. Bryman (2001:336) elucidated that focus groups emphasize a specific theme or topic that is explored in-depth. The discussion allows participants to freely share their ideas; no consensus is determined. Instead, focus group members respond to each other and build upon each others' comments. Frost and Sullivan Consultant (n.d.) affirmed that focus groups are a particularly good method for data collection, to understand how people feel or think about an issue, product, service, or idea.

#### **3.5.2.1. Advantages and disadvantages of focus groups**

The Bureau for Social Research (n.d.) listed the advantages of focus groups:

- They are an excellent method for collecting qualitative data where participants are able to build upon one another's comments.
- Data quality is high, because the focus group moderator can respond to questions and probe for more detailed responses.
- Opinions or ideas of individual group members can be refined by the group, resulting in more accurate information.
- Focus groups usually last 1-2 hours.
- Visual aids can be used and participants can touch, feel and react to items.
- The moderator can control the order of the questions.
- The method does not rely on a respondent's reading and writing ability.
- As the questions of the moderator are directed at a group, rather than at individuals, the degree of spontaneity of the resultant answers is often greater in a focus group interview.

Focus groups have several advantages, but they also have drawbacks:

- The moderator can introduce significant bias into the proceedings, should she/he fail to ask certain questions or delve deeply into specific areas.
- Skilled moderators are difficult to find and, when their services are available, they are often expensive.
- The cost of focus groups is moderate to high.
- Structuring a random sample is a complicated task. The responses of the participants in the interview are likely to be different from the responses of those that did not participate, so non-response can be a serious problem.

Despite these limitations, for the purpose of the present study, focus group participants were key informants, purposively selected from the total population under study. Focus groups were used to collect qualitative data that provide insights, perceptions and opinions of participants (Krueger 1994:19). Focus group interviews were conducted at the University of Zululand, with a total of eight participants in each group. The interviews involved National Research Foundation rated and non-rated academic staff in the humanities at the University of Zululand.

#### **3.5.2.2. Procedure for conducting focus group interviews**

According to Kelly (1999:388), procedures for conducting focus groups refer to the 'rules of play' that give structure to, and set limits on, the group process. In the present study, the procedures were used as a guide to conduct focus group discussions of the academic staff in the humanities at the University of Zululand (see Appendix 5 for the focus group guide). The focus group discussions were facilitated. The facilitator was mainly concerned with keeping the discussion flowing and taking a few notes (Krueger 1994:103). According to Kelly (1999:389), the facilitator needs to be aware of the personal and interpersonal dynamics at work within the group. This includes the marginalisation of certain people, the avoidance of particular topics and the concentration span and comfort level of the group, from beginning to end.

According to Powell (1997:114), “focus groups are usually scheduled for one session of one to two hours, but it may be necessary to hold more than one session, in some cases”. In the present study, the focus group discussions were conducted in October 2006, at the University of Zululand. The focus group discussions were scheduled as two sessions of one hour each.

During the first session, participants were asked to introduce themselves and give details of the period they had been involved in research activities. Thereafter they had an open discussion pertaining to research competencies and skills. In the second session, participants were asked to articulate their experiences on pressure to conduct research and how they can be encouraged to engage and participate in research activities. Participants were asked to share their ideas on the research knowledge gaps identified in their institution. They further discussed measures that could possibly improve the strategies and policies that are in place and help to bridge those gaps.

#### **3.5.2.3. Response rate**

Two focus group interviews were conducted, with a total of eight participants in each group. The interviews consisted of National Research Foundation rated and non-rated academic staff in the humanities at the University of Zululand. The focus group discussions were conducted in October 2006, in the Arts Auditorium Building. The information was relatively similar and therefore there was no need to conduct more focus group discussions. The invitations for the focus group interviews were sent a month in advance and reminders a week before the time of the interviews (see Appendix 4). The attendance of academic staff at focus group interviews was fairly good since eight participants were attended.

#### **3.5.2.4. Transcription of focus group discussions**

According to Maponya (2003:62), the main purpose of transcription is to reproduce as closely as possible the discussion as it happened, to see how the group discussions went. In the present study, all tapes used in the focus group discussions were transcribed for the analysis of data. Different comments for different participants within the groups were

compared, until themes emerged. Transcribing focus group discussions was complicated and time-consuming. The reason was that one needs to take into account who is talking in the session, as well as what is said. This is sometimes difficult, since people's voices are not always easy to tell apart.

### **3.6. Semi-structured interviews**

According to Ngulube (2003:222), interviews are "one method by which a phenomenon may be studied". Interviews can be used for verifying, gathering facts and explanations. Higson-Smith (2000:107) explained that interviews involve direct personal contact with the participant who is asked to answer questions. Interviews give the researcher the opportunity to know people quite intimately. This permits the researcher to understand respondents better, that is how they feel or think.

Van Vuuren and Maree (1999:281) pointed out that interviews have been characterised as having a high response rate. In-depth information can be derived from semi-structured interviews and probing. Bless and Higson-Smith (1995:110) stated that semi-structured interviews allow for the discovery of new aspects of the problem by investigating, in detail, some of the explanations given by respondents.

Interviews have been criticized for being time-consuming and expensive. The wealth and quality of the data gathered are strongly dependent on the skill of the interviewers (Van Vuuren and Maree 1999:282; Bless and Higson-Smith 1995:110). The weakness of semi-structured interviews lies partly in the fact that if the interviewers are not competent they may introduce bias. Thus recording the comments of participants in a discreet matter, because of the great variety of answers and their complexity, might be efficient to the researcher for later assessment and transcription of the recorded information.

In the present study, semi-structured interviews were conducted with 19 heads of departments in the humanities at the University of Zululand, in order to gain in-depth information on research policies and programmes that are meant to support academics in the area of research (see Appendix 7). Semi-structured interviews were conducted with a



fairly open framework. This allowed for focused, conversational and two-way communication. The intention was to conduct a semi-structured interview with the Director of Research in order to get an in-depth insight into the policies and programmes that were in place, but that was not possible because the Director of Research was on sabbatical leave and the person acting in her position could not spare the time.

### **3.6.1. Administering the interview**

The 19 heads of departments of academic staff in the humanities at the University of Zululand were personally interviewed in a face-to-face situation, to get their views on research strategies and policies that were in place at the university. It has been argued that validity is a persistent problem in interviews (Cohen, Manion and Morrison 2000:120). Validity can be compromised by asking leading questions. Bias on the part of both the interviewer and the respondent can be a problem. In the present study, the researcher tried to be equally friendly and open with all staff interviewed, so as not to create researcher bias. Leading questions were avoided, because they tend to influence the answers of the respondent (Morrison 1993:66). All questions asked were standard, taken from the interview schedule (see Appendix 7).

### **3.7. Pre-testing**

Pre-testing is the most important component in survey research design. When a researcher is constructing a questionnaire there is always the possibility of error. Therefore pre-testing the questionnaire is necessary to uncover any defects in questions (Babbie and Mouton 2001:244). Powell (1997:105) stressed that questionnaires require to be pre-tested or evaluated to improve the standards of questioning, before they are used in a survey. To minimize the ambiguity of the data collection methods, pre-testing was used, as suggested by Babbie and Mouton (2001:244).

Powell (1997:106) stated that a pre-test serves as a trial run that allows the researcher to identify potential problems in the proposed study. Although this means extra effort at the beginning of a research project, the pre-test enables the researcher, if necessary, to revise the methods and logistics of data collection before starting the actual fieldwork. As a

result a good deal of time, effort and money can be saved in the long run. Pre-testing is simpler and less time-consuming and costly. In this study the questionnaires and interview schedules were pre-tested with 15 academic staff at the University of KwaZulu-Natal, Howard College Campus, before the study was conducted. This allowed the researcher to determine whether or not all instructions and questions in the questionnaire were understood. The questionnaires and interview schedules were personally distributed to 15 academic staff at Howard College Campus, in August 2006. The pre-testing took three days. The researcher found that there were corrections that were required to be made to the instrument. Those who were pre-tested raised the issue of the length of the questionnaire. Two respondents commented on the clarity of instructions and three commented on the duplication of questions. As a result, the researcher reduced the length of the questions from 70 to 50, through the elimination of duplication. To improve on the clarity of instructions the researcher introduced a section on general instructions for filling in the questionnaire that applied to the whole instrument, in addition to specific instructions, where they were necessary.

Although the questionnaire remained long, this is justifiable and inevitable in view of the research issues that had to be covered. The longer questionnaire was considered feasible in view of the motivation of the respondents and their interest in the study. Neuman (2000:246) affirmed that there is no absolute proper length for questionnaires. He also stressed that responses dropped significantly for longer questionnaires. Neuman (2000:246) further pointed out that with highly educated respondents long questionnaires might be successful.

### **3.8. Administering the questionnaires and interview schedules**

The researcher distributed the questionnaires to academic staff in the humanities at the University of Zululand, in September 2006. During the first trip the researcher was able to speak in person to 42 of 146 respondents. Where the researcher was unable to locate the actual respondent, the questionnaire was placed in the internal mailbox of the respondent. The researcher made subsequent visits to those offices where respondents

were not previously present and managed to speak to all respondents at various times. In spite of all these efforts, the response rate was 55%.

The respondents were given seven days to complete the questionnaire. The respondents were provided with addressed return envelopes. Simultaneously, the covering letter stated clearly where they should return the questionnaires to (see Appendix 2). However, two weeks after the questionnaires were self-distributed, none of the respondents had completed and returned the questionnaires. The researcher visited the respondents' offices again, to remind them and to encourage them to complete the questionnaires. During that trip, the researcher managed to glean five questionnaires out of 146 (7%). On October 2006 the researcher visited the respondents' offices for the third time and stayed for two days at the University of Zululand to encourage them to complete and return the questionnaires while the researcher was present. The trip was more successful than the others, because the researcher managed to obtain 29 (42%) questionnaires. The questionnaire response rate is further discussed under 3.8.1.

### **3.8.1. Response rate**

Response rate to questionnaires is an important concern in survey research. Authorities are not agreed on what constitutes an adequate response. Anything below 50% is considered to be poor and over 90% as excellent (Neuman 2000:267). According to Babbie and Mouton (2001:261), a response rate of 50% is considered adequate for analysis, while 60% is good and 70% is considered very good. Shipman (1997:63), cited in Ngulube (2003:220), argued that although Hite (1994) used a response rate of 4.5% in his study; the normal figure was between 20% and 30%. Therefore the present study was considered adequate for analysis, since it obtained a response rate of 55%.

Eighty one (55%) respondents out of 146 in the humanities at the University of Zululand completed and returned the questionnaires. The researcher had to visit the respondents' offices several times and make follow-up telephone calls, since other respondents stated clearly that they did not respond to emails because of limited time. Some even confessed that they did not look at them, but just deleted them. In general, the relatively low response rate was because four masters students from the same department as the present

researcher sent questionnaires to one institution at the same time. This might have caused a low response rate, since academics were inundated by questionnaires from one institution. The response rate of 81 (55%) achieved by this study was considered adequate for analysis. Furthermore, the researcher conducted two focus group interviews and a semi-structured interview to increase the validity of the results.

### **3.9. Data analysis procedures**

In quantitative approaches to empirical research, “analysis” refers to the stage in the research process where the researcher, through the application of various statistical and mathematical techniques, focuses separately on specific variables in the data set. Data are the raw material for research and the purpose of the analysis is to transform the unordered information into something meaningful (Garaba 2005:66).

According to Goldhor (1972:190), the purpose of analysis is to throw light on the truth or falsity of the hypothesis. Any process of data analysis is to condense information in a body of data into a form that can be easily comprehended and interpreted. For the purpose of this study, data obtained from the questionnaires was analysed using the computer program SPSS 13.0 for Windows. According to Powell (1997:67), the SPSS system is a comprehensive, relatively easy-to-use computer program for statistical analysis, report writing, tabulation and general-purpose data management.

Data reduction relating to open-ended questions was done manually, using content analysis. A coding key was drawn up in which numerical values were assigned to all close-ended or limited answer options in the questionnaire. The data was entered on a data matrix design using SPSS. Presentation of data was in the form of ratios, tables, percentages and other forms of graphic presentations such as charts.

### **3.10. Content analysis**

In the present study, data from focus groups and semi-structured interviews tended to be qualitative in nature. Open-ended questions in the questionnaire and data from focus groups and the semi-structured interview was content analysed. According to Babbie and

Mouton (2001:383), content analysis is collecting and organizing information systematically in a standard format that allows analysts to draw a conclusion about the characteristics and meaning of recoded material. The use of focus groups and semi-structured interviews was aimed at obtaining in-depth information on research capacity needs of academic staff in the humanities at the University of Zululand.

The first step in content analysis involved the construction of categories. According to Sarantakos (1998:281), cited in Ngulube (2003:229), a category is a “set of criteria which are integrated around a theme”. The objectives of the study stated in Section 1.3.2 of Chapter One were the building blocks for the categories that were selected. The categories were examined using one of content analysis’ basic methods, namely, conceptual analysis or thematic analysis. The analysis involved quantifying and tallying the presence of a concept. After identifying the categories data was coded. The coded data presented some evidence about the leading categories and trends. Some of the data was presented in narrative form or was integrated into the quantitative data collected by means of questionnaire and focus group and semi-structured interviews for analysis using SPSS.

### **3.11. Ethical considerations**

Churchill (1992:68), cited in Ngulube (2003:233), pointed out that ethics are key to developing moral standards that can be used in situations where there can be actual harm or potential harm to an individual or group. Cohen, Manion and Morrison (2000:246) stressed that questions of access, harm, deception, secrecy and confidentiality are all issues that a researcher has to consider and resolve in any research context. Informed consent occupies a central place in the ethics literature.

In the present study the respondents to the questionnaires and those that participated in the interviews were told the purpose of the study. The respondents to the questionnaire and those who participated in the interviews were assured that all answers would be treated anonymously, and no identification of individual responses would occur as responses would be aggregated, and they willingly took part.

### **3.12. Evaluation of research methodology**

A number of data collection tools were used and this combination of measuring instruments constitutes triangulation. The most important advantage of this method is that it tries to counteract the weaknesses of other tools, in-as-far as data collection is concerned. The biggest drawback is that survey methods experience a low response rate. Non-response rate is not only affected by the percentage of the units of analysis that fail to respond to the questionnaire, but by the way the respondents complete the questionnaires and the uneven impact of questionnaire structure and question wording (Goder 1987 cited in Ngulube 2003:235). Pre-testing the instruments before administering the questionnaires was aimed at minimizing the ambiguity of the data-collection instruments.

Sproull (1995:136), cited in Ngulube (2003:235), stated that “no one type of research design is universally better or worse than any other. They are different and used for different purposes”. The fact is, the research design is determined by what the research intends to investigate. The use of more than one method in data collection for the present study was aimed at enhancing the validity and reliability of the results. Thus, both qualitative and quantitative methods were used to collect the data. Cohen, Manion and Morrison (2000:112) explained that qualitative and quantitative approaches could be used together to demonstrate concurrent validity.

Babbie and Mouton (2001:119) stated that the validity of a measurement is the extent to which the instrument measures what it is supposed to measure. Reliability of a measurement instrument is the extent to which it yields consistent results when the characteristic being measured has not changed. The four common methods of testing validity are content validation, criterion-related validation, face validity and construction validation (Neuman 2000:169). In the present study, the questionnaire was designed in line with suggestions in the objectives of the study, as well as in the literature, so that it would yield reliable results. The content of the questionnaire was validated through pre-testing.

The study utilised the survey research method, particularly descriptive research design. This research design was applicable for gaining an understanding of research capacity needs of academic staff in the humanities at the University of Zululand. The descriptive research method was utilized because of its strength in-so-far as it is economical and there is a rapid turn-around time in data collection (Creswell 2003:154).

### **3.13. Summary**

This chapter presented a methodology that was used to gain an understanding of research capacity needs of academic staff in the humanities at the University of Zululand. The population of the study was described. Data collection methods were discussed and explanations were given why each instrument for data collection was selected. To supplement the study, a descriptive survey research design was described as the main research procedure employed by the study. Ethical standards, which informed the research process, were presented. The units of analysis and the methods used for data collection and analysis were discussed. The chapter concluded with an evaluation of the research methodology of data collection.

## CHAPTER FOUR: PRESENTATION OF RESULTS

### 4.1. Introduction

The purpose of this chapter is to present the results of the study in relation to the objectives of the study. The objectives of the study were to:

- identify research capacity strategies and policies in place at the University of Zululand;
- determine the level of research support available for academic staff;
- establish the level of research competencies and skills of academic staff;
- examine factors influencing research productivity; and
- recommend possible solutions that could lead to the improvement of the research environment at the University of Zululand.

The population for the present research consisted of 81 out of 146 academic staff (55%) in the humanities at the University of Zululand who responded to the questionnaire. Twelve out of 19 heads of departments were interviewed (63%) and two focus group discussions were held, which consisted of eight participants in each group. In view of the triangulation of methods, it is possible to generalize the findings to the total population. The following section presents findings on areas covered in the study.

### 4.2. Background information of the respondents

Questions 1, 2 and 3 on age, gender and population aimed to find out if there is any difference in academic research productivity due to age, gender and population. Seventy seven (95%) out of 81 (100%) responded to the question. Sixty four (79%) were African; 14 (17%) were White. Four (5%) respondents did not indicate their age group, while three (4%) of the respondents did not record their population group.

**Table 3: Age of the respondents N=77**

Age	Frequency	Percentage
36 - 45	46	60
46 - 55	17	22
Over 55	14	18
Total	77	100



Table 3 shows that the majority of the respondents 46 (60%) were between the ages of 36 and 45. The group between 46 and 55 years accounted for 17 (22%) of the respondents and the respondents who were over 55 numbered 14 (18%).

**Figure 1: Gender of the respondents**

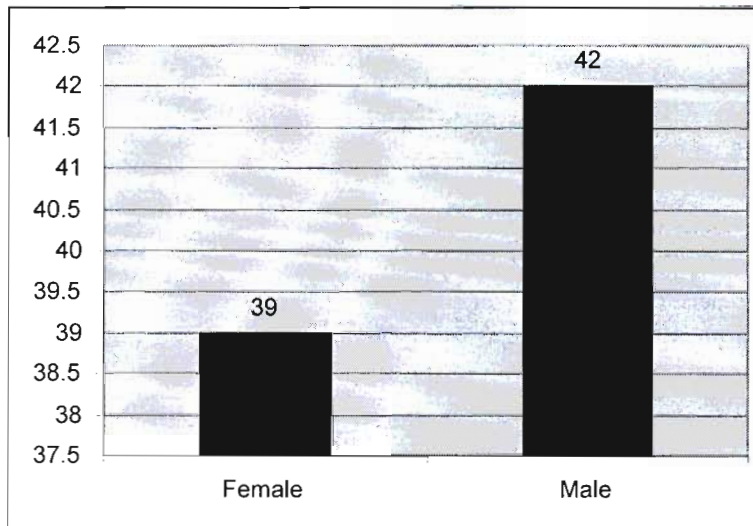


Figure 1 shows that 42 (51%) of the respondents were male, while 39 (48%) were female. This is an indication that male academics are more numerous than female academics.

**Table 4: Highest qualification and the year obtained N=81**

Year obtained	PhD		Masters	
2001	12	15%	-	-
2002	9	11%	-	-
2003	21	26%	-	-
2004	21	26%	9	11%
2005	-	-	9	11%

The questions on highest qualification and the year obtained were asked because the more highly qualified staff would possibly answer differently from less qualified staff. It was important to find out the year the respondents received their qualifications. The most common highest level of qualification recorded was a doctoral degree. Over a third 63 (78%) of the respondents had a doctorate, while 18 (22%) had masters degrees.

**Table 5: Faculty and departments of respondent****N=81**

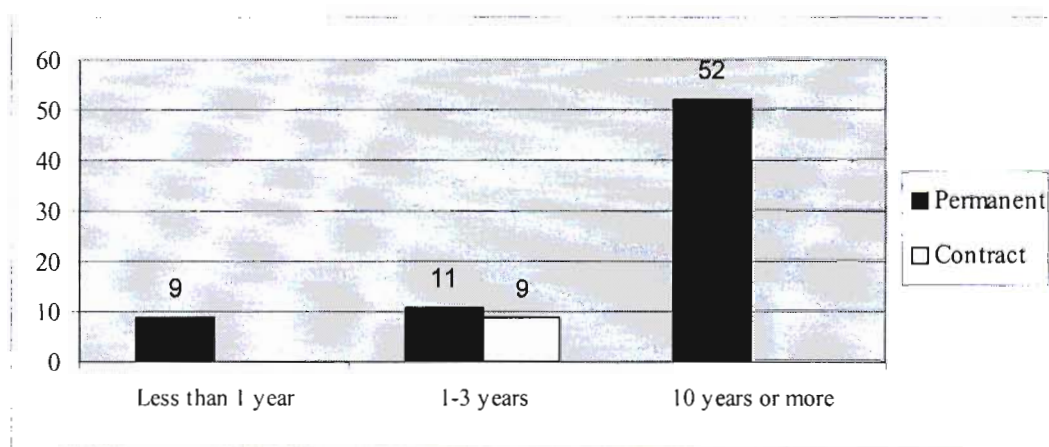
<b>Departments</b>	<b>Frequency</b>	<b>Percentage</b>
Criminal Justice	9	11
Library and Information Science	6	7
Linguistics	5	6
Centre for Integrated Rural Development	9	11
Philosophy	9	11
Social Work	18	22
Sociology	7	9
Communication Science	3	4
English	5	6
Nursing Science	4	5
Music and Drama	2	2
Psychology	4	5
<b>Total</b>	<b>81</b>	<b>100</b>

Questions 5 and 6 on faculty and departments were linked. The reason for these questions being asked was to establish the different departments the respondents belonged to. Table 5 gives the details of their departments. The highest number came from the Department of Social Work.

#### **4.2.1. Employment history**

The questions on the nature of employment and the number of years worked in the institution were asked because research productivity of longer-serving staff members could be different to that of recently employed academic staff. The findings indicate that the overwhelming majority of respondents, that is 72 (89%), were permanent, while nine (11%) of the respondents had contracts of one to three years. The findings indicate that most respondents 52 (64%) had worked more than ten years in the institution. Only nine (11%) of the respondents indicated that they had worked for less than one year. Eleven (14%) of the respondents had worked for one to three years. Figure 2 gives further details.

**Figure 2: Nature of employment and years worked (N=81)**



**Table 6: Rank and years occupied**

**N=81**

Rank	Number of years in the rank				
	Less than 1 year	1-3 years	4-6 years	7-9 years	10 years or more
Professor	-	9	-	-	-
Associate professor	-	-	12	-	-
Senior lecturer	-	-	-	21	21
Lecturer	9	9	-	-	-

Questions on rank and years in the rank were asked. Table 6 shows that the most common rank 42 (52%) was senior lecturer, followed by lecturer, which had 18 (22%). The majority of the respondents 21 (26%) occupied their rank between seven and nine years and ten years and above.

#### **4.3. Research capacity strategies and policies in place**

The following section outlines research capacity strategies in place in the humanities at the University of Zululand.

##### **4.3.1. Research capacity strategies and programmes in place**

Respondents were asked to identify the programmes or strategies in place to support research within their departments. Respondents revealed that they attended research conferences and seminars, where they presented research papers within the departments and also provided feedback on the papers presented. Participants stressed that they

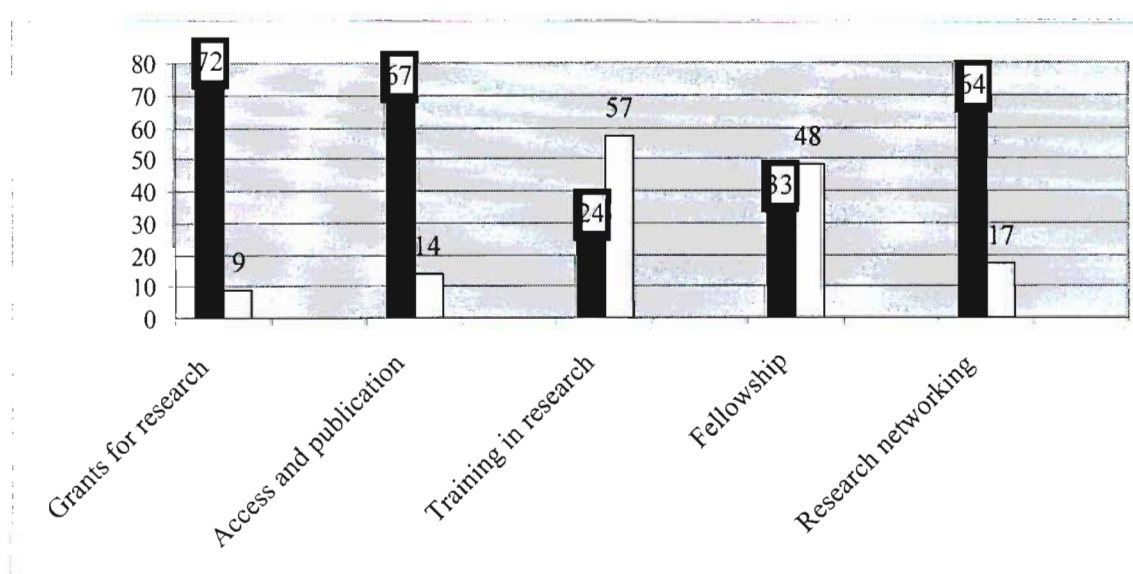
supervised postgraduate students, including doctoral and masters students, as part of the research programmes in place in their departments. Participants said that the National Research Foundation supports postgraduate students through funding their research projects.

Other respondents disclosed that they did not have programmes or strategies in place to support research within their departments. They mentioned that research was more on an individual basis than departmental. They had tried to collaborate with each other as staff members but it did not work. As a result, research was their personal interest rather than an institutional interest. They stated that sometimes they helped each other by making suggestions on each others' research projects.

A follow-up question asked respondents to indicate if their institution had a research policy in place. The question aimed to find out if the research policy addressed the research problems faced by participants. Most respondents stated that they had not heard about a research policy in their institution.

**Figure 3: Nature of research needs**

**N=81**



The question on the research needs of academic staff was asked in order to determine the research strategies that are in place at the University of Zululand. This might locate

interventions and ways that could possibly encourage academic staff to engage in the scholarship of research, thus improving productivity in research. All respondents did not answer the question. A follow-up question asked the respondents to indicate the nature of the research needs of academics. Figure 3 shows that the majority, 72 (89%), of the respondents required the grants for research. The second largest group 67 (83%) of the respondents pointed out that they need access and publications. Sixty four (79%) of the respondents stated that they use research networking. Figure 3 shows that research needs such as training and fellowship are the least required by academics.

#### **4.4. Research support available for academic staff**

The following section discusses the research support available for academic staff within the institution and departments.

##### **4.4.1. Research support received from the institution or departments**

The respondents were asked to discuss the form and level of research support received from their institution or departments. Respondents were asked to indicate if more needs to be done in the related area. All respondents stressed that the support received from their departments was not enough. Therefore the funding policy required more attention from their institution. Most respondents argued that research support depended on whom one knew, either in the institution or department. They stated that they encouraged each other to write papers and present them at conferences. They pointed out that the support received from their departments included invitations by other departments to present research papers, in order to share research-related knowledge.

**Table 7: Form of research support received from the institution/department (N=81)**

<b>Form of research support</b>	<b>Yes</b>	<b>No</b>
Financial support received from the institution	43	38
Financial support received from the department	45	36
Emotional support received from the institution	21	60
Emotional support received from the department	29	52
Resources support such as equipment, facilities, received from the institution	43	38
Resources support such as equipment, facilities, received from the department	30	51
Time received from the institution	39	42
Time received from the department	39	42
Administrative support received from the institution	27	54
Administrative support received from the department	30	51



A follow-up question on the form of research support by the institution and departments was asked. Table 7 shows that 45 (56%) of the respondents indicated that they received financial support from their departments, while 29 (36%) received emotional support from their departments. Forty three (53%) of the respondents indicated that they received resources support from their institution. Table 7 also shows that 39 (48%) of the respondents received time support from their institution and their departments. Thirty (37%) of the respondents received administrative support from their departments.

**Table 8: Form of assistance provided**

**N=81**

<b>Assistance provided</b>	<b>Yes</b>	<b>No</b>
Assistance to students or other staff members to publish	81	-
Assistance in co-publishing with students	9	72
Assistance in co-publishing with other members of staff	21	60
Assistance in arranging mentors	30	51
Assistance in practical advice	72	9

The passion to assist others to publish would possibly enhance research productivity in one way or another. The results found that all respondents assisted students or other staff members to publish. The findings indicate that 72 (89%) of the respondents were providing assistance in practical advice. Eleven percent of respondents were co-publishing with students. Twenty six percent of respondents were co-publishing with other members of staff, while 30 (37%) of the respondents were arranging mentors. Table 8 gives further details.

**Table 9: Research endeavours supported and level of support**

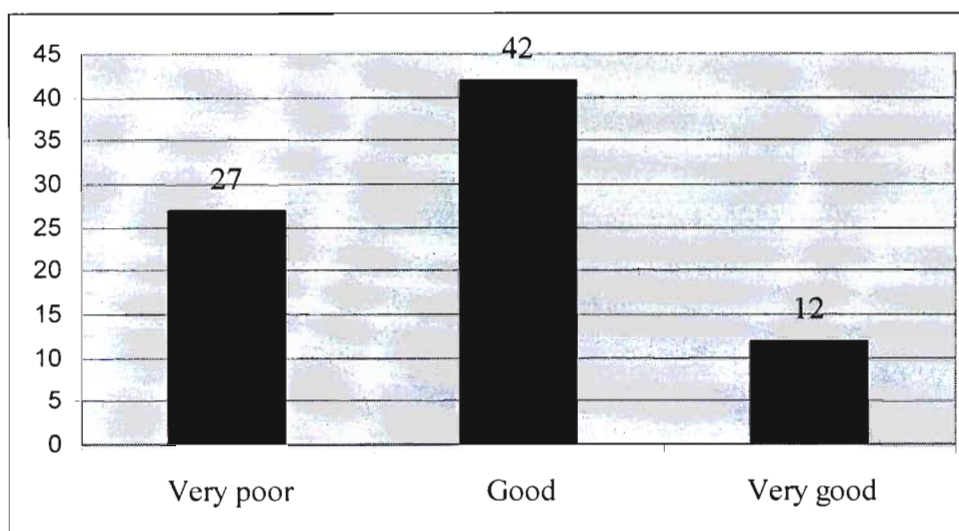
**N=81**

<b>Research endeavours supported</b>	<b>Level of support</b>			
	<b>Not at all supportive</b>	<b>Fairly supportive</b>	<b>Supportive</b>	<b>Strongly supportive</b>
Head of department	12	30	21	18
Colleagues in the department	30	-	42	9
In the institution	21	21	30	9
Another mentor	33	-	39	9

Table 9 shows the respondents' assessment of the level of research endeavours that were supported by their institution or departments. The results show that few of the respondents chose 'not at all supportive', in comparison with the 'supportive' option. Very few respondents chose 'strongly supportive' option.

Respondents were asked to rate the level of research support received from their departments. The highest rating indicated was 'good'. This shows that most of the respondents were getting some form of support from their departments. Figure 4 gives further details.

**Figure 4: Level of research support N=81**



#### 4.5. Level of research competencies and skills of academic staff

Research competencies and skills of academic staff might enhance the productivity of research in one way or another. Therefore this section outlines the level of research competencies and skills of academic staff.

**Table 10: Involvement in research activities**

**N=81**

Research activities	Yes	No
Institution's research structure/s or research association/s	42	39
National research association/s	44	37
International research association/s	21	60
Journal editorial board/s	12	69

Respondents were asked to indicate if they were involved in any of the research-related activities stated in Table 10. The findings in Table 10 indicate that 42 (52%) of the respondents were involved with the institution's research structure(s) or research association/s, while 44 (54%) revealed that they were involved in national research association(s). Twenty one (26%) of the respondents said that they were involved with an

international research association(s). A small number of respondents 12 (15%) pointed out that they were involved in journal editorial board(s).

**Table 11: Reasons for conducting research (N=81)**

<b>Reasons</b>	<b>Yes</b>	<b>No</b>
I want to publish	81	-
I want a formal qualification	28	53
Of professional interest	24	57
I see myself as a producer of knowledge	49	32
I want to be an agent of change	39	42
I want promotion	37	44
It contributes to job security	39	42
Because of a chance of financial gain	30	51
Because of pressure from my department	30	51
Because of pressure from my institution	39	42
Because of academic status	30	51
Because of community interest	40	41
Because I like research	55	26
Because I like personal fulfilment	51	30
Because of social interest	39	42
I seek empowerment	51	30

The question on the reasons why the respondents conduct research was asked to establish the research competencies and skills of academic staff. Respondents were asked to indicate responses applied as reasons why they did research. The findings in Table 11 show that reasons such as ‘I want to publish’, ‘Liking of research’, ‘Because I seek empowerment,’ ‘Because I like personal fulfilment’, ‘See myself as a producer of knowledge’ were ranked most highly. Other reasons which were highly rated were ‘I want to be an agent of change’; ‘It contributes to job security’, ‘Of pressure from my institution’ and ‘Of community interest’, ‘Because of social interest’. However, the reasons such as, ‘I want a formal qualification’, ‘Of professional interest’, ‘I want promotion’, ‘Of a change of financial gain’, ‘Of pressure from my department’ and ‘Because of academic status’ were rated low.



**Table 12: Research activities achieved in the period past five years** N=81

Research activities achieved	Number of papers per individual				
	0	1	2	3	6 & above
Papers in South African accredited journal/s (sole author)	12	9	39	9	12
Papers in South African accredited journal/s (joint author)	42	-	27	12	-
Papers in International accredited journal/s (sole author)	54	18	9	-	-
Papers in International accredited journal/s (joint author)	60	-	21	-	-
Monographs or books (sole author)	81	-	-	-	-
Monographs or books (joint author)	69	12	-	-	-
Chapters in books (sole author)	81	-	-	-	-
Chapters in books (joint author)	57	24	-	-	-
Conference proceedings (sole author)	30	-	24	27	-
Conference proceedings (joint author)	72	9	-	-	-
Commissioned reports (sole author)	60	12	-	-	9
Commissioned reports (joint author)	72	-	-	-	9
Papers presented at South African conferences (sole author)	39	12	12	18	-
Papers presented at South African conferences (joint author)	63	18	-	-	-
Papers presented at international conferences (sole author)	57	12	12	-	-
Papers presented at international conferences (joint author)	81	-	-	-	-
Research network meetings attended	72	-	-	-	9
Collaborative research projects	42		30		9
Collaborative research projects (as team leader)	72	9	-	-	-
Individual research projects	42	27	12	-	-

The question on research activities achieved was asked to discover research skills and competencies of academics. Table 12 shows that the majority of papers, monographs, chapters and commissioned reports achieved by the respondents during the past five years were between one and three. The findings show that very few of the respondents achieved six and more research activities. The results show that the majority of the respondents 39 (48%) had achieved two papers in South African accredited journal/s (sole author). Thirty (37%) had achieved two collaborative research projects, while the third group 27 (33%) of the respondents had published papers in South African accredited journal/s as joint author, at conference proceedings as sole author and with their own individual research projects.

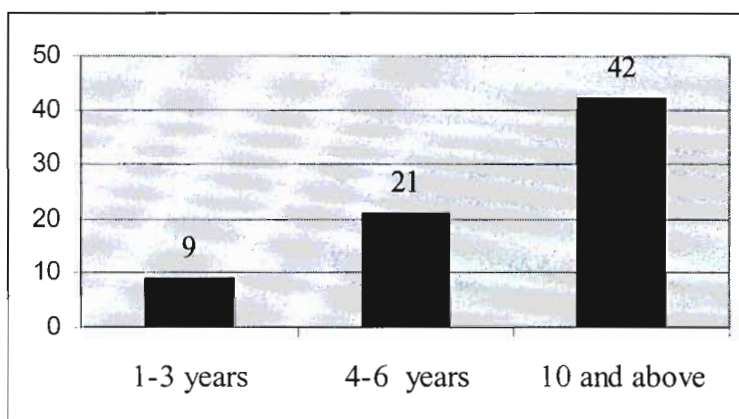
#### **4.5.1. Supervision and number of postgraduates supervised**

Respondents were asked to stipulate if they were supervising postgraduate students in research projects this year. The question on supervision was asked because supervision

and number of postgraduates supervised might establish the level of research competencies and skills of academic staff. The results show that 72 (89%) of the respondents were supervising postgraduate students in research projects. Nine (11%) of them were not supervising postgraduate students.

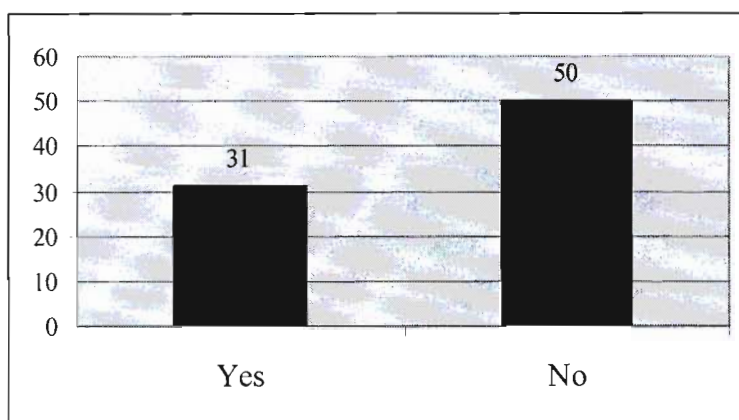
The findings show that the majority of respondents supervised between one and two postgraduate students at most levels. Only nine (12%) respondents supervised five or more postgraduate students.

**Figure 5: Years spent in supervising student N=72**



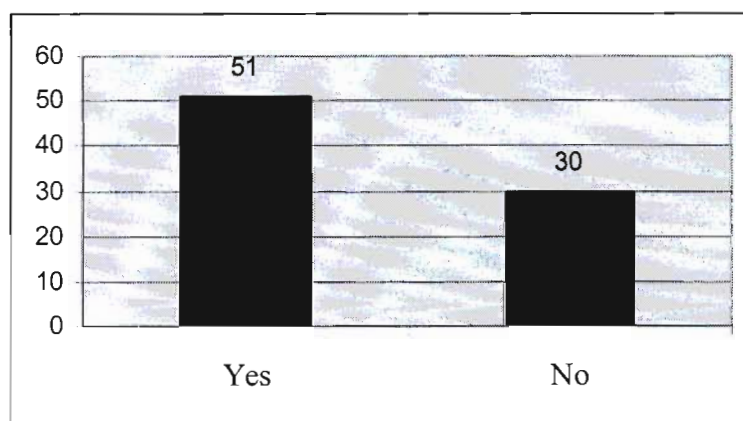
Respondents were asked to indicate the years spent in supervising students. The question was asked because more skilled staff would possibly answer the question differently from less skilled staff. If research academics had more experience in supervising students, their production in research would be identifiable. Figure 5 indicates that 42 (52%) of the respondents had supervised students for ten years and above. The second group 21 (26%) of the respondents stated that they supervised students for four to six years, while nine (11%) indicated that they had supervised students between one and two years. Figure 5 also shows that nine (11%) of the respondents were not supervising postgraduate students at all.

**Figure 6: Training required in supervision N=81**



Respondents were asked to reveal if more training in research supervision was required. Thirty eight percent of the respondents saw the need to be trained in research supervision, while 50 (62%) of the respondents stated that they did not require more training in research supervision.

**Figure 7: Further training in research related skills N=81**



Training of academic staff in the area of research might lead to more productivity in research. The respondents were asked if they wanted further training in research-related skills. The question was asked because of the evidence in the literature that research training is correlated with research productivity. The findings indicate that the majority of the respondents needed further training in research (see Figure 7).

**Table 13: Areas where research training was required N=81**

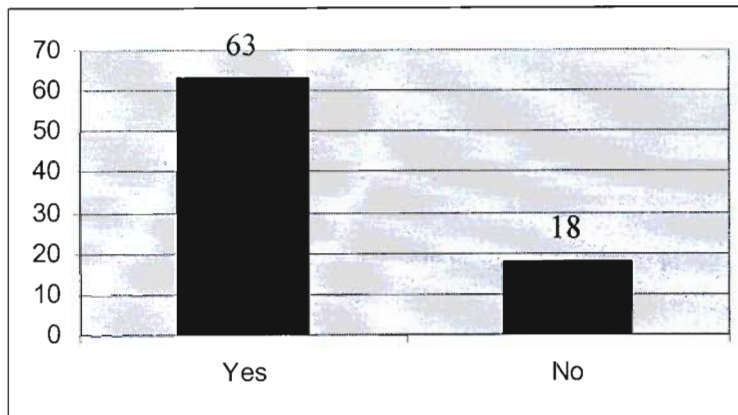
<b>Research training</b>	<b>Yes</b>	<b>No</b>
Formulating a research problem	25	56
Research design	25	56
Data collection, organization and interpretation	27	54
Identifying the research problem	9	72
Obtaining funding for a research project	70	11
Writing a research report for publication	60	23
Statistical methods including coding data	58	21
Presenting research findings to an audience	30	51

The follow-up question on training in research-related skills sought to determine the areas in which the respondents needed to receive training. The question aimed at discovering if there are other means or strategies in place that would assist academics to require more skills and competencies in research. The findings show that the greatest interest of areas where training was required was expressed in respect of obtaining funding and writing a research report for publication. The next most popular area was on statistical methods, including coding the data. High levels of interest were expressed in most of the other areas (see Table 13 for further details).

#### **4.5.2. National Research Foundation rating system**

The question concerning National Research Foundation rating was asked because rated academics would possibly show relatively higher research productivity than non-rated academics. The National Research Foundation rating might possibly determine the capacity of research at the university. The respondents were asked to indicate if they were rated by the National Research Foundation. The results of the survey show that all respondents were not rated by the National Research Foundation. A follow-up question was posed to the heads of departments in the humanities. The results show that, out of 12 participants who were interviewed, four of them were rated by the National Research Foundation. Three of them were in category C, while one was in category Y.

**Figure 8: Intention to obtain National Research Foundation rating**



The follow-up question on the intention to obtain National Research Foundation rating was asked. The majority 63 (78%) of the respondents intended to obtain National Research Foundation rating (see Figure 8).

#### **4.6. Factors influencing research productivity**

The following section summarises the factors influencing the research productivity of academic staff.

**Table 14: Factors that influence research productivity N=81**

Factors	Yes	No
Motivation	60	21
Socialization	60	21
Content knowledge	37	44
Basic and advanced research skills	29	52
Orientation	15	66
Autonomy and commitment	24	57
Work habit	54	27
Research emphasis	27	54
Mentoring	47	34
Sufficient work time	64	17
Rewards	49	32
Communication	47	34
Sponsoring	40	41
Research oriented	33	48

Respondents were asked to indicate the factors that influence their research productivity within the institution and departments. The findings were that 64 (79%) of the



respondents stated that sufficient work time influences their research productivity. The second largest group 60 (74%) indicated that motivation and socialization was one of the obstacles to their research productivity. Fifty four (67%) of the respondents viewed work habit as one of the factors that influence their research productivity. The findings show that 49 (60%) of the respondents saw rewards as one of the factors that affect their research productivity. Forty seven (58%) of the respondents named communication and mentoring as one of the biggest factors that hinder their research productivity. Factors such as research emphasis, autonomy and commitment, basic and advanced research skills, content knowledge and orientation were the least important factors that affect research productivity. Table 14 provides further details.

#### 4.6.1. Accounts of how these factors affect research productivity

The open-ended question as a follow-up question on factors that influence research productivity requested respondents to give details of the factors that affected their research productivity. Only six (7%) of the respondents answered the question. The emphasis was on heavy workloads. They stated that heavy workloads caused a lack of confidence when conducting research. They stated that insufficient motivation, such as lack of funding and rewards, depressed them in persisting with research. Respondents stated that they required sufficient work time to conduct research. Respondents emphasised that an urgent need existed for appointing postgraduate students to assist in administrative work.

**Table 15: Well-developed research network/collaboration** **N=81**

Research Networks	Well-developed 39 (48%)		Not well-developed 42 (52%)	
	Yes	No	Yes	No
Workshop (s)	32	7	9	33
Conference (s)	39	-	42	-
Seminar (s)	36	3	28	14
External colleague (s)	19	20	13	29
Departmental colleague (s)	5	34	6	36
Professional colleague (s)	18	21	-	42

Questions 44 and 45 asked respondents to indicate if they had a well-developed research network/collaboration in their institution. The follow-up question asked respondents to

indicate the kind of research network/collaboration they were involved in. The questions were asked because the respondents that had a well-developed research network/collaboration would possibly respond differently from those who did not have a well-developed research network in their institution.

The findings indicate that 42 (52%) of the respondents did not have a well-developed research network in their institution. Table 15 shows that all respondents networked through conferences. The second largest group 36 (92%) of the respondents, who had a well-developed research network, networked through seminars. Table 15 shows that research networks such as external colleagues, departmental colleagues and professional associations are the networks least used.

#### **4.6.2. Teaching and number of modules taught per semester**

Questions 13 and 14 on teaching and the number of modules taught were linked because they are related. The questions aimed at finding out if the teaching load could affect research productivity of academics. Respondents were asked if they were involved in teaching students. The follow-up question asked the respondents to indicate the number of modules they taught in 2006. All the respondents were involved in teaching students. Twenty seven (33%) of the respondents taught between one and two modules at most levels. Forty five (56%) respondents taught three modules at undergraduate level.

#### **4.6.3. Percentage of time spent in teaching**

The follow-up question on percentage of time spent in teaching students intended to establish if there was a correlation between research productivity and the percentage of time spent in teaching students. The survey wanted to discover if teaching loads could affect research productivity. The findings indicate that the majority of the respondents spent 16 (20%) of time teaching doctoral students, while 24 (30%) was spent on teaching masters students. The majority of respondents spent 32 (40%) of their time teaching honours students, while 24 (30%) of their time was spent on teaching postgraduate students. The results show that nine (11%) respondents spent between 65 (80%) and 73 (90%) of their time teaching undergraduate students.

#### **4.6.4. Administrative role and hours spent in administrative work**

Questions on the administrative role within the faculty were asked to discover if administrative work could affect research productivity of academic researchers. Respondents were asked if they have any administrative role within their faculty. All the respondents stated that they do. The findings reveal that 51 (63%) of the respondents spent five to seven hours in doing administrative work per week. Twelve (15%) of respondents spent seven to nine hours doing administrative work. Nine (11%) of the respondents spent nine to eleven hours, while the other nine (11%) spent less than five hours doing administrative work.

#### **4.7. Possible solutions that could lead to the improvement of the research environment at the University of Zululand**

The following section outlines the possible solutions that could lead to the improvement of the research environment at the University of Zululand.

##### **4.7.1. Suggestions on measures that could be taken to improve support given to academics**

The possible measures to improve the status of research would include making more research funding available. The majority of the respondents were concerned with funding opportunities and support in terms of training and workshops. Others stated that the university needed to draft a structure which would allow it to appoint postgraduate students to assist in administration work, to free up enough time for research. Further suggestions concerned additional lecturers, particularly in teaching undergraduate students, and a well-co-ordinated research centre/office that would create an environment in which research of all kinds could flourish.

#### **4.8. Summary of the findings from the questionnaire**

The survey found that:

- Some of the factors that could possibly be correlated with research productivity are funding, workload, time, motivation, rewards and networking.



- The support received from the institution or departments were inadequate.
- The university needed to draw up a structure which would allow it to appoint postgraduate students to assist in administration work.
- The university did not have a well-co-ordinated research centre/office.

#### **4.9. Focus group interview results**

The following section discusses the results of the focus groups interviews.

##### **4.9.1. Pressure to conduct research**

The literature revealed that research is one of the ways in which higher education institutions generate income in order to survive or operate. There is an increasing pressure on academics, in that they were expected to either publish or perish. In that regard, the discussion on pressure to conduct research was conducted. All participants agreed that pressure to conduct research is a serious challenge they faced. The participants provided various reasons, according to their experience within the departments.

The principle of publishing or perishing was caused by the fact that individual academic staff members were evaluated and promoted on the basis of their research profiles. This exerted pressure on the academics, as limited time and huge workloads did not allow them to conduct research.

Another aspect discussed with regard to pressure to conduct research was the issue of publishing. The participants pointed out that, when publishing, manuscripts were rejected by the publishing companies. The most stressful part was the problem of the report-back on the manuscripts that were declined. The participants complained that the declined manuscripts discouraged them to pursue any research activity. The junior staff were most vulnerable to this discouragement.

Another pressure that affected the requirement to conduct research was the pressure to solicit funding. Participants revealed that obtaining funding was one of the stressful

issues from their institution. It was even worse if a staff-member was not permanently employed or was more recently appointed by the university.

#### **4.9.2. Summary of focus group findings**

The findings were that pressure to conduct research was affecting many academics. This might be prompted by factors such as insufficient funding from the institution or department, large workloads and insufficient time to conduct research. The results revealed that stress was caused by the principle of “publishing or perishing”.

Concerning the discussion of research support received from the institution or departments, the discussion revealed that some form of research support was available from the institution or departments. This, however, was not sufficient, because academics are expected to be well known in order to receive research support.

#### **4.10. Semi-structured interviews**

Semi-structured interviews were conducted with twelve heads of departments in the humanities at the University of Zululand. The purpose of the interviews was to gain in-depth information of research policies and programmes that are meant to support academics in research. The following section presents findings on the areas covered in the interviews.

##### **4.10.1. Level of research output within the department**

One of the research objectives of the study was “to establish the level of research competencies and skills of academic staff”. To achieve the research objective under study, respondents were asked to rate out of 10 the level of research output within their departments. Most participants showed that they were not satisfied with the research output within their departments. The majority of respondents rated their level of research output as three out of ten and some of them rated it at four out of ten. One department expressed some satisfaction with their research; as a result, they rated themselves eight out of ten.

Participants complained that heavy teaching loads might perpetuate the relatively low productivity within their departments. Some of them said that they taught 800 undergraduate students and 12 honours students, while they were also supervising masters and doctoral students. They revealed that there was a policy that students should write assessment tests every week, which resulted in them having heavy marking loads.

#### **4.10.2. Research problems currently faced by academics in the departments**

A follow-up question was asked about problems currently faced by academic staff in their departments. Participants were asked if they were satisfied with the performance of their departments. If not, they were asked to discuss problems currently facing their departments. All participants stressed that they were not satisfied with the performance within their departments.

Among the problems discussed, teaching loads were one of the most important. Participants indicated that teaching loads hindered them in the production of research. Another important problem discussed was that of publishing. Participants discussed funding as one of the problems faced by their departments. They stressed that the policy on research funding in their institution needed to be addressed. They revealed that, because of inconsistency in funding, they ended up financing their own studies.

The participants were asked how the situation could be improved. They replied that the university needed to improve the lecturer/student ratio. Some of the participants suggested that the ratio should be 500 students to 10 lecturers. Participants strongly recommended that the university should employ part-time postgraduate students to assist in reducing administrative work. On the issue of publishing, participants stated that the university needs to find a structure where it could liaise with other universities so that they could receive constructive feedback on the problems experienced with publishing.

#### **4.10.3. Motivation to conduct research**

The question on motivation to conduct research aimed at discovering if academic staff members were motivated to conduct research, or if pressure forced them to publish. The

majority of the participants indicated that they were not motivated to conduct research, since publishing involved challenges. However, publication in SAPSE journals was one of the ways of generating income to support their departments. They stated that when one publishes he/she obtained some form of recognition, including promotion and rewards.

#### **4.10.4. Collaboration of departments with other institutions**

Participants were asked to indicate if their departments collaborated with other institutions or departments. If so, they were asked to indicate the kind of collaboration they engaged in. The majority of participants revealed that they collaborated with other institutions and departments. One of the popular ways used to collaborate with other institutions was through the appointment of external examiners to examine the research projects of their students. They stated that they corresponded with, and invited other academic institutions internationally, to share research knowledge. They said that they jointly published papers and collaboratively authored and co-authored books with other academic staff.

#### **4.10.5. Summary of the findings**

The interviews revealed many issues that might be correlated with research productivity. Some of the issues discussed were workload, funding and publishing. The findings showed that there was no formal structure of research support that capacitated research academics. The results indicated that the programmes or strategies that are in place to support research within the departments need much improvement.

#### **4.11. Summary of the chapter**

Chapter Four presented the findings of the study and discussed the findings in the context of the purpose of the study. The themes of the objectives of the study were adopted and used as a foundation for the analytical framework. The study was conducted to establish the research capacity needs of academic staff in the humanities at the University of Zululand.

Some of the research capacity needs of academics that were identified by the present study were:

- Research productivity at the University of Zululand was relatively low, as it was among the lowest rated of five universities;
- Research support provided to academic staff was not adequate;
- Grants for research, access and publication, research networking, sufficient work time, teaching loads, motivation and rewards were cited as the major factors that inhibited research productivity;
- Academic staff did not have a well-developed research collaboration/network;
- Most academic staff required more training on research;
- The university needs to appoint additional academic staff, including postgraduate students, that would assist in reducing the workloads of academics;
- The university did not have a formal research office or centre;
- The university did not have a formal research policy and strategy in place.

## **CHAPTER FIVE: INTERPRETATION**

### **5.1. Introduction**

The purpose of this chapter is to provide an interpretative discussion of the findings and to relate these to the objectives of the study, as well as to the literature reviewed, in order for the study to have substance. The purpose of the study was to establish the research capacity needs of academic staff in the humanities at the University of Zululand. In view of the triangulation used, it is possible to generalize the findings to the total population.

#### **5.1.1. Survey of the academic staff in the humanities at the University of Zululand**

The survey of the academic staff in the humanities at the University of Zululand questionnaire was the research instrument used to investigate the following research objectives:

- to identify research capacity strategies and policies in place at the University of Zululand;
- to determine the level of research support available for academic staff;
- to establish the level of research competencies and skills of academic staff;
- to examine factors influencing research productivity positively and/or negatively; and
- to recommend possible solutions that could lead to the improvement of the research environment at the University of Zululand.

To position the respondents in their context within the university, the first part of the questionnaire (background information of academic staff) will be discussed. The discussion will follow the pattern of the questions that were asked.

### **5.2. Background information of academic staff**

The study involved 81 (55%) out of 146 academic staff in the humanities at the University of Zululand, 12 (63%) out of 19 heads of department and two focus group discussions, consisting of eight participants in each group.

### **5.2.1. Demographic information**

Le Roux (2001) found no difference in academic research productivity due to age. Bland *et al.* (2002:227) affirmed that male researchers tend to publish more than female researchers. That difference was eliminated when the density of female researchers in lower ranks was taken into accounts. The results showed that of 77 (95%) of the respondents who answered the question on age, gender and population, 42 (51%) of the respondents were male, while 39 (48%) were female. The findings of the literature corresponded with the results of the survey.

### **5.2.2. Representation by highest qualification**

Highly qualified staff would possibly be more productive than less qualified staff. Bland *et al.* (2002:227) pointed out that, of the:

465 academics who provided data, 74% were men, 45% had a high level of research productivity (for example, published five or more peer-reviewed articles in the past two years). Eighty two percent held either masters or doctoral degrees.

The results of the survey concurred with the findings from the literature, since the most common highest level of qualification recorded in the study was a doctoral degree, followed by masters degrees.

### **5.2.3. Representation by rank**

According to Bland *et al.* (2002:227), research productivity is one of the major criteria for promotion; therefore high research productivity in academics of higher rank would be expected. The results indicated that the most common rank was senior lecturer 42 (52%), followed by the lecturer, 18 (22%). This was an indication that the results from the literature did not agree with those from the survey. The results of the survey showed that 42 academics had been senior lectures for more than five years and yet their productivity was not very high.

### **5.3. Research capacity strategies and policies in place**

Research capacity strategies and policies in place at the University of Zululand are discussed in the following section.

#### **5.3.1. Research strategies and programmes in place**

One of the objectives under study was “to identify research capacity strategies and policies in place at the University of Zululand”. Le Roux (2001) stated that “higher education institutions are required to review their academic programmes and research projects in terms of whether or not they contribute to the universe of knowledge”. Furthermore, there was a need for institutions to establish their policies and practices to build the capacity for research in teaching and learning (D’Andrea and Gosling 2000).

Respondents were asked to indicate if their institution had a research policy in place. The findings from the literature concurred with the results of the survey, because the results indicated that there was no formal research policy in place in the institution. This was an indication that there was an urgent need for the establishment of research programmes and policies that would possibly improve research skills and capabilities of academic staff in research and scholarly activities would be required.

The results indicated that the programmes that were required by the National Research Foundation and were in place in the humanities at the University of Zululand were attendance at conferences and seminars, scholarships and supervision of postgraduate students.

The question on the nature of research needs was asked to find out the research capacity strategies in place in the humanities at the University of Zululand. The results showed that grants for research, access and publication, and research networking are the major research needs of academics. This indicates that some strategies and policies that were in place in the institution need to be improved for research to be capacitated.



#### **5.4. Research support available for academic staff**

This section discusses research support available for academic staff within the institution and departments.

##### **5.4.1. Form of research support**

The literature revealed that forms of research support such as financial, emotional, resources, time and administration could affect research productivity (Cooke and Green 2000:60). Individual academic staff characteristics such as motivation, professional networks and research training are highly correlated to research productivity (Bland *et al.*, 2002:228). Gumbi (2006) stated that academics at the University of Zululand received support, including funding, according to the policy for research.

The results showed that financial, resource and emotional support were received from the departments and the institution. Although academics received some form of research support, improvement in the research support provided would be necessary for them to be more productive in research.

Participants were asked to discuss the form of research support received from their institution or department. They were asked to indicate if more needed to be done in that area. The results showed that support received from the departments was insufficient. This might be because research support received depended on who one knew, either in the institution or department. Because of this, research productivity would decline in one way or another. The literature concurred with the results of the discussion, because the academics that were recently appointed might possibly not receive the support they required. Respondents were asked to indicate if more needs to be done in this regard. The findings showed that research funding policy in their institution needed to be re-examined.

##### **5.4.2. Research endeavours supported by the institution**

It is the duty of the institution to ensure that academic staff received the research support required for them to be more productive in research. The findings indicated that some

form of support was provided by the institution and departments. However, the support received seemed inadequate. This was indicated by the fact that a few of the respondents chose 'not at all supportive', in comparison with the supportive option. Very few respondents chose the 'strongly supportive' option.

#### **5.4.3. Level of research support**

Sufficient research support by the institution would be highly correlated with research productivity (Bland *et al.*, 2002:228). One of the objectives of the study was "to determine the level of research support available for academic staff". The results showed that the highest rating given was 'good'. Twenty seven (33%) saw the level of research support as very poor. This indicates that, although some form of research support was provided, there was need for improvement.

#### **5.4.4. Improvement of research support given to academics**

Institutions of higher learning require a mechanism to motivate academics to be more productive in research and thus improve research competencies and skills of academic staff (McMahon and Kitson (1997), cited in Cooke and Green (2000:59). The results showed that research funding was the major research support that would be correlated with research productivity. The literature concurred with the results from the survey, that a mechanism to support academics, particularly with funding, was required.

### **5.5. Level of research competencies and skills of academic staff**

The following section outlines the level of research competencies and skills of academic staff.

#### **5.5.1. Involvement in research activities**

Research is one of the ways in which higher education institutions generate income in order to survive or operate. Therefore there is increasing pressure on academics, in that they are "expected to either publish or perish" (Maponya 2005:907). This prompts many academic staff to be involved in research. The literature corresponded with the results from the survey, because all respondents in the survey were involved in research other

than for degree purposes. The majority of the respondents 44 (54%) were not currently registered for higher degrees or diplomas. This might explain why research productivity was relatively low in the humanities at the University of Zululand.

#### **5.5.2. Rationale for conducting research**

Maponya (2005:907) and Kaniki (2004:7) stated that individual academic staff members were evaluated and promoted on the basis of their research profiles. This forced many academics to participate in research activities. However, the results demonstrated that “individual achievement variables and institutional characteristic variables would predict research productivity across national boundaries” (Bland *et al.*, 2002:228).

This was indicated by the fact that the reasons such as ‘I want to publish’, ‘Liking of research’, ‘Because I seek empowerment,’ ‘Because I like personal fulfilment’, ‘See my self as a producer of knowledge’ were ranked most highly. This shows that, individual achievement variables predicted the research productivity.

#### **5.5.3. Research output of academics**

The number of research outputs of academic staff would predict research productivity (Bland *et al.*, 2002:227). The results indicated that the majority of papers, monographs, chapters and commissioned reports achieved by the respondents during the period of five years numbered between one and three. Very few respondents indicated that they had achieved six or more research activities. The results showed that very few research outputs of academic staff in the humanities at the University of Zululand were achieved during the past five years. This might be one of the reasons why the university had relatively low research productivity.

#### **5.5.4. National Research Foundation rating**

The literature revealed that persons who had gone through the established promotion process would have met certain levels of excellence and recognition (Kaniki 2004:7). This illustrates the importance of the rating system in the institutions of higher learning. The study established that research output in the humanities at the University of Zululand

was relatively low (National Research Foundation 2005). This was manifest by the fact that the University of Zululand was among the five lowest rated universities (see Section 1.1, Table 2). The results from the survey corresponded with the findings from the literature, because very few respondents were rated by the National Research Foundation. This might reduce the productivity in research.

#### **5.5.5. Intention to obtain National Research Foundation rating**

The literature confirmed that most academic staff had the intention to obtain National Research Foundation rating (Kaniki 2004:7). The findings from the literature corresponded with the results of the survey, because the majority of the respondents 63 (78%) had some intention to obtain National Research Foundation rating. This shows that academics had an interest in pursuing research activities.

#### **5.5.6. Supervision and number of postgraduates supervised**

The literature suggested that the impact of the institution is mediated by the qualities and style of the leader. This is an indication that the experience and skills of the supervisor can be correlated with research productivity (Bland *et al.*, 2002:228). The findings of the literature agreed with the results of the survey, because 72 (89%) respondents were supervising postgraduate students in research projects during 2006. Academics thus had some research skills and experience in supervision. This might increase research productivity in one way or another.

#### **5.5.7. Years spent in supervising students**

Most skilled and highly experienced staff would possibly exhibit more productivity when compared to less skilled and experienced staff (Bland *et al.*, 2002:227). The findings from the literature coincided with the results of the survey, because the majority of the respondents have research skills and experience in supervision. This was confirmed by the fact that 42 (52%) of the respondents had supervised students for ten years and more, while the second group (26%) of respondents supervised students for four to six years.

#### **5.5.8. Opinion about training required in supervision**

It is of particular importance for the academic staff to be able to find some form of research training for their research productivity to be improved. Cooke and Green (2000:59) warned that a shortage of research training opportunities is considered a barrier to research productivity. The results of the survey disagree with findings from the literature, because 51 (63%) of the respondents required no training in research supervision.

#### **5.5.9. Further training in research-related skills and the areas where research is required**

Cooke and Green (2000:59) viewed research skills as one of the inhibiting factors that could influence research productivity. Training of academic staff in research might lead to higher productivity in research. Research knowledge, competencies and skills are important to encourage flexibility, creativity and innovation and thus build capacity in research. The results from the literature concurred with the findings of the survey, because the majority of the respondents need training in research-related skills. In addition, obtaining funding and writing a research report for publication was their utmost interest, followed by training in statistical methods.

#### **5.6. Factors influencing research productivity**

Cooke and Green (2000:60) said that evidence confirmed that time is a significant factor affecting research productivity. This suggests that academics in the higher education institutions required dedicated time to enable them to undertake research. Wood (1990:90), cited in Cooke and Green (2000:60), explained that administrative duties are also considered distractions from the research enterprise, but do not necessarily reduce research productivity. Gumbi (2006) stated that the University of Zululand provided academics with manageable teaching and marking loads so that they have sufficient time to conduct research.

The following section discusses the factors influencing the research productivity of academic staff.

### **5.6.1. Research network/collaboration**

The literature revealed that professional networks are factors that are highly correlated to research productivity (Bland *et al.*, 2002:228). The results showed that all participants collaborated with other institutions and departments and shared research experiences and skills. The findings showed that all respondents networked through conferences. The second largest group 75 (92%) networked through seminars. The literature thus agreed with the results of the survey.

### **5.6.2. Administrative work**

According to Hashim *et al.* (2006), the normal workload of academics should include teaching and research; scholarly and creative activities; and service to the university, in the proportions of approximately 40%, 40% and 20%, respectively, of each academic's time. The whole population in the survey had an administrative role within their departments. The majority 51 (63%) of the respondents spent five to seven hours doing administrative work per week. Academics thus spent many hours in an administrative role. This would possibly affect research productivity.

### **5.6.3. Pressure to conduct research**

Most academic staff experienced pressure to conduct research. This might be due to the fact that research in higher institutions of learning is one of the ways in which they generate income, to survive or operate. This results in increasing pressure, because academics are "expected to either publish or perish" (Maponya 2005:907).

The literature corresponded with the results from the discussion, because all participants agreed that pressure was experienced when research was conducted. This pressure was caused by the fact that individual academic staff members are evaluated and promoted on the basis of their research profiles.

#### **5.6.4. Publishing**

The OECD (2005) decreed that institutions of higher learning need to ensure that academics produce new knowledge, for the institution to be identified as a leading research institution. One of the objectives of the study was “to examine factors influencing research”. Gumbi (2006) explained that academics at the University of Zululand are required to deliver one academic conference paper per year and publish one academic article, on average, per year, in addition to improving their qualifications up to doctoral level.

This might be the obstacle to academics because the results from the survey showed that publishing is one of the problems that hinder research productivity. This causes pressure, because the publishing companies reject some of the manuscripts.

#### **5.6.5. Research funding**

Gumbi (2006) stated that academics at the University of Zululand received research support as needed. However, the participants stressed that it was difficult to obtain funding, particularly for academics who were employed on a contract basis, or were recently appointed. Therefore the literature deviated from the results under discussion.

#### **5.6.6. Research output**

Observations have been made that “there is a declining of research output over the last few years in research in some universities” (Walker 2003; Cooke and Green 2000; National Research Foundation 2005). Participants were asked to rate out of ten the level of research output within their department. Most participants were not satisfied with research output within their departments. The literature agreed with the results of the discussion. The participants viewed the relatively low research productivity as being caused by heavy teaching loads.

#### **5.6.7. Motivation to conduct research**

Cooke and Green (2000:60) concurred with Bland *et al.* (2002:228), that motivation could affect the productivity of academic researchers. Motivation is “a more critical

element in staff development”. Therefore, in order for academics to pursue the culture of research, motivation through departments and/or institutions must be enhanced. The results showed that most participants were not motivated in this manner to conduct research and therefore research productivity would be affected in one way or another.

#### **5.6.8. Teaching and modules taught**

Teaching loads would possibly affect the research productivity of academic researchers. Kiger (1994), cited in Cooke and Green (2000:60), argued that it is unlikely that all teaching loads could be reduced, particularly as some departments receive little or no funding for research.

The results showed that all respondents were involved in teaching students. The findings were that the majority of respondents taught one or two modules, at most levels. The respondents that taught undergraduate students taught more than two modules and also supervised postgraduate students. The results from the literature seemed to agree with those of the survey, since the majority of respondents taught one and two modules at most levels.

#### **5.7. Possible solutions which could be implemented in the departments to improve the status of research**

One of the research objectives of the study was “to recommend possible solutions that could lead to the improvement of the research environment at the University of Zululand”. Participants were asked to discuss the possible solutions that could be implemented in their department to improve the research status.

The results show that the solutions that could be implemented in the departments to improve the status of research include research support in terms of training and workshops, establishment of a well-co-ordinated research centre/office, a suitable structure of research funding and appointment of postgraduate students to reduce workloads.



### **5.8. Summary of the chapter**

In this chapter the analysis of the findings from the questionnaire, focus group and semi-structured interviews were given. The chapter discussed the pressure to conduct research and the form of research support received from the institution or departments. Many of the findings agreed with the findings of the Thuthuka Programme of the National Research Foundation on “Women In Research”. This shows that many of the challenges experienced when conducting research are widely applicable.

The main challenges that emerged were:

- Pressure to secure research funding,
- Enough time to conduct research,
- Workload,
- Challenge of publishing,
- Support in research related-activities,
- Establishment of a research centre and
- Appointment of postgraduate students.

## **CHAPTER SIX: SUMMARY OF FINDINGS, RESEARCH CONCLUSIONS AND RECOMMENDATIONS**

### **6.1. Introduction**

Chapter Six provides a summary of research findings, conclusions and recommendations that were made in the study. The purpose of the study was to establish the research capacity needs of academic staff in the humanities at the University of Zululand. To gather data, the descriptive survey research method was employed, through the use of a self-administered questionnaire, complemented by focus group and semi-structured interviews. Recommendations made are based on the results found in the objectives, literature and findings of the research.

### **6.2. Conclusions of the study**

Based on the findings, the study made the following conclusions:

#### **6.2.1. Research capacity strategies and policies in place**

The following section outlines research capacity strategies and policies in place in the humanities at the University of Zululand.

##### **6.2.1.1. Research strategies and policies**

The study found that there was no formal research policy in place at the University of Zululand. Some strategies to support research within the departments were used, however. Research strategies that are in place are not sufficient to improve the research production of academic staff. The results showed that grants for research, access and publication and research networking are the major research needs of academics. This was an indication that some strategies and policies in the institution needed to be improved. It was concluded that for the University of Zululand to compete within the global system, it needs to establish research development programmes that would improve the knowledge and skills of academic staff in research and scholarly activities.

#### **6.2.1.2. Research capacity needs**

According to the National Educational Research Forum (2000), research knowledge, competencies and skills are important in encouraging novelty, which would lead to capacity building in research. It is imperative for an institution to develop and encourage a rapport with its academic staff. This might enhance the chances of their research being improved. The study found that most research capacity needs of academic staff in research include grants for research, access and publication and research networking. It was found that 71 (88%) of the respondents said that they need grants for research. The second largest group 67 (83%) revealed that they need access and publication. Sixty four (79%) of the respondents stated that they required research networking. In conclusion, it seemed as if an urgent need for more research support for academic staff is necessary if the university intends to excel in research.

### **6.3. Factors influencing research productivity**

In this section the conclusions on factors influencing research productivity for academic staff are summarised.

#### **6.3.1. Factors that influence research productivity for academic staff**

It was found that funding, publishing, sufficient work time, workload, motivation and rewards are the major factors that are correlated with research productivity. The University of Zululand needs to improve research support and develop research affinity, for academic staff to produce the knowledge required.

#### **6.3.2. National Research Foundation rating**

The study found very few respondents who were rated by the National Research Foundation in the humanities at the University of Zululand. For an institution such as the University of Zululand to be excellent in research it needs to provide the interventions and methods that could encourage academic staff to engage in the scholarship of research.

### **6.3.3. Research collaboration/network**

It was found that the majority of respondents did not have a well-developed research network; however, research networks such as conferences and seminars are the networks used most. For academics to be capacitated in research, the university needs to facilitate research networks.

### **6.3.4. Training in research-related skills**

It was found that a dearth in research training could be an obstacle to research productivity. The results showed that 51 (63%) of the respondents need to train further in research-related skills. When asked about specific areas in which they need training, the greatest interest was expressed in obtaining funding and writing research reports for publication. The next most popular area was training in statistical methods, including coding the data.

## **6.4. Possible solutions that could lead to the improvement of the research environment at the University of Zululand**

Academic staff need to assist the institution by providing possible solutions that could lead to the improvement of the research environment. It was found that comments ranged from making available more research funding, additional lecturers, particularly to teach undergraduate students, appointments of postgraduate students to assist in administrative work and the establishment of a research office/centre. In conclusion, there was an urgent need for the institution to evaluate research capacity needs of academic staff, so that the status of research could be improved.

## **6.5. Recommendations**

The following recommendations are based on the objectives of the study, findings of the study and the related literature that was reviewed.

### **6.5.1. Research capacity strategies and policies in place**

It was found that the University of Zululand did not have a research policy in place. Academic staff should insist that the institution ensures that policies on research are

established and written in black and white. Academic staff should lobby for funds to be made available to employ substitute lecturers, so that academics could take sabbaticals to conduct research. Academics, particularly junior staff, should lobby for mentorship (at departmental level) to be built into the evaluation of senior academics. Academic staff should lobby their institution to provide information regarding funding (and equipment for funding) for new researchers. In addition, they should lobby for institutional awards as a way of publicising their academic achievements.

#### **6.5.2. Research capacity needs**

The study intended to establish the research capacity needs of academic staff in the humanities at the University of Zululand. The study found that the major research capacity needs of academic staff in research include grants for research, access and publication and research networking. It was found that 71 (88%) of the respondents said they need grants for research. Sixty seven (83%) pointed out that they need access and publication, while 64 (79%) required research networking. In conclusion, the study found that there was inadequate research rapport and support between the institution and the academic staff. This might be caused by the fact that the institution did not have a working research centre/office that supports academics.

To ensure that the needs of academic staff are addressed, the institution needs to develop a research rapport with academic staff and provide more research support for them to be excellent in research. To enhance and strengthen its research, the university needs to develop the research capacity for academic staff to play a leading role in the provision and creation of knowledge, in all aspects.

#### **6.6. Factors influencing research productivity**

The following section outlines the recommendations on factors influencing research productivity.

#### **6.6.1. Funding**

It is strongly recommended that institutions of higher learning should provide sufficient funds to support research in many areas, including publishing of research projects and attending conferences. Institutions of higher learning need to disseminate information about other sources of funding and types of research which are most likely to be funded. In addition, the university needs to provide enough information that would specify who is qualifying for funding, irrespective of them being senior or junior staff.

#### **6.6.2. Publishing**

Most of the respondents complained about the rejection of their manuscripts. The study recommends that institutions of higher learning should offer some assistance, which might explain how they should complete application forms. Institutions should provide enough information to clarify all the possibilities that might lead to the rejection of manuscripts.

#### **6.6.3. Work time and work hours**

Academic staff should encourage their institutions or departments to be more flexible regarding time and work hours spent on teaching. They should encourage their institutions or departments to appoint additional staff or higher postgraduate students to assist with administrative work. The study recommends that the teaching and administrative loads should be reduced for academic staff to spend more time on research. Sabbatical leave should be promoted for academic staff to have time and space for research.

#### **6.6.4. Motivation and rewards**

Academic staff should demand that institutions ensure that their achievements are rewarded in one way or another. Academic staff should receive recognition and rewards for their research productivity. As a result, participation in research evaluation by academic staff would be promoted.

#### **6.6.5. Research collaboration/network**

The university should do more to facilitate interdisciplinary and collaborative projects which attract less experienced researchers. Institutions should be actively involved in setting up linkages and networks that promote collaborative research for academics within and across institutions. The institution should establish communities of research to foster collaboration. These communities of research should offer constructive criticism on each others' work, without being afraid to criticise, thus promoting the culture of research, which would lead to an increase in production.

#### **6.6.6. Training in research-related skills**

The university should provide funds to run training workshops for academics who need them in crucial areas such as report writing and training in statistical methods. It was found that 70 (86%) of the respondents need further training in research-related skills. When asked about the specific areas in which they would need training, the greatest interest was expressed in obtaining funding and writing research reports for publication. The next most popular area was training in statistical methods.

#### **6.6.7. National Research Foundation rating**

The results showed that very few respondents were rated by the National Research Foundation. Because of this, research productivity might deteriorate. The study revealed that there is a discernible need for the University of Zululand to continuously nurture its research community and build capacity in all fields of research. It should build capacity in research to increase the chances of the academic staff being rated.

#### **6.7. Possible solutions that could lead to the improvement of the research environment at the University of Zululand**

Among the possible solutions that could be implemented to improve the status of research, was an urgent need for the University of Zululand to establish a research office or centre. Respondents stated that the university needs to provide and create a well-co-ordinated research centre/office that would be managed by competent staff. The centre/office should provide and create an environment in which research of all kinds can

flourish. The research office should be established to provide the effective research support needed for academic staff, without compromise.

#### **6.8. Suggestions for further research**

The study primarily focused on academic staff in the humanities at the University of Zululand. The study found that the major research capacity needs of academic staff in research included grants for research, access and publication and research networking. Funding, sufficient work time, reasonable teaching loads, motivation and rewards; and publishing are the chief factors that could be correlated to research productivity. Future research, therefore, has to take note of these factors. There is a need to further examine other institutions and make comparative analyses of research needs of academic staff.



## LIST OF REFERENCES

Abell, A. and Oxbrow, N. 2001. *Competing with knowledge: the information professional in the knowledge management age*. London: Library Association Publishing.

Abrahams, L.A. and Melody W.H. 2004. South African higher education in the knowledge economy: vision and vignettes towards the future. Available: [http://www.triplelix5.com/pdf/A309\\_THC5.pdf](http://www.triplelix5.com/pdf/A309_THC5.pdf) (Accessed 19/03/06).

African Union. 2006. Revitalizing higher education in Africa. Report of First Experts' Meeting held on 27<sup>th</sup> to 28<sup>th</sup> October, Johannesburg. Available: [http://www.aau.org/au\\_experts/docs/midrand\\_rep.pdf](http://www.aau.org/au_experts/docs/midrand_rep.pdf) (Accessed 19/03/06).

Babbie, E. and J. Mouton. 2001. *The practice of social research*. Cape Town: Oxford University Press.

Bawa, A. and Chetty, N. 2006. Research: the key to real change. *The Natal Witness*: 15 September.

Bawa, A. and Mouton, J. 2002. *Research transformation in higher education: global pressures and local realities in South Africa*. Pretoria: CHET, pp. 296-333. Available: <http://www.chet.org.za/papers/resechap.pdf> (Accessed 02/04/2006).

Bland, C. J., Center, B. A., Finstad, D. A., Risbel, K. R. and Staples, J. G. 2005. A theoretical, practical, predictive model of faculty and department research productivity. *Academic Medicine* 80(3):225-237.

Bless, C. and Higson-Smith, C. 1995. *Fundamentals of social research methods. African perspectives*. 2<sup>nd</sup> ed. Kenwyn: Juta.

Bless, C. and Higson-Smith, C. 2000. *Fundamentals of social research methods: an African perspective*. 3<sup>rd</sup> ed. Cape Town: Juta and Co. Ltd.

Bowles, M. 2000. Conducting a knowledge audit. Available:  
[http://www.marcbowles.com/sample\\_courses/frontline\\_v5/fmd17/fmd17d.htm](http://www.marcbowles.com/sample_courses/frontline_v5/fmd17/fmd17d.htm) (Accessed 01/10/2006).

Bryman, A. 2001. *Social research methods*. Oxford: Oxford University Press.

Buchwalter, J., Liebowitz, J., McCaw, D., Newman, B., Rebeck, K. and Rubenstein-Montano, B. 2001. SMARTVision: a knowledge management methodology. *Journal of Knowledge Management* 5(4):300-310. Available: <http://www.emerald-library.com/ft> (Accessed 15/07/2006).

Bureau for Social Research. (n.d.). Focus groups. Available:  
<http://ches.okstate.edu/bsr/focus.html> (Accessed 04/11/2006).

Busha, C.H. and Harter, S.P. 1980. *Research methods in librarianship: techniques and interpretation*. New York: American Press.

Carnesale, A. 2000. The challenges facing higher education. Paper presented at the Milken Institute Forum. May 2000. Available:  
<http://www.mikeninstitute.org/pdf/carnesaletrans.pdf> (Accessed 02/04/2006).

Chi Fai, C., Kam Chin, K., Ka Fu, C and Wing Bun, L. 2005. Systematic knowledge auditing with applications. The Hong Kong polytechnic university. *Journal of Knowledge Management Practice*. Available: <http://www.tlainc.com/aric197.htm> (Accessed 15/07/2006).

Christiansen, I.M. and Slammert, L. 2005. A multi-faceted approach for research development (1): addressing the myths. *South African Journal of Higher Education* 19(6):1047-1061.

Cohen, L., Manion, L. and Morrisson, K. 2000. *Research methods in education*. 5<sup>th</sup> ed. London: Routledge Falmer.

Cooke, A. and Green, B. 2000. Developing research capacity of departments of nursing and midwifery based in higher education: a review of the literature. *Journal of Advanced Nursing* 32(1):57-65.

Cousin, G., Healey, M., Jenkins, A., Bradbeer, J. and King, H. 20002. Raising educational research capacity: a discipline-based approach. Paper presented to 10<sup>th</sup> International Improving Student Learning Symposium on Improving Students Learning: Theory and Practice-10 years on. 4-6 September: Brussels. Available: [www2.glos.ac.uk/gdn/confpubl/index.htm](http://www2.glos.ac.uk/gdn/confpubl/index.htm) (Accessed 10/06/2006).

Creswell, J.W. 1994. *Research design: qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.

Creswell, J.W. 2003. *Research design: qualitative, quantitative and mixed methods approaches*. 2<sup>nd</sup> ed. Thousand Oaks, CA: Sage

D'Andrea, V. and Gosling, D. 2002. Promoting research in teaching and learning in higher education: two case studies of multidisciplinary pedagogic research. Available: <http://www.tlrp.org/pub/acadpub/Dandrea2000.pdf> (Accessed 02/04/2006).

De Vos, A.S. 1998. *Research at grass roots: a primer for the caring professions*. Pretoria: J.L. Van Schaik.

Duderstadt, J. 2000. *A university for the 21<sup>st</sup> century*. Ann Arbor: The University of Michigan Press.

Effindi, K. 1999. Publish or perish disseminating your research findings. In: Terre Blanche, M. and Durrheim, K. (eds). *Research in practice: applied research for the social sciences*. Cape Town: University of Cape Town, pp.173-188.

Frost and Sullivan Consultancy. (n.d.). Focus groups. Available:  
<http://www.frost.com/prod/servlet/mcon-methodologies-focus-groups.pag> (Accessed 04/11/2006).

Garaba, F. 2005. An investigation into archival appraisal practices in the member states of the East and Southern Africa regional branch of the international council on the archives (ESARBICA). Masters thesis. Pietermaritzburg: University of KwaZulu-Natal.

Gay, L. 1996. *Educational research: competencies for analyses and application*. 5<sup>th</sup> ed. Columbus, Ohio: Charles E. Merrill.

Glazier, J.D. and Powell, R.R. 1992. *Qualitative research in information management*. Englewood, Colorado: Library Unlimited Inc.

Glencross, M. and Mji, A. 2001. *The role of a research resource centre in the training of social science researchers*. Granada: International Association for Statistical Education and International Statistical Institute.

Glesne, C. and Peshkin, A. 1992. *Becoming qualitative researchers: an introduction*. White Plains, NY: Longman.

Goldhor, H. 1972. *An introduction to scientific research in librarianship*. Urbana: University of Illinois, School of Library Science.

Green Paper of Higher Education in Australia. 2001. Higher education research: a national investment. Available:  
<http://www.dest.gov.au/archive/highered/otherpub/greenpaper/chapt1.htm>

(Accessed 04/07/2006).

Grey, D. 2000. KmAudit. Available: <http://www.voght.com/cgi-bin/pywik?KmAudit>  
(Accessed 23/07/2006).

Gumbi, P.T. 2006. Research capacity building - a strategy for the University of Zululand. University of Zululand Institutional Plan: 2006 – 2009.

Guruz, K. 2003. Higher education in the global knowledge economy. Available:  
[http://www.bc.edu/bc\\_org/avp/acavp/inprg/pdfs/higher%20ed%20poster%2021.pdf](http://www.bc.edu/bc_org/avp/acavp/inprg/pdfs/higher%20ed%20poster%2021.pdf)  
(Accessed 20/03/06).

Hashim, R. H., Hamid, J. A., Selamat, M. H., Ibrahim, H., Abdullah, R., M. G. and Malaysia, U. P. 2006. Using algorithmic taxonomy to evaluate lecturer workload. *Journal of Knowledge Management Practice* 7( 2). Available:  
<http://www.tlainsc.com/article115.htm> (Accessed 02/04/2006).

Hazelkorn, E. 2004. Growing research: challenges for late developers and new comers. *Higher Education Management and Policy* 16(1):119-142.

Henczel, S. 2000. The information audit as a first step towards effective knowledge management: an opportunity for the special librarian. *INSPEL* 34(3/4):210-226.

Hylton, A. 2002a. A knowledge audit must be people-centred and people focused. Available: [http://www.knowledgeboard.com/library/people\\_centerdknowledgeaudit.pdf](http://www.knowledgeboard.com/library/people_centerdknowledgeaudit.pdf)  
(Accessed 15/03/2006).

Hylton, A. 2002b. Measuring and assessing knowledge-value and the pivotal role of the knowledge audit. Available:  
[http://www.providersedge.com/docs/km\\_articles/Measuring\\_&\\_Assessing\\_K-Value\\_&\\_Pivotal\\_Role\\_of\\_K-Audit.pdf](http://www.providersedge.com/docs/km_articles/Measuring_&_Assessing_K-Value_&_Pivotal_Role_of_K-Audit.pdf) (Accessed 01/08/2006).

Israel, G.D. 1992. Determining sample size. Fact Sheet. PEOD-8. Available: <http://www.edis.ifs.ufl.edu> (Accessed 01/08/2006).

Jaensson, J.E. and Rutashobya, L. 2001. Research capacity building: a knowledge transfer project. Paper presented at the International Academy of African Business and Development. Washington. Available: <http://www.usbe.umu.se/forskning/pub/Business.Studies/Paper%20Washington%20camera2.pdf> (Accessed 20/03/06).

Kaniki, A. M.1999. Doing an information search. In: Terre Blanche, M. and Durrheim, K. (eds). *Research in practice: applied research for the social sciences*. Cape Town: University of Cape Town, pp.17-28.

Kaniki, A.M. 2004. The right to quality knowledge in library and information sciences: what role can the National Research Foundation rating system play? Paper presented at the LIASA 7<sup>th</sup> Annual Conference October 2004. Polokwane. Available: [http://www.liasa.org.za/conferences/conference2004/papers/LIASA\\_Conference\\_2004\\_Kaniki.pdf](http://www.liasa.org.za/conferences/conference2004/papers/LIASA_Conference_2004_Kaniki.pdf) (Accessed 15/06/2006).

Kelleher, D. and Levene, S. 2001. *Knowledge management: a guide to good practice*. London: British Standards Institution.

Kelly, K. 1999. From encounter to text: collecting qualitative data for interpretative research. In: Terre Blanche, M. and Durrheim, K. (eds). *Research in practice: applied research for the social sciences*. Cape Town: University of Cape Town, pp.279-397.

Kidwell, J. J., Vander Linde, K. M. and Johnson, S. L. 2000. Applying knowledge management practices in higher education. *EDUCAUSE Quarterly* 4:28-33. Available: <http://www.educause.edu/ir/library/pdf/EQM004.pdf> (Accessed 12/03/06).

- Krueger, R.A. 1994. *Focus groups: a practical guide for applied research*. 2<sup>nd</sup> ed.
- Leedy, P.D. and Ormrod, J.2001. *Practical research: planning and design*. 7<sup>th</sup> ed. New Jersey: Merrill Prentice Hall.
- Le Roux, K. 2001. Thuthuka programme: developing and advancing excellence in researchers. Available: <http://www.nrf.ac.za/wir/audit.html> (Accessed 15/03/06).
- Liebowitz, J., Rubenstein-Montano, B., McCaw, D., Buchwalter, J. and Browning, C. 2001. *Knowledge management: learning from knowledge engineering*. Boca Raton: CRC Press.
- Makgoba, M.W. 2004. The value of and need for research in the African University. Paper presented at Conference on African Migration and Urbanization in Comparative Perspective. *Ingede: Journal of African Scholarship* 1(2). Available: <http://ingedej.ukzn.ac.za/> (Accessed 12/03/2004).
- Maponya, P.M. 2003. Development of a model for knowledge auditing in the Eastern Cape estuaries with special reference to the Tyolomnqa estuary. Masters thesis. Pietermaritzburg: University of KwaZulu-Natal.
- Maponya, P.M. 2005. Fostering the culture of knowledge sharing in higher education. *South African Journal of Higher Education* 19(5):900-911.
- Meyer, V. 2005. Research capacity building at a historically disadvantaged tertiary institution in South Africa. Available:<http://www.interaction.nu.ac.za/saardhe2005/> (Accessed 02/05/2006).
- Morrison, K.R.B. 1993. *Planning and accomplishing school-centered evaluation*. Norfolk: Peter Francis Publishers.

Mosia, L. and Ngulube, P. 2005. Managing the collective intelligence of local communities for the sustainable utilization of estuaries in the Eastern Cape, South Africa. *South African Journal of Libraries and Information* 71(2):175-186.

National Educational Research Forum. 2000. Building research capacity: sub-group report. Available: [http://www.nerf-uk.org/word/capacity\\_report.doc?version=1](http://www.nerf-uk.org/word/capacity_report.doc?version=1) (Accessed 10/11/06).

National Electronic Library for Health. 2005. Conducting a knowledge audit. Available: [http://www.nelh.nhs.uk/knowledge\\_management/km2/audit\\_toolkit.asp](http://www.nelh.nhs.uk/knowledge_management/km2/audit_toolkit.asp) (Accessed 19/03/06).

National Plan for Higher Education in South Africa. 2001. Foreword Ministry of Education. Available: <http://www.polity.org.za/html/govdocs/misc/higheredu1.htm?rebookmark=1> (Accessed 27/06/2006).

National Research Foundation. 2005. Facts and figures: the National Research Foundation evaluation and rating system. Available: [www.nrf.ac.za/evaluation/Content/Facts/factsfigures.htm](http://www.nrf.ac.za/evaluation/Content/Facts/factsfigures.htm) (Accessed 14/05/2006).

Neuman, W. L. 2000. *Social research methods: qualitative and quantitative approaches*. 4<sup>th</sup> ed. London: Allyn and Bacon.

Newell, S., Robertson, M., Scarbrough, H. and Swan, J. 2002. *Managing knowledge work*. New York: Palgrave.

*New Encyclopaedia Britannica*. 2005. Humanities. 15<sup>th</sup> ed. London: Encyclopaedia Britannica Inc.



Ngulube, P. 2003. Preservation and access to public records and archives in South Africa. PhD. Dissertation. Pietermaritzburg: University of KwaZulu-Natal.

Ngulube, P. 2004. National Research Foundation funding application report.

Available:

<http://nrfonline.nrf.ac.za/documents/temp/FocusAreasUserApplicationReport/> (Accessed 20/02/ 2005).

Ngulube, P. 2005. Improving the quality of research outputs in higher education through knowledge sharing and collaboration: a case study. *Mousaion* 23(1):39-61.

OECD. 2005. Analysis: Developing research in higher education. Available: [http://aserf.org.in/bulletin1/dev\\_res\\_hr\\_edu.htm](http://aserf.org.in/bulletin1/dev_res_hr_edu.htm) (Accessed 19/03/06).

Oosterlink, A. and Leuven, K. U. 2002. Knowledge management in post-secondary education: universities. Available: <http://www.oecd.org/pdf/M00027000/M00027356.pdf> (Accessed 19/03/06).

Payne, G. and Payne, J. 2004. *Key concepts in social research*. London: Sage Publications.

Powell, R. R. 1997. *Basic research methods for librarians*. 3<sup>rd</sup> ed. London: Ablex Publishing.

Salant, P. and Dillman, D.A. 1994. *How to conduct your own survey*. New York: John Wiley and Sons.

Sallis, E. and Jones, G. 2002. *Knowledge management in education*. London: Kogan Page.

Sinha K and Ogilvy and Mather India Associates. 2004. Knowledge, entertainment, networking. *Journal of Knowledge Management Practice* May. Available: <http://www.tlainc.com/articl65.htm> (Accessed 15/06/2006).

Slater, M. 1990. *Research methods in library and information studies*. London: Library Association Inc.

Stevens, L. 2000. Knowing what your company knows. *Knowledge Management Magazine*: 34-42. Available: [http://www.destinationcrm.com/kmdcrm\\_km\\_article.asp?id=475](http://www.destinationcrm.com/kmdcrm_km_article.asp?id=475) (Accessed 15/06/2006).

Study South Africa. 2004. Research and development. Pretoria. Available: <http://www.studysa.co.za/> (Accessed 10/06/2006).

The California Wellness Foundation. 2001. Definition of capacity building. Available: [http://www.tcwf.org/pub\\_reflections/2001/april/pages/definition\\_of\\_capacity\\_building.htm](http://www.tcwf.org/pub_reflections/2001/april/pages/definition_of_capacity_building.htm) (Accessed 15/12/2006).

Trostle, J. 1992. Research capacity building and international health: definitions, evaluations and strategies for success. *Social Science and Medicine* 35(11):1321-1324. Available: <http://www.nccrcd.nhs.uk/about/> (Accessed 10/06/2006).

UNESCO. 2003. Higher education in a globalized society. Available: [http://www.unesco.org/iau/pdf.unesco/\\_position\\_paper\\_globalization\\_he.pdf](http://www.unesco.org/iau/pdf.unesco/_position_paper_globalization_he.pdf) (Accessed 19/03/06).

University of Free State. 2006. Report on suggested strategic clusters for University of Free State. Available: <http://www.uovs.ac.za/faculties/documents/11/459/Cluster/11589-Annexure%20B.doc> (Accessed 27/06/2006).

University of Zululand. 2006. About the University of Zululand. Available: <http://www.uzulu.ac.za> (Accessed 27/06/2006).

University of Zululand, Library and Information Science. 2006. Faculty of Arts Conference. Available: <http://www.lis.uzulu.ac.za> (Accessed 27/06/2006).

Van Vuuren, D. and Maree, A. 1999. Survey methods in market and media research. In: Terre Blanche, M. and Durrheim, K. (eds). *Research in practice: applied research for the social sciences*. Cape Town: University of Cape Town, pp.269-286.

Walker, A.D. M. 2003. The research environment. Available: <http://www.nu.ac.za/departments/data/PLANFORMERGER.pdf> (Accessed 01/04/2006).

Weiss, C. 2001. Linking science to economic development. Available: <http://www.aaas.org/programs/international/caip/events/fall2001/weiss.shtml> (Accessed 01/04/2006).

White Paper on Higher Education in South Africa. 2003. The future of higher education: comments from UCET. Available: <http://www.ucet.ac.uk/Docs/res23apr03dfeswhpap.doc> (Accessed 27/06/2006).

Wigg, K.M. 1995. *Knowledge management methods: practical approaches to managing knowledge*. Arlington, TX: Schema Press.

Wimmer, R.D. and Dominick, R.J. 1994. *Mass media research: an introduction*. Belfont, California: Wadsworth.

## APPENDICES

### Appendix 1: Rating of institutions by the National Research Foundation

#### Ratings per institution across all disciplines: 2004

Type of institution	Institution	A	B	C	L	P	Y	Total
Technikon/university of technology	Cape Technikon		1	4	1			6
	Durban Institute of Technology			5	1		3	9
	Mangosuthu Technikon				1			1
	Peninsula Technikon			1	1		1	3
	Port Elizabeth Technikon		1	1	6		2	10
	Technikon Free State			1			1	2
	Technikon Witwatersrand			2	1		1	4
	Tshwane University of Technology		1	9	2		3	15
	Vaal University of Technology						1	1
Total for technikons/universities of technology			3	23	13		12	51
Museum	Albany Museum		1	2				3
	Durban Natural Science Museum			1				1
	Iziko Museums of Cape Town		3	3				6
	Natal Museum		1	4				5
	National Museum			1				1
	Northern Flagship Institution		1	1				2
	Port Elizabeth Museum		1	1				2
Total for museums			7	13				20
University	Medical University of Southern Africa			2			1	3
	North-West University	2	7	54	3		8	74
	Rand Afrikaans University	2	11	35			9	57
	Rhodes University	1	10	32			1	44
	University of Cape Town	18	75	111	4	4	15	227
	University of Fort Hare			3	4			7
	University of KwaZulu-Natal	4	51	70	4	2	9	140
	University of Port Elizabeth	1	6	26	3		4	40
	University of Pretoria	3	44	94	2	2	23	168
	University of South Africa		9	50	6		3	68
	University of Stellenbosch	9	52	100	10	4	30	205
	University of the Free State		10	49	1		9	69
	University of the North			3			2	5
	University of the Western Cape		8	36	3	1	4	52
	University of the Witwatersrand	10	52	58	2	3	18	143
	University of Transkei			2			1	3
	University of Venda			2	1		1	4
	University of Zululand			4			1	5
Total for universities		50	335	731	43	16	139	1 314
Total for other South African institutions			17	17			7	41
Total of rated researchers who have retired or left their institutions and current institution is not known		1	6	18	1		7	33
Total of rated researchers who have moved to foreign institutions			5	7	1		1	14
Total		51	373	809	58	16	166	1 473

Source: National Research Foundation, 2004. Data for the 2004 survey of South African institutions and researchers.

## **Appendix 2: Covering letter of the survey instrument for collecting data on the research capacity needs of academic staff in the humanities at the University of Zululand**

Dear Respondent

I am a student at the University of KwaZulu-Natal, doing a Master's Degree in Information Studies. The main aim of this project is to establish the research capacity needs of academic staff in the humanities at the University of Zululand. The term "research capacity needs" refers to "research skills and knowledge development in a wide range of areas, such as research training and competence promotion".

Your participation in this project, by completing the questionnaire will result in a greater understanding of the research capacity needs of academic staff and will also possibly contribute to the development of more comprehensive and appropriate research strategies and policies that would help improve the research environment of the institution. Your participation is voluntary. All answers will be treated anonymously. No identification of individual responses will occur, as responses will be aggregated. The data will only be used to further the purpose of this research.

I should be grateful if you would complete and return this survey questionnaire by 30 September 2006 to Smangele Moyane at: e-mail: [205527111@ukzn.ac.za](mailto:205527111@ukzn.ac.za)

C/o Dr Luyanda Dube

University of Zululand

Department of Library and Information Studies

KwaDlangezwa

3886

Should you have any queries regarding the study, please contact Smangele Moyane at: [205527111@ukzn.ac.za](mailto:205527111@ukzn.ac.za).

Yours faithfully

Smangele Moyane (Miss)

### Appendix 3: Survey instrument for collecting data on the research capacity needs of academic staff in the humanities at the University of Zululand

Case Number ...

Instructions for filling in the questionnaire

- Tick the applicable answer(s). (✓)
- Use spaces provided to write your answers to the questions.
- Please answer as fully as possible.
- If you would like to expand on any of your answers please use the blank page at the end of the questionnaire.

#### SECTION A: DEMOGRAPHIC INFORMATION

1. Age .....

2. Gender

☐ Male

☐ Female

3. Population group

☐ Black

☐ Indian

☐ Coloured

☐ White

☐ Other (please specify) .....

4. What is your highest qualification?

Highest Qualification	Year obtained
PhD	
Masters	
Honours	
PG Diploma	
Degree	
Other (please specify) .....	

#### SECTION B: EMPLOYMENT HISTORY

5. Faculty .....

6. Department/programme .....

7. Nature of your employment

☐ Permanent

☐ Contract: 2 years and above

☐ Contract: below 2 years (specify) .....

8. Number of years you have worked in your institution

☐ Less than 1 year

☐ 1-3 years

☐ 4-6 years

☐ 7-9 years

☐ 10 years or more

9. Rank

☐ Senior Professor

☐ Professor

☐ Associate Professor

☐ Senior Lecturer

☐ Lecturer

☐ Junior Lecturer

☐ Senior Tutor

☐ Tutor

☐ Other (please specify) .....

10. Number of years you have occupied this rank

☐ Less than 1 year

☐ 1-3 years

☐ 4-6 years

☐ 4-6 years

☐ 7-9 years

☐ 10 years or more

11. Do you have any administrative role within the faculty?

☐ Yes

☐ No

12. If the answer to question 11 is “Yes” how many hours are spent in administrative work in each week?

☐ Less than 5 hours

☐ 5- 7 hours

☐ 7-9 hours

☐ 9-11 hours

☐ 11-13hours

☐ 14 hours or more

### SECTION C: TEACHING ACTIVITIES

13. Are you involved in teaching students?

☐ Yes

☐ No

14. If the answer to question 13 is “Yes” please indicate the number of modules you are teaching this year.

Level	1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester
Doctoral		
Masters		
Honours		
PG Diploma		
Undergraduate		
Other (please specify) .....		

15. Please estimate average percentage of time spent on each of the following levels of teaching:

Level	Percentage
Doctoral	
Masters	
Honours	
PG Diploma	
Undergraduate	
Other (please specify) .....	
<b>TOTAL</b>	<b>100%</b>



#### SECTION D: RESEARCH ACTIVITIES

16. Are you involved in research other than for degree purposes at the moment?

☐ Yes

☐ No

17. If the answer to question 16 is “No” do you intend to undertake the research other than for degree purposes in the next two years?

☐ Yes

☐ No

18. If the answer to question 17 is “Yes” what will be the outcome/product of your undertaking the research activity?

☐ Journal article

☐ Book

☐ Project

☐ Conference paper

☐ Other (please specify).....

19. If you are currently involved in research for degree purposes, please indicate the degree that you are studying for.

☐ PhD

☐ Masters

☐ Honours

☐ Other (please specify).....

20. Are you involved in any of the following? (Mark all that apply)

☐ Your institution’s research structure/s or research association/s

☐ National research association/s

☐ International research association/s

☐ Journal editorial board/s

Other (please specify).....

21. Is research a requirement in your academic career?

☐ Yes

☐ No

22. If the answer to question 21 is “Yes” why are you conducting research?

(Mark all that apply)

I want to publish	
I want a formal qualification	
Of professional interest	
I see myself as a producer of knowledge	
I want to be an agent of change	
I want promotion	
It contributes to job security	
Because of a chance of financial gain	
Because of pressure from my department	
Because of pressure from my institution	
Because of academic status	
Because of community interest	
I like research	
I want personal fulfilment	
Because of social interest	
I seek empowerment	
For other reasons (please specify) .....	

23. Please indicate how many of the following you have achieved during the past five years? (Respond to all that apply)

<b>Achievement in past 5 years</b>	<b>Number</b>
Papers in South African accredited journal/s (sole author)	
Papers in South African accredited journal/s (joint author)	
Papers in international accredited journal/s (sole author)	
Papers in international accredited journal/s (joint author)	
Monographs or books (sole author)	
Monographs or books (joint author)	
Chapters in books (sole author)	
Chapters in books (joint author)	
Conference proceedings (sole author)	
Conference proceedings (joint author)	
Commissioned reports (sole author)	
Commissioned reports (joint author)	
Papers presented at South African conferences (sole author)	
Papers presented at South African conferences (joint author)	
Papers presented at international conferences (sole author)	
Papers presented at international conferences (joint author)	
Research network meetings attended	
Collaborative research projects	
Collaborative research projects (as team leader)	
Individual research projects	
Other (please specify).....	

24. Are you rated according to NRF rating system?

☐ Yes

☐ No

25. If the answer to question 24 is “Yes” please indicate your level of rating.

Category	Definition	
A	Leading international researchers	
B	Internationally acclaimed researchers	
C	Established researchers	
L	Late entrants into research	
P	NRF president’s Awardees	
Y	Promising young researchers	

26. Are you satisfied with your rating?

☐ Yes

☐ No

27. If your answer to question 26 is “No” what suggestions would you give to improve your rating?

.....  
.....

28. Please indicate where you see your position 5 years from now in terms of NRF rating?

Category	Definition	
A	Leading international researchers	
B	Internationally acclaimed researchers	
C	Established researchers	
L	Late entrants into research	
P	NRF president’s Awardees	
Y	Promising young researchers	
N/A	None of the above	

29. If your answer to question 24 is “No”, do you intend to obtain an NRF rating?

☐ Yes

☐ No

## SECTION E: SUPERVISION AND RESEARCH ACTIVITIES

30. Are you supervising any postgraduate students in research projects this year?

☐ Yes

☐ No

31. If the answer to question 30 is “Yes” please indicate the level and the number of students you are supervising?

Level	Number
Doctoral	
Masters	
Honours	
P G Diploma	
Other (please specify) .....	

32. Estimate the average percentage of time spent on the following supervision activities:

Activity	Percentage of time
Formal contact session with students	
Preparation of supervision session	
Marking	
Consultation	
General administration	
Other (please specify).....	
<b>TOTAL:</b>	<b>100%</b>

33. How many years have you been supervising students?

☐ Less than 1 year

☐ 1 – 3 years

☐ 4 – 6 years

☐ 7 – 9 years

☐ 10 years and above

34. Do you assist students or other staff members to publish?

☐ Yes

☐ No

35. If the answer to question 34 is “Yes” what form of assistance are you providing?

(Mark all that apply).

☐ Co-publish with students

☐ Co-publishing with other members of staff

☐ Arranging mentor

☐ Practical advice

☐ Other (please specify).....

36. Do you need more training in supervision?

☐ Yes

☐ No

37. If your answer to question 36 is “Yes” which areas of supervision would you like training on?

.....

## SECTION F: SUPPORT FOR RESEARCH

38. Are your research endeavours supported in your institution?

Research support	Not at all Supportive	Fairly Supportive	Supportive	Strongly Supportive
From your head of department				
From colleagues in your department				
From your institution				
From another mentor				
Other (please specify) .....				

39. What form of research support are you receiving from your institution or department?

Form of support	Institution	Department
Financial support		
Emotional support		
Resources such as, equipment, facilities etc.		
Time		
Administrative support		
Other (please specify) .....		

40. How would you rate the level of support your field of research receives within your department?

☐ Very poor

☐ Poor

☐ Good

☐ Very good

41. Please offer any suggestions about what measures could be taken to improve support given to researchers in your institution?

.....  
 .....

## SECTION G: FACTORS INFLUENCING RESEARCH PRODUCTIVITY

42. Please indicate the factors that influence your research productivity.

(Mark all that apply)

Motivation	
Socialization	
Content knowledge	
Basic and advanced research skills	
Orientation	
Autonomy and commitment	
Work habits	
Research emphasis	
Mentoring	
Sufficient work time	
Rewards	
Communication	
Sponsoring	
Research oriented	
Other (please specify).....	

43. How do these factors affect your research productivity?

.....  
 .....

44. Do you have a well-developed research network/ collaboration in your institution?

☐ Yes

☐ No

45. If the answer to question 44 is “Yes” what kind of research network/collaboration are you involved in?

☐ Workshop (s)

☐ Conference (s)

☐ Seminar (s)

☐ External colleagues

☐ Departmental colleagues

☐ Professional association

☐ Other (please specify).....

## **SECTION H: RESEARCH CAPACITY NEEDS**

46. What are your research needs?

.....

.....

47. What is the nature of those needs?

☐ Grants for research

☐ Access and publications

☐ Training in research

☐ Fellowship

☐ Research networking

☐ Other (please specify).....

## **SECTION I: RESEARCH COMPETENCIES AND PROCESSES**

48. Would you like further training in research-related skills?

☐ Yes

☐ No

49. If the answer to question 48 is “Yes” please indicate the areas you need to receive training: (Mark all that apply).

- ☐ Formulating a research problem
- ☐ Research design
- ☐ Data collection, organization and interpretation
- ☐ Identifying the research problem
- ☐ Obtaining funding for a research project
- ☐ Writing a research report for publication
- ☐ Statistical methods including coding data
- ☐ Presenting research findings to an audience
- ☐ Other (please specify).....

50. In your opinion, what possible solutions could be implemented in your department to improve the status of research?

.....

.....

.....

**THANK YOU FOR YOUR TIME AND COOPERATION**



#### **Appendix 4: Covering letter of focus group interview questions for the research capacity needs of academic staff in the humanities at the University of Zululand**

##### **Introduction**

Good morning ladies and gentlemen. My name is Smangele Moyane. I am a student at the University of KwaZulu-Natal, doing a Master's Degree in Information Studies. I would like to introduce my supervisors to you: Ms Pearl Maponya and Prof. Patrick Ngulube. Our project is on "research capacity needs of the academic staff in the humanities at the University of Zululand" The term "research capacity needs" refers to "research skills and knowledge development in a wide range of areas, such as research training and competence promotion". You have been chosen to participate in this focus group discussion because of your involvement in research activities. Thank you for your co-operation.

We are here today to talk about research capacity needs of academic staff in your institution. The purpose of this discussion is to obtain your views on the research capacity needs of academic staff and how academic staff can be encouraged to engage and participate in research activities. In addition, we want to find out if any research knowledge gap has been identified in your institution, and what strategies and policies are in place that could possibly help to bridge those gaps. We are not here to give you answers but rather hear from you. There is no right or wrong view. Your views are what matters.

We hope that the information you will give us and the discussion today, will possibly help all of us including yourselves to identify interventions that could be implemented to encourage academic staff to engage in the scholarship of research. We will be taking notes and tape recording during the discussion so that we do not miss anything you have to say. Everything you say is confidential. Although we will ask you to tell us your names so that we will address one another by name, when we write up, anonymity will be observed. We want this to be a group discussion, feel free to respond to me and to my supervisors without waiting to be called on. However, we would appreciate it if only one

person talks at any given time and if you can give an opportunity to one speaker to complete what he/she wants to say. The discussion will last approximately 2 hours.

## **Appendix 5: Focus group interview questions for the research capacity needs of academic staff in the humanities at the University of Zululand**

### **SESSION 1: 1 Hour**

*Procedure: May one of you write your responses on the card provided and after we will have an open discussion.*

At this moment, for (5 minutes) we can start by sharing our names, where we coming from and how long we have been involved in research activities.

### **RESEARCH ACTIVITIES**

1. Are you currently involved in research other than for degree purposes?
2. Why are you carrying out the research activity?
3. Is research a requirement in your academic career? If so, do you feel pressure to do so?
4. Please explain your answer.
5. What motivates you to do research?
6. Do you experience any difficulties or problems when embarking on a research activity? Please explain.

### **SUPERVISION AND RESEARCH ACTIVITIES**

7. Are you supervising any postgraduate students in research projects this year?
8. How did you start as a research supervisor?
9. Did you receive any training on research supervision?
10. Do you still need more training? What training do you need?
11. What is a good supervisor?

### **SESSION II: 2 Hour**

*Procedure: May one of you write your responses on the card provided and afterwards we will have an open discussion.*

## **SUPPORT FOR RESEARCH**

12. What form of research support are you receiving from your institution or department?

Do you think more needs to be done in this area?

13. In your own view, how is your institution actively participating in your research activities?

14. How does your institution identify and communicate with other departments in order to form research partnerships?

15. What are your constraints when it comes to participating in issues of research?

16. What kind of programmes or interventions do you feel need to be in place to improve the research?

17. What level of resource support is needed to build capacity in research?

18. Please offer any suggestions about the measures that could be taken to improve support given to researchers in your institution?

## **Closure and summary**

Is there any other information regarding research capacity needs that you think would be useful for us to know?

**Thank you very much for coming to this workshop. Your time is very much appreciated and your comments have been very useful.**

## **Appendix 6: Covering letter of semi-structured interviews with the Heads of Departments**

### **Introduction**

My name is Smangele Moyane. I am a student at the University of KwaZulu-Natal, doing a Master's Degree in Information Studies. My project is on "research capacity needs of the academic staff in the humanities at the University of Zululand". Thank you for your co-operation.

### **Purpose**

I am here today to talk about research capacity needs of academic staff in your institution. The term "research capacity needs" refers to "research skills and knowledge development in a wide range of areas, such as research training and competence promotion".

The purpose of this discussion is to obtain your views on research strategies and policies that are in place at your university, how these policies and strategies are utilized in enabling/promoting the research environment of the institution, and the role you play in the promotion and development of research strategies and policies. In addition, I want to find out if any research knowledge gaps have been identified in your institution.

I hope that the information you will provide me with, and the discussion today will help me and yourself to put in place interventions and ways that could possibly encourage academic staff to engage in the scholarship of research. I will be taking notes and tape recording during the discussion so that I do not miss anything you have to say. Everything you say is confidential. The discussion will last approximately 30 minutes.

## **Appendix 7: Semi-structured interviews questions with the Heads of Departments**

### **RESEARCH CAPACITY BUILDING**

1. What programmes or strategies are in place to support research within your department?
2. Do you feel the support that your department receives is enough?
3. Out of 10, how would you rate the level of research output within your department?
4. Are you satisfied with this kind of performance? If not, what problems are you currently facing in your department?
5. How can the situation be improved?
6. Are your staff members motivated to do research?
7. Do you feel staff members need more training in the area of research?
8. Does your department collaborate with other institutions/departments? If so, what kind of collaboration does it engage in?
9. In your opinion, what possible solutions could be implemented in your department to improve the status of research?

### **Closure and summary**

Is there any other information regarding research capacity needs that you think would be useful for me to know?

**Thank you very much for your cooperation.**