

**ALTERNATIVE QUALITY ASSESSMENT  
PRACTICES IN LESOTHO**

by

**'MATSELANE BELINA KHAHLLOE**

**ALTERNATIVE QUALITY ASSESSMENT  
PRACTICES IN LESOTHO**

by

**'MATSELANE BELINA KHAHLLOE**

**S.T.C.; DIP. SCI. Ed.; B.Sc. Ed.; B. Ed. Hons.; M. Ed.**

*Thesis submitted in fulfillment of the requirement for the degree*

**PHILOSOPHIAE DOCTOR**

in the

**DEPARTMENT OF CURRICULUM STUDIES  
FACULTY OF THE HUMANITIES**

at the

**UNIVERSITY OF THE FREE STATE**

**SUPERVISOR: Dr. G.S. Kotzè**

**November 2008**

# AKNOWLEDGEMENTS

to the following:

- ❖ God Almighty who guided my faltering steps through this academic ladder.
- ❖ My supervisor Dr. G.S. Kotzè.
- ❖ The head of the department of Curriculum Studies, Prof G.F. du Toit for providing me with the golden opportunity to challenge my potential.
- ❖ My son and daughter-in-law (Tšooanyane and 'Malitšitso Khaahloe) for their devotion, encouragement and assistance with typing.
- ❖ The lecturers and the students who participated in this study.
- ❖ The authorities of the participating institutions and the office of the higher education department, for granting permission to conduct this research.
- ❖ The Statistics Department (UFS) and particularly Ms. Kate Smith and Dr. van Zyl for their professional support in compiling the statistics.

## DECLARATION

I, 'Matselane Belina Khaahloe, declare that this thesis is my original work and has never been submitted for any degree at any university or institution. A complete list of references is provided to acknowledge all the resources cited in this study.

I hereby also cede copyright to the University of the Free State.

---

**MB KHAHLOE**

NOVEMBER 2007

# DEDICATION

I dedicate this study to:

- ❖ My late parents 'Mapolo and Mariti Mariti: may their souls rest in peace.
- ❖ My late husband Tlale Khaahloe: may his soul rest in peace.
- ❖ My brother Machela Mariti and my sister Selloane Mariti.
- ❖ My late and beloved son Moruti Khaahloe: may his soul rest in peace.
- ❖ My elder son Tšooanyane and his wife 'Malitšitso Khaahloe.

## SUMMARY

The focus of this study is on the quality of assessment practices in assessing student achievement in institutions of higher education in Lesotho. The purpose of the study was to investigate the quality of assessment practices in assessing student achievement, and also to determine the extent to which alternative assessment practices are used in institutions of higher education in Lesotho. Five institutions were selected to take part in the research. The design of the research is a descriptive survey. The study further employs a multi-method approach, within which quantitative and qualitative methods are combined.

A literature study was undertaken to provide the background and the context of the problem. The empirical study employed a survey in which separate questionnaires for students and lecturers were compiled. The questionnaires were used to gather data on the quality of assessment practices and the extent to which alternative assessment is used in higher education in Lesotho. Interviews were also used to determine the initiatives of the Lesotho government in improving the quality of assessment in institutions of higher education in this country. Three instructional leaders from the selected institutions of higher education were interviewed.

Pilot studies were carried out to test the clarity and feasibility of both the questionnaires and the interview protocol. Request to conduct the research study was sought and permission was granted.

The Department of Statistics at the University of Free State assisted with the analysis of the quantitative data collected through student and lecturer questionnaires, while the researcher analysed the qualitative data collected through the interviews held with Lesotho government officials from the higher education sector.

The study has uncovered that the quality of assessment practices in institutions of higher education is satisfactory in some aspects, while in others quality is not

acceptable. It has also been revealed that the use of alternative assessment is very limited in institutions of higher education in Lesotho. The quality of assessment practices need to be maintained, enhanced and continuously improved to meet the emerging contexts. It was concluded that the use of alternative assessment practices can enhance the quality of assessment in higher education in Lesotho.

**Key words:** Assessment; quality; quality assurance; alternative assessment; performance assessment; product assessment.

# TABLE OF CONTENTS

## CHAPTER 1

### ORIENTATION

1.1	Introduction	1
1.2	Background	2
1.2.1	Traditional and contemporary assessment practices	3
1.2.2	Trends in assessment of students in higher education	6
1.2.3	Higher education in Lesotho	11
1.2.3.1	The mission statements of the selected institutions of higher education	11
1.2.3.2	Aims of quality improvement in higher education institutions in Lesotho	14
1.2.3.3	Policies of higher education in Lesotho related to quality	14
1.2.3.4	Challenges of higher education in Lesotho	15
1.2.3.5	Quality initiatives in the higher education system in Lesotho	17
1.2.3.6	Strategic goals of higher education in Lesotho	17
1.2.3.7	Cross-cutting issues in higher education in Lesotho	18
1.2.3.8	Emerging innovative modes of instruction in higher education	18
1.3	Statement of the problem	19
1.4	Purpose of the study	21
1.5	Significance of the study	21
1.6	Research methodology	23
1.7	Research design	23



1.7.1	Literature research	24
1.7.2	Empirical research	25
1.7.2.1	Quantitative approach	25
1.7.2.2	Qualitative approach	26
1.7.2.3	The sample of the study	26
1.7.2.4	Data presentation and analysis	27
1.7.3	Validity and reliability	27
1.7.4	Evaluation	27
1.8	Delimitation of the study	28
1.9	Exposition of terms	28
1.10	Course of the study	29
1.11	Conclusion	31

## **CHAPTER 2**

### **QUALITY IN EDUCATIONAL SYSTEMS AND PROCESSES.**

2.1	Introduction	33
2.2	Definitions of quality	35
2.3	Driving factors for quality	37
2.3.1	Existing policies, mission statements and quality in education	37
2.3.2	Accountability and quality in education	38
2.3.3	Globalisation and internationalism	39
2.3.4	Increased autonomy of institutions of higher education	39
2.3.5	Increased access to education	40
2.3.6	Paradigm shift from elite to mass education	40
2.3.7	Information technology and its impact on the quality of education	41

2.3.8	Transformation and winds of change in politics	43
2.3.9	Diversification in higher education	44
2.4	History of quality	45
2.5	The theory of total quality	46
2.5.1	Defining total quality	46
2.5.2	Characteristics of total quality	47
2.5.3	Principles of total quality	49
2.5.4	Attitudes necessary for total quality	52
2.5.5	Benefits of total quality	52
2.6	Quality assurance in education systems	53
2.6.1	Purposes of quality assurance in education systems	54
2.6.2	The concept of quality assurance	55
2.6.3	Steps in assuring quality	56
2.6.4	Characteristics of quality assurance systems in education	57
2.6.5	Principles for the successful implementation of quality assurance systems	59
2.6.6	Phases of implementing a quality assurance system	59
2.6.6.1	Defining the purpose	60
2.6.6.2	Planning and policy formulation in quality assurance systems	60
2.6.6.3	Development phase of quality assurance systems	62
2.6.6.4	Reporting phase of quality assurance systems	63
2.6.6.5	Monitoring and evaluation in quality assurance systems	63
2.6.6.6	Redefining the Purpose	64
2.6.7	Stumbling blocks in the implementation of quality assurance systems	64
2.6.8	Advantages of quality assurance systems	66

2.6.9	Disadvantages of quality assurance systems	66
2.7	Hallmarks in implementing quality assurance systems	67
2.7.1	The mission statement and its role in a quality assurance system	67
2.7.2	Standards in quality	68
2.7.3	Benchmarking	70
2.7.3.1	Benefits of benchmarking	71
2.7.4	Communication in quality assurance systems	72
2.7.5	Team building in quality assurance systems	73
2.7.5.1	Characteristics of a good team	73
2.7.6	The role of leadership in implementing quality assurance systems	74
2.7.7	Staff development and quality improvement	75
2.7.8	Quality as a change process	76
2.8	Conclusion	78

### **CHAPTER 3**

#### **QUALITY OF ASSESSMENT PRACTICES IN HIGHER EDUCATION**

3.1	Introduction	79
3.2	Definitions of assessment	80
3.3	Purposes and uses of assessment	82
3.3.1	Assessment for initial guidance	83
3.3.2	Assessment for the purpose of selection	83
3.3.3	Assessment for in-program purposes	84
3.3.4	Assessment for certification of student achievement	84
3.3.5	Assessment for accountability	85
3.4	Paradigm shifts in assessment practices	84

3.5	Issues in assessment practices: challenges and problems	89
3.5.1	The mission statement and the vision for the future	89
3.5.2	Standards and assessment	90
3.5.3	Transformation and assessment	90
3.5.4	Accountability and assessment of students in higher education	90
3.5.5	Market demands and changing job prospects	91
3.5.6	Competence based qualifications and innovative ways of Learning	91
3.5.7	Globalisation and internationalisation in assessment	92
3.5.8	Increased participation and massification in Assessment	93
3.5.9	Student diversity and assessment	93
3.5.10	Assessing multiple achievements	94
3.5.11	Financial implications of assessment	94
3.5.12	Increased institutional autonomy and assessment	95
3.6	Principles of quality assessment practices	96
3.6.1	Policy in planning and design of assessment practices	96
3.6.2	Matching assessment practices to educational objectives	97
3.6.3	Integrating assessment with instruction	97
3.6.4	Appropriateness of assessment methods and techniques	98
3.6.5	Using a wide range of assessment methods and techniques	98
3.6.6	Practicality of assessment	98
3.6.7	Fairness in assessment	99
3.6.8	Transparency in assessment	99
3.6.9	Reliability in assessment practices	99
3.6.10	Validity of assessment practices	100
3.6.11	Manageable workload in assessment	100
3.6.12	Prompt and constructive feedback	100

3.6.13	Relevance of assessment criteria	102
3.6.14	Ongoing assessment	102
3.6.15	Redemption and flexibility in assessment	102
3.6.16	Accountability and assessment	103
3.6.17	Quality assurance and assessment	103
3.6.18	Collaboration in assessment	104
3.6.19	Staff development in assessment	104
3.7	Quality and assessment	105
3.7.1	The notion of quality in assessment	105
3.7.2	Quality and quality indicators in assessment	106
3.8	Quality assurance practices in assessment	107
3.8.1	Defining quality assurance in assessment practices	107
3.8.2	Policy formulation and planning	108
3.8.3	Specification of standards and expectations	108
3.8.4	Moderation of assessment practices	109
3.8.5	Validation of assessment practices	110
3.8.6	Accreditation	110
3.8.7	Monitoring of assessment practices	111
3.8.7.1	Auditing and verification of assessment practices	111
3.8.7.2	Documentation, communication and reporting in assessment practices	111
3.8.7.3	Evaluation and review of assessment practices	112
3.9	Assessment as an agent of change and transformation	112
3.10	The role of feedback and the quality of assessment	113
3.11	The impact of workload on the quality of assessment in higher education	113
3.12	Conclusion	114

**CHAPTER 4**  
**USE OF ALTERNATIVE AND PAPER AND PENCIL ASSESSMENTS IN**  
**ASSESSING STUDENTS' ACHIEVEMENTS**

4.1	Introduction	115
4.2	Paper and pencil assessment	117
4.2.1	Characteristics of paper and pencil examinations	118
4.2.2	The drive for improvement and reform	118
4.2.3	Common malpractices in pencil and paper examination	119
4.2.4	Advantages of paper and pencil examinations	120
4.2.5	Disadvantages of paper and pencil examinations	121
4.2.6	Principles of high quality paper and pencil assessment	124
4.2.7	Examinations and quality in education	125
4.3	Alternative assessment	127
4.3.1	Definitions of alternative assessment	127
4.3.2	Characteristics of alternative assessment	128
4.3.3	The drive for alternative assessment	130
4.3.4	Different types of alternative assessment	132
4.3.4.1	Project assessment	132
4.3.4.2	On-demand tasks	132
4.3.4.3	Demonstrations and exhibitions	133
4.3.4.4	Oral presentations	133
4.3.4.5	Portfolio assessment	133
4.3.5	Advantages of alternative assessment	133
4.3.6	Disadvantages of alternative assessment	135
4.3.7	Principles of high quality alternative assessment	137
4.3.8	Using portfolios to balance assessment of student achievement	138
4.3.8.1	Different perspectives of portfolio assessment	138
4.3.8.2	Rationale for the use of portfolios as assessment tools	139

4.3.8.3	Benefits of portfolio assessment	140
4.3.9	Alternative assessment and current theories of learning	141
4.3.9.1	Constructivism and alternative assessment	142
4.3.9.2	Learning styles and alternative assessment	143
4.3.9.3	Multiple intelligences and assessment	143
4.3.10	Conclusion	148

## **CHAPTER 5**

### **RESEARCH METHODOLOGY**

5.1	Introduction	149
5.2	Ethical issues in the research	150
5.3	Research methodology and design	152
5.3.1	Empirical research	153
5.3.1.1	Quantitative and qualitative approaches to research	153
5.3.1.2	Comparing quantitative and qualitative approaches to research	153
5.3.1.3	Similarities between quantitative and qualitative approaches	153
5.4	Quantitative research	155
5.4.1	A survey study on the quality alternative assessment in Lesotho	156
5.4.1.1	Data collection in a survey	158
5.4.1.2	Questionnaires	159
5.4.1.3	Major characteristics of a good questionnaire	164
5.4.1.4	Preparation and administering of questionnaires	164
5.4.1.5	Covering letter	164
5.4.1.6	Pilot study	166
5.4.1.7	Distribution of questionnaires	167

5.4.1.8	Request to conduct a research study	167
5.4.1.9	Response rate	167
5.4.1.10	Follow-up activities	171
5.5	A qualitative approach	171
5.5.1	Semi-structured interviews	171
5.5.2	Pre-testing interview protocol	172
5.6	Multi-method approach	173
5.7	Sampling techniques	176
5.7.1	Selecting the sample of institutions of higher education	177
5.7.2	Determining sample sizes	179
5.7.2.1	Selecting a sample of lecturers	179
5.7.2.2	Selecting a sample of students	180
5.7.2.3	Selecting a sample of instructional leaders	181
5.7.3	Participants	182
5.8	Objectivity of the researcher	182
5.9	Presentation and analysis of the empirical data	183
5.9.1	Questionnaires	183
5.9.2	Interviews	184
5.11	Conclusion	185

## **CHAPTER 6**

### **ANALYSIS, PRESENTATION AND DISCUSSION**

6.1	Introduction	187
6.2	Presentation, analysis and discussion of data (lecturers)	187



6.2.1	Biographic information (Part 1)	188
6.2.2	Quality of assessment practices (Part 2)	191
6.2.2.1	The quality of assessment practices with regard to policy issues (Category A)	192
6.2.2.2	The improvement of the quality of learning (Category B)	194
6.2.2.3	Quality of content coverage (Category C)	196
6.2.2.4	Administrative issues (Category D)	197
6.2.2.5	Collaboration in assessment (Category E)	199
6.3	Use of alternative assessment (Part 3)	200
6.3.1	Implementation of alternative assessment tasks	200
6.3.2	Implementation of alternative assessment techniques	203
6.3.3	Comparison of the use of alternative assessment types and tasks (Lecturers)	207
6.4	Presentation, analysis and discussion of the data (students)	210
6.4.1	Biographic information (Part 1)	211
6.4.2	Quality of assessment practices (students)	212
6.4.2.1	Quality of assessment with regard to administration issues (Category F)	212
6.4.2.2	The improvement of the quality of learning: Students (Category G)	214
6.4.2.3	Practicality of assessment (Category H)	215
6.4.2.4	The use of alternative assessment (students)	216
6.5	Comparison of the use of alternative assessment and paper and pencil assessment	218
6.6	Presentation and analysis of qualitative data (interviews)	220
6.6.1	Analysis of the interviews	221
6.6.2	Interview questions	221

6.6.3	Views of instructional leaders on the quality of assessment practices	223
6.6.4	Lesotho government initiatives to improve the quality of assessment practices	231
6.7	Conclusion	234

## **CHAPTER 7**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS OF THE STUDY**

7.1	Introduction	236
7.1.1	Problem of the study	236
7.1.2	Research questions	237
7.1.3	Purpose of the study	238
7.1.4	Research methods used in the study	238
7.1.5	Limitations of the study	239
7.2	Conclusions of the study	241
7.2.1	Conclusions based on the findings of the literature research	241
7.2.1.1	Conclusions on quality in educational systems and processes (Chapter 2)	241
7.2.1.2	Conclusions on the quality of assessment practices in higher education Chapter 3)	242
7.2.1.3	Conclusions on the use of alternative assessment in education (Chapter 4)	243
7.2.2	Conclusions on the findings of the empirical research	245
7.2.2.1	Conclusions on the findings of the lecturers' questionnaire	245
7.2.3	Conclusions on the findings of the students' questionnaire	249
7.2.4	Conclusions on the findings of the face-to-face interviews	251
7.2.5	Recommendations	254

7.2.5.1	Internal moderation	254
7.2.5.2	Abandoning over dependence on traditional assessment	254
7.2.5.3	Adequate staffing as well as continuous and systematic staff development	255
7.2.5.4	Sound financial support	255
7.2.5.5	Regular and systematic review for continuous quality Improvement	256
7.2.6	The use of alternative assessment in institutions of higher education	256
7.2.7	Initiatives of the Lesotho government to improve the quality of assessment	257
7.3	Possibilities for further research on the quality of assessment practices	257
7.4	Conclusion	
7.5	Final conclusions of the study	258

## **APPENDICES**

**Appendix A:** Questionnaire for lecturers

**Appendix B:** Questionnaire for students

**Appendix C:** Interview protocol

**Appendix D:** A letter requesting permission to conduct a research study

**Appendix E:** Permission to undertake a research study

**Appendix F:** A letter of consent

**Appendix G:** A testimonial letter from the promoter

**Appendix H:** Pearson's correlation table for Questions 5.1 to 5.9 (Students' questionnaire)

**Appendix I:** Pearson's correlation table for Questions 18.1 to 18.13 (Lecturers' questionnaire)

## LIST OF TABLES

Table 2.1:	Key principles of total quality	64
Table 3.1:	Classification of forms of assessment according to purpose and use	107
Table 3.2	Paradigm shifts in assessment	109
Table 5.1:	Contrast between quantitative and qualitative approaches	194
Table 5. 2:	The response rate for the sample of the lecturers per institution	211
Table 5.3:	The response rate for the sample of students per institution	211
Table 5.4:	Response rate for the students' and the lecturers' questionnaires	212
Table 5.5	Theoretical sample sizes for different sizes of population at 95 per cent confidence level	221
Table 5.6:	Proportional representation of the sample of the lecturers	222
Table 5.7	Participants of the study	224
Table 6.1:	Quality aspects of assessment practices relating to policy issues	238
Table 6.2:	Improvement of the quality of learning	241
Table 6.3:	Quality of content coverage	242
Table 6.4:	Quality aspects with regard to administrative issues	243
Table 6.5:	Quality aspects with regard to collaboration	245
Table 6.6:	Implementation of alternative assessment tasks	246
Table 6.7:	Use of alternative assessments techniques	249
Table 6.8:	Correlation between tasks and techniques	252
Table 6.9:	Quality aspects of assessment practices with regard to administrative issues	258
Table 6.10:	Improvement of the quality of learning (students)	259
Table 6.11:	Practicality of assessment practices	260
Table 6.12:	Use of types of alternative assessment (students)	261
Table 6.13:	Paper and pencil assessment and alternative assessment (students)	263
Table 6.14:	Existence of policy guidelines	268

Table 6.15: Quality of assessment practices	269
Table 6.16: Major quality aspects of assessment practices	272
Table 6.17: Major weaknesses of assessment practices	274
Table 6.18: Suggested quality improvements	275
Table 6.19: Initiatives to improve the quality of assessment practices	277

## **LIST OF FIGURES**

Figure 2.1: Five principles of total quality as a house of quality	65
Figure 6.1: Age groups of lecturers in years	233
Figure 6.2: Positions of lecturers	234
Figure 6.3: Subject areas of lecturers	235
Figure 6.4: Experience of lecturers	236
Figure 6.5: Gender profile of students	256

<b>List of references</b>	<b>305</b>
---------------------------	------------

## **DECLARATION OF LANGUAGE EDITING**

### **To whom it may concern**

I hereby declare that this thesis has been language edited.

Prof. D. Coetzee

PhD

Language Editor

## ORIENTATION

### 1.1 Introduction

When focusing on trends in higher education, the quality of higher education features as one of the most controversial issues and the main cause of the concern for the quality of higher education world wide. Despite the fact that the issue of quality and the related aspects of quality are not new in higher education, the renewed focus on the quality of higher education stems from several forces which impact on the quality of higher education (Lewis & Smith 1994: Preface). The issue of quality has come to mean so much to all the stakeholders because education is valued for the contribution it makes to students as valued citizens who are better prepared to meet future academic and business challenges. As a consequence, assessment should provide valid evidence of students' capabilities to the stakeholders. Quality improvement and assurance have become extremely important objectives in education, including all its processes such as assessment of student achievement. In confirmation, Sallis (1993:35) contends that quality is at the top of most of the agendas in all educational institutions worldwide. Baijnath, Maimela and Singh (2001:11) extrapolate that improving quality is one of the most important tasks facing every institution of higher education. Most importantly, students' achievement and assessment are important aspects (indicators) of any quality framework in higher education (Cox and Ingleby 1997:88).

According to Erwin in Thackwray (1997:6) a useful definition of assessment is that it provides a systematic basis for making inferences about the learning and development of students; it is proof of defining, selecting, designing, collecting, analyzing, interpreting and using information to increase student learning and development.

The definitions of quality and quality assurance are highly contextual and multidimensional; this is because the problems of individual institutions are also contextual (Arcaro 1995:12; Parsons 1994:34; Ecclestone 1996:56; Bowering-Carr and Burnham 1994:26; Salisbury, Wilson and Goldsmith 1990:53; Harris, Bennet and Preedy 1997:165; Baijnath, Maimela and Singh 2001:31). The operational definition of quality in this study is fitness of purpose. Other definitions of quality (2.2) are descriptive of the fitness of education systems and their processes for their purposes.

This chapter takes off by presenting the background of the problem of the study focusing on an exposition of paper and pencil assessments and alternative assessments, the impact of the trends in assessment of students in higher education in Lesotho, including a brief description of the selected institutions of higher education and their mission statements. The aims for quality improvement, the quality improvement policies and the challenges of higher education in Lesotho are further identified and discussed. The initiatives of the Lesotho government (through the Ministry of Education) towards improvement of the quality of assessment practices in institutions of higher education in Lesotho were also examined. The strategic goals and cross-cutting issues in higher education in Lesotho, as well as the emerging innovative modes of instruction in higher education are presented. The chapter proceeds by stating the problem and the purpose of the study. The significance, delimitation of the study, as well as the methodology and research methods of the study, are described. Lastly, validity and reliability, definitions of unusual terms, a list of abbreviations and the structure of the study are finally addressed.

## **1.2 Background**

A history of quality and quality assurance practices indicates that quality was adopted from the industrial sector and that the aim of quality is to prevent problems before they start (Arcaro 1995:5; Cornesky 1992:29; Bradley 1993:172; Taiti 1994:36; Parsons 1994:22) (cf. Chapter 3). Furthermore, according to



literature, quality and issues related to quality are re-emerging global issues in entire education systems (Sallis 1993; Ecclestone 1996; Nasta 1994). The issue of quality improvement is on the agenda of every educational organisation, and all activities and processes in quality improvement systems are targeted (Arcaro 1995:6). The need for quality improvement and maintenance in higher education and its activities and processes, are influenced by emerging issues such as massification, increased autonomy of institutions, accountability, globalisation and others (Calder 1994; Craft 1994; Loder 1990; as well as Cox and Ingleby 1997). As a result, the concept of quality in education also changes as a result of these trends (cf. Chapter 2). Fourie, Strydom and Stetar (1999:11) emphasise that the purpose of quality assurance systems is to develop uniform procedures and to improve student learning experiences across faculties and institutions.

The subsequent section considers traditional assessment and contemporary assessment as represented by paper and pencil assessment and alternative assessment respectively.

### **1.2.1 Traditional and contemporary assessment practices**

There is a growing mistrust of paper and pencil examinations. This form of assessment is criticised all over the world for its detrimental effect on instruction and students, as well as for many other weaknesses (Heynemann and Ransom (1992:105; Brown and Gasner 1997:21). Some common deficiencies of paper and pencil assessment are presented in this section. Eckstein and Noah (1992: preface); Smith (1996:88) and Adams (1996:127) point to the following problems and weaknesses of paper and pencil assessment, and in particular tests and examinations:

- **Irrelevance:** This implies that some questions in paper and pencil assessment may focus on irrelevant concepts that do not impact directly on students' lives. In other words, examinations are not contextual.

- **Bias:** This can be explained by the fact that bias in paper and pencil assessment always results from factors such as use of foreign languages, gender bias, favour of certain ethnic groups and others.
- **Discrimination:** This implies that examinations discriminate against other learners such as deprived students and students who live in poor socio-economic conditions which may cause learning problems. Learners from disadvantaged areas may experience discrimination. Examinations may also discriminate against the gifted and the less gifted learners. As such, examinations may destroy self-esteem.
- **Academic overloading:** Academic overloading entails that voluminous factual knowledge is provided to students in preparation for examinations.
- **High failure rates:** It can be deduced that high failure rates are caused by academic overloading, bias, unreliable grading and others.
- **Superficial learning:** Most paper and pencil assessment lacks content, construct, and face validity because it tests sub-skills in an isolated and decontextualised way, directly contradicting the schematic nature of learning.
- **Limited interaction when learning:** Examinations fail to assess student ability to negotiate meaning in social contexts.
- **Rote learning:** Paper and pencil assessment relies heavily on factual information. Learning thus becomes more focused on rote learning in order to pass.
- **Negligence of higher order thinking skills:** Very little attention if any is given to the development of higher order thinking skills such as reasoning, imagination and independent inquiry.
- **Mismatch between education and job market:** Graduates are often not prepared for the demands of higher order cognitive skills such as reasoning, problem solving and other competence skills in the workplace or adult life.

McMillan (2004:16) argues that what is necessary in assessment practices is a balanced approach to assessment in which appropriate techniques are administered, varied and used in a credible way for decision-making. As a consequence of the foregoing exposition, abandoning total dependence on traditional assessment practices is necessary. Despite all the criticism of paper and pencil assessment, examinations in particular still play a prominent role in most countries worldwide. It is clear that since there is a growing mistrust in paper and pencil assessment, alternative assessment practices that may provide reliable evidence of the competences that are developed in the prospective labour force, are necessary in higher education.

In contrast alternative assessment entails a range of assessment methods designed to take the place of or to supplement paper and pencil tests and examinations (Hart 1994:105; Schwartz and Webb 2002:61). Alternative assessment includes the following: projects, extended essays, paper presentations, examinations and tests. It must be noted that the use of alternative assessment emphasises the use of varied assessment strategies and approaches, including the appropriate use of high quality examinations and tests.

The benefits of alternative assessment (or most importantly, the quality indicators of student assessment) include: achievement of subject, course or the program objectives, consistency, practicality, reliability, fairness, validity, multiple approaches to assessment and others (McMillan 1997:76; Cox and Ingleby 1997:79; Brown and Knight 1994:46).

Although the above attributes are lacking in paper and pencil assessment, paper and pencil examinations are still considered the best way to assess student achievement in some institutions of higher education, despite the international move towards the use of alternative assessment.

Assessment is one of the cornerstones of higher education and it is subjected to several challenging and emerging socio-economic factors worldwide (1.2). These

factors or trends hit hard on the quality of assessment practices in higher education and they are both challenging and problematic (Lewis and Smith 1994: preface).

### **1.2.2 Trends in assessment of students in higher education**

The deep concern for quality and quality assurance has become an imperative for every institution in education because of the increasing call for accountability and other challenging driving forces for quality. This is indicated in sources that include McNay (1998:126); O'Neil and Kitson (1996:53); Calder (1994:36); Ellis (1997:75); Maharasoa, Strydom and Van der Westhuisen (2002:3); Erwin in Brown and Knight (1994:135-6), and others. Scott (1994:48) points out that accountability is closely related to quality control in education and it is about keeping and fulfilling the promises to the society served by a particular education system.

According to Adams (1996:236); Furlong and Smith (1996:33); Linn and Miller (2005:7); Halpen in Anderson and Specks (1998:6); Greenwood (1994:15); Lewis and Smith (1994: preface); Sallis (1994:92); Arcaro (1995:95) and Vedder (1992:135), some of these challenging and problematic factors include inter alia:

- **Accountability for public funds:** Higher education plays an important role in society, and as a result there are increasing demands for accountability to all stakeholders, who include students, government, parents and employers. There is a growing dissatisfaction with the performance and the quality of higher education worldwide. As a result there is increasing pressure for more accountability in the use of public funds. Furthermore, the alarming rate at which the enterprise of higher education is expanding challenges accountability with regard to the quality of higher education. Brown, Race and Smith (1996: Preface) further indicate that funding bodies demand high standards. Brown *et al.* (1996: Preface) also highlight that the students have high expectations and that there is new emphasis on competence-based assessment practices. In Lesotho, the

government is concerned about the standards and the value for money spent on education by the public (Ministry of Education Report 2000:32). The latter report also indicates that parents and other stakeholders complain that the education system is wasting their hard-earned money for poor educational returns. What expires from the exposition of the way in which accountability for public funds influences quality is that assessment practices are obliged to provide justifiable evidence that the graduates of higher education can meet the demands of the workplace and adult life in general.

- **The changing nature of higher education:** The world in which institutions of higher education is operating is changing. The structure and the environment of higher education is changing because of, among others, increased participation of parents, students and other stakeholders, student diversity, as well technological advancement. The demands for new programs of study that fit well into the ever-changing job market also impacts on the quality of assessing students in higher education.
- **Economic growth:** A need for the continuation of economic growth generally demands a better educated workforce that is capable of delivering improved public services. To achieve in an economically adaptive workforce calls for high quality assessment practices that may provide valid evidence and proof of the capabilities of the graduates (the quality of the product) of higher education.
- **Market forces:** Against the background of increasing market forces, competition for finances, students as well as other resources in higher education demand high performance standards to satisfy all stakeholders. Most importantly, the changing financing structure of higher education is a major cause of financial constraints, which result in tight competition for enrolling students. Another competing factor for finances is that governments are faced with the challenge of the equitable distribution of finances between education and other human services in society. It must also be noted that the impact of the alarming expansion of student numbers on public expenditure is also becoming a controversial issue.

- **Financial constraints:** A lack of financial resources due to declining public support and increasing competition for donor support necessitates seeking cheaper but valid ways of assessing learning in higher education. Lesotho is also experiencing this problem. However, higher education in Lesotho enjoys a large portion of education expenditure. The major sources of finances for higher education in Lesotho are the government and the donor community. As such higher education should be accountable to the parents, the donor community, and the nation at large.

- **Increasing student numbers (massification) and diversity:** The needs of an increasingly diverse and changing population also necessitate varied assessment strategies to meet these differing needs. The problem of diversification and massification is aggravated by increasing participation in higher education. All these necessitate that the quality of assessing many students with the available resources is assured. Equity issues also need to be addressed.

- **Existing policies:** The changing and existing policies in higher education also impact on the quality of educational delivery and assessment practices. In Lesotho, existing policy statements emphasise quality improvement in all sectors of education (1.1.3.3).

- **New and innovative ways of instructional delivery and changing knowledge:** There is strong argument that the current theories of learning, such as Gardner's theory of multiple intelligences, constructivism and theories on learning styles are not compatible with traditional assessment since current theories of learning emphasise how learners think and how they apply thinking skills (Adams 1996:236). Adams (1996:236) alleges that the "hows" that are emphasised by current theories of learning cannot be satisfactorily addressed with traditional paper and pencil examinations only. Since knowledge is not static and changes in every aspect of life, the implication is that ways of assessing students' achievement should respond accordingly and therefore move away from traditional assessment practices.

- **Globalisation and internationalisation:** Globalisation and internationalisation demand the formulation of global standards, objectives and principles of good practice as well as development structures and mechanisms that particularly enable the countries to cooperate in the field of education to improve quality. Smith (1996:89) holds that globalisation forces countries into greater international interdependence, which demand skills such as critical thinking, analysing divergent cultural perspectives on given issues and creative problem-solving across cultures. Smith continues by emphasising that the memorisation of facts and one-dimensional interpretation of social issues are no longer sufficient. Based on this exposition it is clear that balanced and varied assessment practices that enable graduates to fit into and adapt to the world of work, both locally and internationally, are imperative in higher education systems.
- **Technology:** There appears to be a general view that assessment of student achievement in higher education should change to adapt to ever-changing technological demands that continually change the world of work and societies. Moeletsi (2005:2) is of the view that the assessment of student achievement in higher education should be in line with changing job demands so that it (student assessment) provides valid evidence that the graduates of higher education are prepared for the labour market. Furlong and Smith (1996:33) maintain that there is a global perspective that quality and quality assurance systems are not static and that it changes within changing contexts and the changing requirements of the environment and technology. Wilnut and Rainbow (1991:178) emphasise that social, political, economic and educational factors force institutions in higher education to review their activities.

These trends impact on higher education to the extent that the nature of higher education is in a continuing flux, and this is indeed the case with the society at large (Furlong and Smith 1996:33). Flexibility, creativity and abandonment of all outmoded practices in education, as well as in practices of assessment, are an imperative (Furlong and Smith 1996:33). It seems that the quality of assessment practices cannot be divorced from the entire enterprise of higher education. The

dynamics and challenges of higher education as such impact on assessment practices, and therefore call for rethinking strategies to improve the quality of assessment of student achievement so that higher education fulfils its mission both locally and internationally. Furthermore, the implication of the foregoing exposition for this particular study is that overdependence on traditional assessment practices, such as paper and pencil tests, should be reduced so that the assessment of students becomes balanced. The general opinion is that there is growing pressure on lecturers in higher education to provide alternative assessment practices that are for example, fair, varied, valid, reliable, efficient and effective.

Some of the above-mentioned problems and trends and their impact on the quality of higher education, and in particular on assessment practices of student achievement, apply also to Lesotho. More than fourteen years ago, Kellaghan and Greaney (1992:65) indicated that the problem of the unsatisfactory quality of education was not new to Lesotho. In response to this problem, and other related challenges, which jeopardise the quality of higher education in Lesotho, the government is currently striving to improve training in all institutions of higher education in this country. The government and all stakeholders are working together to develop and establish national accreditation mechanisms for higher education institutions in Lesotho (Ministry of Education: Lesotho Education Sector Strategic Plan 2005-2015 2004:80, 81).The latter includes the practices of assessing student achievement.

The focus of this study is consequently on the quality of assessment practices and the extent to which alternative assessment is utilised in higher education in Lesotho. Since alternative assessment allows for the use of varied forms of assessment, it may be necessary to balance the assessment practices of students by incorporating alternative assessment in the higher education system of Lesotho. A brief background of higher education in Lesotho is subsequently provided.



### **1.2.3 Higher education in Lesotho**

Higher education in Lesotho is a sector comprising of post high school institutions which offer diploma programs, with the exception of an institution which also offers degree programs. There is one national university, one national college of education, one national health college for nurses, one agricultural college, a polytechnical college, institute of manpower development, institute for center for accountancy, one technical college, institute of public administration and institute of extra mural studies. The selected sample of the institutions of higher education is briefly described in the following section. For generalisability of the results of the study, five institutions of higher education were selected for this study. The names of the institutions are not mentioned for the sake of confidentiality; and they are designated as institutions A, B, C, D and E.

#### **1.2.3.1 The mission statements of the selected institutions of higher education**

Literature reports that the mission statement of an institution is central to the implementation of quality improvement systems at all levels of education (Bowering-Carr and West-Burnham 1994:26; LEC Calendar 2002:17; Craft 1992:12; Ecclestone 1996:139). It is therefore important to present the institutions of higher education and their mission statements. Only a small number of higher education institutions exist in Lesotho. Almost all of the ten public institutions of higher education are situated in Maseru, except one institution, which is about thirty-five kilometers north-west of this city. The institutions in the Maluti area could not be accessed easily because of financial constraints and the difficulty of traveling in mountainous areas. The selected institutions of higher education are briefly outlined below:

- **Institution A** is the only institution that offers technical education at a diploma level. Its vision is to become the leading institution in the region, offering the highest quality of programs, relevant to both local and international markets,

and to equip their graduates with the skills that will allow them to adapt in life (Ministry of Education Strategic Plan 2004-2015).

- **Institution B** is also the only one of its kind in Lesotho. It trains Lesotho students to be competent personnel for the agricultural sector of the Lesotho government. In addition, it trains secondary teachers to teach agriculture in Lesotho secondary schools (Lesotho Agricultural College: Academic prospectus 2006/7:2). According to the prospectus of this institution, the mission statement is to produce high caliber graduates:
  - who are well-trained in various fields of agriculture, home economics, and natural resources management at diploma and certificate level;
  - who have a strong knowledge-base and foundation of practical orientation and competitiveness in commercial agricultural production; and
  - whose technical contribution will impact on, and be reflected by sustained increase in agricultural productivity and production.
- **Institution C** is the highest academic institution in the Kingdom of Lesotho. In its strategic plan the institution envisages to address both qualitative and quantitative aspects of its services. The mission statement of this institution is to meet the needs of Lesotho, Southern Africa and the world by producing competent and skilled graduates (National University of Lesotho Calendar 2006-2007: 4).
- **Institution D** aims to promote educational development by responding to the changing societal needs in the context of lifelong learning. The vision of this institution is to become the leading institution that provides professional services for the higher education system of Lesotho.
- **Institution E** is the only teacher training college in the country. The college is charged with the responsibility of training primary and secondary teachers at diploma level. In its mission statement the college indicates that it strives to train and produce competent teachers for the school system of Lesotho, who are able to offer the necessary services in their communities, as well as in

international communities (Lesotho College of Education Calendar 2006-2007:3).

What expires from the mission statements of the selected institutions of higher education in Lesotho is that they are all committed to quality improvement. The mission statements of these institutions emphasise aims that indicate devotion and commitment to excellence.

The above mission statements and their focus imply the following:

- Development of programs which are relevant and responsive to local as well as international markets, provision of high quality programs to meet the needs of the students, the needs of the country as well as of the international communities and development of adaptive skills that may permit graduates to perform competently both locally and internationally.
- Development of a competent personnel that is able to provide high quality service both locally and internationally as well as consideration of equity in program development with regard to gender bias as well as discrimination in program delivery

The foregoing presentation of the selected public institutions of higher education in Lesotho is a clear indication that the system has its own ideals, aspirations and expectations. As mentioned previously, the study focused only on public institutions of higher education in the Maseru area. Some institutions of higher education are complex in nature in that they offer short-term in-service courses, which may run for two to four weeks on average. As a result, only a small number of students (4 to 12 in total) attend the courses. The students come for training sessions intermittently and are always in the minority. For this reason, it was not practical to include such institutions in the sample of this study.

To fulfill their mission statements, efficient planning and clearly documented specific aims are essential in institutions of higher education. What follows is a

summary of the aims pertaining to quality improvement in higher education in Lesotho.

### **1.2.3.2 Aims of quality improvement in higher education institutions in Lesotho**

A number of international aims of higher education include increased participation to achieve higher standards and the effective use of available resources (Ellis 1997:7). Some of the aims of higher education in Lesotho also indicate a striving towards quality and excellence. These are:

- To equip high-level personnel with the knowledge and skills required for the economic, social and political advancement of the Kingdom of Lesotho, and by full realisation of their abilities, to fit them into their communities and the life of the entire nation (Ministry of Education: Educational Policy Guidelines).
- To improve the quality of education and training, to establish quality assurance and improvement mechanisms and to improve efficiency in institutions of higher education and the relevance of higher education and to make it responsive to the demands of the labour market.

The aims pertaining to quality in higher education in Lesotho thus indicate that the government and the nation at large have high expectations with regard to the quality and the standards of performance. The challenge is how to implement these good intentions. The aims inevitably lead to the formulation of policies. The policies of higher education in Lesotho, related to quality, are discussed in the next section.

### **1.2.3.3 Policies of higher education related to quality**

One of the main expectations of higher education in Lesotho with regard to quality enhancement and improvement is to supply high quality human resources for the labour market. The aims and expectations of higher education in Lesotho

have therefore led to the formulation of policies that may enhance quality improvement strategies.

The formulation of relevant policy frameworks is necessary to achieve the aims and the goals of the higher education system in any country. In Lesotho quality related policies of higher education include the following: Increased access to higher education on equitable terms, improvement of efficiency in higher education and improvement of the relevance of higher education to be responsive to the demands of the labour market, both locally and internationally.

These policy issues indicate the good intentions of the Lesotho government to deliver high quality higher education. However, there are always challenging areas that need to be addressed immediately and with caution.

#### **1.2.3.4 Challenges of higher education in Lesotho**

Higher education systems are generally subjected to three main challenges. These are attempts to increase the numbers of students, failure of governments to financially support mass participation systems at affordable rates, as it was in small elite systems, and the call to demonstrate that the standards are maintained and enhanced (Evidence to Enquiry into HE: [http://www.qaa.ac.uk./about\\_quad/evidence.hum](http://www.qaa.ac.uk./about_quad/evidence.hum)).

The Lesotho higher education system has a share in these global challenges. However, the system is also faced with its own unique challenges and problems that include the following:

- Enhancing the quality of higher education through well-programd and well-structured curriculum improvement. This includes assessment of student achievement, which is integral to well-structured curricula. A change in curriculum necessitates a change in the assessment of student achievement.

- Improving the developmental relevance of higher education by involving all the stakeholders, including the private sector (NGOs and others), in revising and developing the curriculum and relevant assessment practices in higher education.
- High staff attrition, which refers to the problem of high staff turnover. Employees will always look for greener pastures where they are paid better salaries.
- Inadequate funding, which demands institutions of higher education to rationalise their expenditure and find ways of generating revenue as well as inadequate infrastructure, which calls for the construction of additional buildings such as hostels and classrooms.
- Massification of higher education, which results in the increase of student enrolment that may impact negatively on the quality of assessment and other instructional activities. More importantly, massification becomes even more problematic because of the unmanageable workloads that are aggravated by downscaling of posts.

In view of the foregoing, it is clear that Lesotho has a share in some of the problematic global trends. These challenges and problems have become a major concern since it impacts negatively on the quality of higher educational provision in Lesotho, and particularly on assessment practices.

The concern of this study is the quality status of the assessment practices and the use of alternative assessment in the higher education system in Lesotho. For institutions of higher education to successfully face these issues and challenges, rethinking of the quality of assessment practices in higher education, among others, is an imperative. To this effect the Lesotho government, through the education sector, has taken the initiative to improve the quality of higher education. However, the question of the effect of what the government is doing to improve the quality of assessment practices, and the extent of the use of alternative assessment, still remain unanswered.

#### **1.2.3.5 Quality initiatives in the higher education system in Lesotho**

According to the Higher Education Act (one) of the recently formed Council of Higher Education (CHE), Lesotho is charged with the responsibility to promote quality assurance audit (QA) mechanisms in higher education institutions and accredit higher education programs and to monitor and evaluate performance of academic programs and publish information on higher education development on a regular basis as well as to promote access and participation of students to higher education.

Against the background of the foregoing exposition of the quality initiatives in higher education in Lesotho, little evidence could be found of specific intentions to improve the quality of the assessment of student achievement. To provide a clear picture of the intentions of the Lesotho government towards quality improvement of higher education, and to unfold the problem of this study further, the strategic goals of higher education and crosscutting issues are briefly presented in the following section.

#### **1.2.3.6 Strategic goals of higher education in Lesotho**

According to Ecclestone (1996:138) a strategy is a systematic series of steps for achieving quality in an educational institution. On this basis some of the main strategic goals of higher education, which are geared towards the improvement of the quality of higher education in Lesotho: Education Sector Strategic Plan (2004:79), includes: Establishment of national accreditation means for higher education in Lesotho, adoption and implementation of quality mechanisms and preparation of higher education staff development plans and improvement of the relevance of higher education through relevant review of programs.

Against the background of the strategic goals, the focus on quality improvement seems to be a controversial issue, which cuts across almost all the sectors of government and necessitates immediate action. However, the improvement of the quality of the assessment of student achievement is still condoned. The study

consequently focuses on the quality of higher education and the assessment of student achievement.

#### **1.2.3.7 Cross-cutting issues in higher education in Lesotho**

According to the Lesotho Government: Education Sector Strategic Plan (2004:96), crosscutting issues in higher education in Lesotho include development and establishment of a national framework for curriculum and assessment (still in the development stage) as well as deciding on development of an evaluation strategies.

However, innovative modes of instruction and new theories of learning demand new ways of assessing student achievement.

#### **1.2.3.8 Emerging innovative modes of instruction in higher education**

Cunningham, in Anderson and Specks (1998:61), as well as Abruscado (2000:32) indicate that according to theories of learning, each person has his or her own way of learning, and an understanding of individual learning styles can assist in preparing experiences that allow students to approach assessment tasks differently.

Because students should be prepared for the future adult world they need abilities that will enable them to solve day-to-day problems, to make informed decisions, to learn new things, and to adapt and change (Smith 1996:179). Smith's assumptions about the future of the students imply that assessment practices must be appropriately adapted to their needs so that, as graduates of higher education, they could fit properly into the world of work and adult life in general. More details on the compatibility of alternative assessment and innovative current modes of instruction are provided in Chapter four (4.3).



### **1.3 Problem statement**

There is a continuing overdependence of assessment practices on paper and pencil tests and examinations in institutions of higher education in Lesotho. Assessment practices in higher learning are often limited to paper and pencil tests, and as a result, traditional assessment dominates other techniques and approaches to assessment and little recognition is given to alternative assessment. The problem of overdependence of assessment practices on paper and pencil assessment is perpetuating despite the worldwide call to move away from traditional ways of assessing student achievement. The reality is often that paper and pencil assessment scores (tests and examinations) weigh more than coursework scores.

According to the Lesotho Government Report, in Kellaghan and Greaney (1992:135), the Lesotho government has been aware of many problems with current instruction that stem from inordinate emphasis given to preparation for summative examinations, which undermine the attainment of objectives that are critical to the country's economic development.

The former Lesotho Minister of Education and Training, Mr. Lesao Lehohla, raised the issue that for many years, since the beginning of formal education in Lesotho, paper qualifications have been used to certify knowledge, skills and attitudes attained through formal systems, and little has been done to recognise knowledge and skills acquired through other forms of learning and assessment practices (*Public Eye: Policy to Improve Education System*, Friday July 30, 2004). The Minister continued that this has to change so that qualifications may represent what a person knows and can 'do' rather than mere completion of a course to obtain a certificate. The emphasis is on the ability to perform or to transfer and apply knowledge in real contexts rather than memorisation of knowledge to obtain certification.

New ways of assessing students in higher education should be sought to strike the balance between paper and pencil assessment with other alternative assessment techniques within the scope of available resources in Lesotho.

Against the background of the stated problem of the research, the following problem question and subsequent sub-questions will guide this study and may be answered :

**What is the quality of assessment practices in assessing student achievements and to what extent are alternative assessments utilised in higher institutions of Lesotho?**

Sub-questions:

- What are the theoretical perspectives underlying quality in education (Chapter 2), assessment practices in higher education (Chapter 3) and the use of alternative assessment (Chapter 4)?
- What are opinions of lecturers and students on the quality of assessment practices in institutions of higher education in Lesotho?
- To what extent are the alternative assessment practices utilised in the assessment of student achievement in institutions of higher education in Lesotho?
- What policy guidelines exist with regard to the assessment of student achievement in institutions of higher education in Lesotho?
- What are the initiatives of the Lesotho government to improve the quality of assessment practices in institutions of higher education in Lesotho?
- What recommendations can be made with regard to quality improvement of assessment practices and the use of alternative assessment in the higher education system in Lesotho (Chapter 7)?

#### **1.4 Purpose of the study**

Given the background of the problem of the study and the emerging questions, the purpose of the study is to investigate the quality of assessment practices, the extent to which alternative assessment is utilised in the assessment of student achievement in higher education in Lesotho, and the Lesotho government's initiatives to improve the quality of assessment of student achievement in higher education in this country.

The following objectives will direct the study to achieve this purpose:

- To provide theoretical perspectives on quality issues in education, with a more specific focus on the quality of practices of assessment and the use of alternative assessment in higher education.
- To determine lecturers' and students' opinions on the quality of assessment practices and the way in which the students experience the quality of assessment practices in Lesotho.
- To determine the extent to which alternative assessment is utilised in institutions of higher education in Lesotho.
- To investigate the existence of policy guidelines with regard to assessment of student achievement in higher education in Lesotho.
- To determine initiatives undertaken by the government to improve the quality of assessment of student achievement in higher education in Lesotho.
- To make recommendations on the basis of the findings of the study.

#### **1.5 Significance of the study**

Significance provides the rationale for the importance of the study for the selected audience (Creswell 2005:113). For this reason it is necessary to provide reasons why the study is valuable. According to Adams (1996:235) appropriate ways of gathering information about the skill-levels of students continue to be a persistent issue debated by educators globally. Adams continues and points out

that the debate on how to assess comes to the surface with each new trend in education. In view of the forgoing exposition, the research is necessary for the following reasons: To establish the relationship between the assessment of students in higher education in Lesotho and quality improvement and to expand on the scarcity of literature on the quality of assessment practices in Lesotho higher education.

For this reason, this research may close the hiatus in the existing knowledge on quality improvement and enhancement of assessment practices with regard to higher education in Lesotho and other areas with similar problems.

- To make informed inferences and recommendations on the quality of assessment practices with regard to student performance. These, together with the findings of the study may be utilised by other institutions of higher education in wider areas in Lesotho, South Africa and other countries on the African continent.
- The study may also be a valuable source of data for training and development within larger areas with similar problems regarding quality improvement of assessment practices.
- To provide a better understanding of the quality of assessment practices in higher education in Lesotho, as well as the extent to which alternative assessment is utilised to assess student achievement.
- To identify policy gaps in the quality of assessment practices in institutions of higher education in Lesotho.

Baijnath *et al.* (2001:65) affirm that assessment of quality has always been done on an ad hoc basis, and not systematic. Therefore, more systematic approaches are necessary for improving the quality of assessment practices in higher education. In this particular study more systematic ways to explore the quality of assessment practices and the use of alternative assessment to supplement and balance the current modes of assessment, were sought.

The next section addresses the research methodology and the procedures that were followed in this particular study.

## **1.6 Research methodology**

Methodology may be defined as a distinct way of approaching research with a particular understanding of purposes, foci, data, analysis and relationships to data, and what they refer to (Guba & Lincoln 1998:61; Scott 1998:61). This study adopts a quantitative research methodology, which has its roots in positivism. Positivism is a family of philosophies, which are characterised by positive evaluation of science and scientific methods (Wiersma 1995:91). In line with this methodology, the study attempts to quantitatively evaluate the quality of assessment practices in the higher education system of Lesotho, and the extent to which alternative assessment is utilised to assess student achievement in higher education.

## **1.7 Research design**

According to Goddard and Melville (2005:1) research is about answering unanswered questions or creating idea(s) which do not exist, while on the other hand McMillan and Schumacher (2001:8) add that research is a process of systematically collecting and logically analysing information for the particular purpose of trying to gain a better understanding of a complex human interaction. The purpose of this section is to explain the procedures and the methods followed in conducting this particular study.

The exposition of the procedures and the design include a literature review, data collecting and sampling procedures, data collecting instruments, presentation and analysis of data (more details are provided in Chapter 5).

This study is exploratory. It explores theoretical perspectives on quality in education, and conceptual perspectives of quality in the assessment of student achievement. The study can also be viewed as descriptive for it attempts to

describe the status of the quality of assessment practices in institutions of higher education in Lesotho. Lastly, the study is suggestive as well as analytical. The data collected through a literature review, the semi-structured interviews and questionnaires were analysed (Chapter 6). Ways to improve the quality of assessment practices are suggested as recommendations (Chapter 7). The procedures and the methods followed in this particular study were mostly related to quantitative survey methods. The quantitative survey methods were used to collect data over a large area. The rationale for this choice is that a survey permits collection of data from a large population (Scott 1998:54). Lecturers and the students in institutions of higher education in Lesotho make up quite a large population. The research method is however injected with some qualitative procedures whereby semi-structured interviews and semi-structured questionnaires were employed to enable individuals to express their own experiences about the status of the quality of assessment practices in Lesotho higher education. The study further probes the extent of the use of alternative assessment in institutions of higher education in Lesotho, as well as initiatives by the Lesotho government to improve the quality of education in the sector of higher education.

### **1.7.1 Literature research**

The literature review is an essential component of any research. The aim of the literature review in this study was to investigate the emerging issues to support and validate the problem of the study. It has many beneficial functions (cf. Chapter 5), which include the support and validation of the problem of the research. In this study, a literature review was conducted to identify general theoretical perspectives of quality in education (Chapter 2). Emphasis was placed on the quality of assessment practices (Chapter 3). Lastly, a more focused literature exploratory review was undertaken to focus more closely on the use of alternative assessment (Chapter 4). According to literature there is general consensus that the use of alternative assessment may contribute positively towards the improvement of the quality of assessment practices and

the products (the graduates) of higher education. The conceptual perspectives which have been extrapolated with regard to the problem of the study include quality in education (Chapter 2), quality in assessment practices in higher education (Chapter 3), the use of alternative assessment (Chapter 4) and certain issues related to these broader topics.

## **1.7.2 Empirical research**

The empirical investigation is central to this study. McBurney (1994:6) argues that empirical research is based on the direct experiences of the participants. This study investigates the perspectives and experiences of the lecturers and the students regarding the quality of assessment practices in higher education in Lesotho. A multi-method approach, embracing both qualitative and quantitative methods, was employed in this study. This approach was used to validate (among others) the collected data and the findings of the study (cf. 5.4.1; 5.5.1 and 5.6).

### **1.7.2.1 Quantitative approach**

The aim of quantitative research is to determine facts, to enhance valid statistical analysis and to demonstrate relationships between variables and predictions (Usher 1998:12). In this study, the quality of assessment practices in higher education in Lesotho and the use of alternative assessment are investigated. A quantitative survey was conducted to obtain information (5.4.1). Data was collected through semi-structured (open-ended and close-ended) questionnaires to collect both quantitative and qualitative information on lecturers' and students' opinions on the quality of assessment practices, as well as on the use of alternative assessment to evaluate student achievement in higher education in Lesotho (Appendices A and B). More detail on the methodology followed in this study will be provided in Chapter five.

### **1.7.2.2 Qualitative approach**

The qualitative approach was also found appropriate for this study because the object of this approach is to generate data while digging deeper into the phenomenon of the status of the quality of assessment practices and the use of alternative assessment in higher education institutions in Lesotho (cf. 5.3; 5.3.2.2).

The main purpose of using interviews, as a qualitative instrument, was to complement and validate data collected through the questionnaires, and consequently also the findings of the empirical study (cf. 5.3.2). For this reason semi-structured interviews were used to provide an in-depth understanding of the research problem by probing more deeply into the experiences and the general perceptions of the instructional leaders on the status of the quality of assessment practices and the initiatives of the Ministry of Education to improve the quality of such practices. As such the interviews assisted to obtain information about the quality of assessment practices and the initiatives of the Ministry to improve the quality of these practices in institutions of higher education in Lesotho (Appendix B).

### **1.7.2.3 The sample of the study**

The target groups for the survey were lecturers and students in the selected institutions of higher education in Lesotho (cf. 1.1.2.1). The target group for the semi-structured interviews comprised of three instructional leaders (Heads of Departments or Deans) and the sector of higher education of the Ministry of Education of Lesotho (cf. 1.4.2). The five selected public institutions of higher education in Lesotho served as the sample population of this survey (cf. 5.7). A detailed description of the procedures followed in conducting this study is presented in Chapter five.



#### **1.7.2.4 Data presentation and analysis**

Appropriate methods of data analysis were employed for both qualitative and quantitative data (cf. 5.11; 5.11.1 and 5.11.2). Data collected through semi-structured interviews were presented qualitatively, while data collected through semi-structured questionnaires were presented in tabular and text-form. More details are provided in Chapter six.

Validity and reliability are important issues for the generalisability of the results and the findings of the study.

#### **1.7.3 Validity and reliability**

The validity and reliability of the research findings are important aspects of the research study. Triangulation of different data collection techniques enhanced the validity and the reliability of the findings of this study (Babbie and Mouton: 2001:78). Triangulation was achieved through a literature review (cf. Chapters 1; 2 and 3), the application of a mixed-method approach and procedures in which unstructured interviews and questionnaires were used (Appendices A and B). Reliability was further enhanced through a test-retest pilot study to determine the feasibility of the study (cf. 5.10). Furthermore, the interview protocol was pretested (cf. 5.2.2), while the interviews were rechecked to refine the collected data. More details on validity and reliability will be provided in Chapter five. Evaluation is further necessary to coordinate the study.

#### **1.7.4 Evaluation**

The last chapter in this study evaluates the research to establish whether the questions of this study have been answered (Gay and Airasian 2003:531). In the evaluation of the research, the results of the study were used to report the findings, to make deductions and to draw conclusions (Chapter 7). Lastly, the recommendations were made on the basis of the findings (Chapter 7).

The next section addresses the way in which the boundaries of the study were set.

### **1.8 Delimitation of the study**

Delimitation entails a demarcation of the study to present the way in which the study was narrowed in scope (Best and Kahn 2003:37; and Creswell 1994:110). According to the above authors it is necessary to set the boundaries of the study within manageable limits. The study therefore focuses on the quality of education, with specific emphasis on the quality of assessment practices and the use of alternative assessment practices in institutions of higher education in Lesotho, within the sub-discipline of Curriculum Studies. The specific topic of this study is “Alternative quality assessment practices in Lesotho”.

The boundaries of the research will be set and explained for a better understanding in Chapter seven.

- The study is limited to higher education in Lesotho. Higher Education entails post secondary education (tertiary education), which includes colleges and universities. The participating institutions fall under this category.
- Five institutions of higher education in Lesotho were involved in the study. Institutions A, B, D and E are all found in the city of Maseru, except Institution C, which is situated about thirty kilometers north-west of Maseru. However, despite the distance, the institution is still part of the Maseru area. The above public institutions of higher education were selected because of their stability, as opposed to private institutions which may not be sustainable.

### **1.9 Exposition of terms**

Definitions of the terms used in the study are of vital importance since unfamiliar words used in the study are explained and clarified (Creswell 2004:65). A brief

explanation of unfamiliar words used in this study is consequently provided in the following paragraphs.

**Assessment** is a process of gathering, analysing and interpreting information about students, their learning and progress (Kruger and Van Schalkwyk 1998:88; and McMillan 1997:16), as well as using the information to make informed judgments.

**Quality** is the totality of features and characteristics of a product or service which bear on its ability to satisfy stated or implied needs, including a predictable degree of uniformity and dependability at low cost and suited to the market (Loder 1995:30). Quality is therefore fitness for purpose. (cf. Mayhew, Ford and Hubbard 1990:5; Ellis 1999:11; O'Neil and Kitson 1996:60; Taiti 1997:30; and Thackwray 1997:20), depending on the required quality attributes of a phenomenon.

**Quality assurance** comprises all the policies, systems and processes directed at ensuring the enhancement of the quality and standards of educational provision.

**Alternative assessment** refers to alternative assessment procedures that provide alternatives to paper and pen assessments or methods designed to replace or to supplement standardised traditional tests (Gronlund 2003:223; and Hart 1994:6). These include alternative assessment such as **performance assessment**, which requires students to demonstrate their achievement of understanding and skills by actually performing a task or a set of tasks (Gronlund 2003:6), and **product assessment**, which requires students to create a product and portfolio (McMillan 2004:400).

### **1.10 Course of the study**

The focus of this research is to investigate the quality of assessment practices and the extent to which alternative assessment is used to assess student achievement in higher education in Lesotho. This study is composed of seven chapters, and these are:

**Chapter one** outlines the background of the study, including the problem statement, the purpose, the scope, as well as its significance. A brief background on the quality of education assessment practices in higher education was provided to support and justify the problem. The chapter also presents a brief description of the research methodology, methods and the procedures that were followed in this study. Finally, the chapter presents the course of study by means of a brief outline of the chapters of the study.

In **Chapter two** quality in education is reviewed in a wider context to provide a broad perspective of quality and related issues in education. The chapter explores relevant literature, focusing on broad perspectives on quality in education and its processes as the broad base of an inverted pyramid. This chapter lays the foundation for Chapter three.

**Chapter three** narrows its scope and focuses on quality in assessment practices in higher education and related aspects. It considers the concept of quality in assessment practices. The chapter unfolds by presenting the directives for movement towards alternative assessment and the principles of quality assessment. Finally, the hallmarks of quality assessment practices were also presented and discussed.

**Chapter four** further focuses the study by addressing the use of alternative assessment to improve and balance the quality of assessment practices in higher education. The chapter continues by comparing paper and pencil assessments with alternative assessment. The benefits of alternative assessment are explored and discussed. The chapter further provides an exposition of portfolio assessment and its benefits. Lastly, the chapter relates new and innovative theories of learning with the use of alternative assessment in improving the quality of assessment practices in higher education.

**Chapter five** provides a description of the application of the research design that was proposed in this study to investigate the quality of assessment practices and the use of alternative assessment in higher education in Lesotho.

**Chapter six** focuses on the presentation and analysis of data collected through the questionnaires and the interviews. This is followed by an interpretation of the results of the empirical research.

**Chapter seven** portrays the findings of the research, which entails primarily the quality status of assessment practices as well as the extent to which alternative assessment is implemented. This chapter also provides conclusions regarding the status of the quality of assessment practices and the use of alternative assessment in the higher education institutions in Lesotho. Recommendations for improving the quality of assessment practices and the use of alternative assessment in higher education institutions in Lesotho are also presented.

### **1.11 Conclusion**

This subsection summarises the orientation of the study. A brief introductory background about higher education in Lesotho was presented. This included mentioning of the selected institutions of higher education and statements of their mission statements. The quality aims and policies of higher education in Lesotho as well as the challenges of higher education were subsequently examined. The theoretical framework that places the problem into the scholarly literature was addressed. An exposition of traditional and contemporary assessment, challenges and trends such as accountability, new market forces and others (cf. 1.1.3), were discussed to support the problem statement. This assisted in defining and stating the problem of the study as well as in the formulation of the questions that arise from the problem. The purpose of the study and the objectives that helped in achieving the purpose of the study were also stated. The chapter continued by addressing the details of the research methods and the procedures that were followed in the study. The significance of the study, as well as the issues of validity and reliability, was described. The chapter further unfolded by addressing the research boundaries through demarcating the area of the study. An exposition of unfamiliar terms used in this study, as well as a list of

the tables used in this report was provided. Lastly, the outlay of the study was given.

The next chapter provides a general theoretical perspective on quality in education and its processes.

### QUALITY IN EDUCATIONAL SYSTEMS AND PROCESSES

#### 2.1 Introduction

The previous chapter provided an orientation and background to the study of investigating the quality of assessment practices, and the extent to which alternative assessment is employed in assessing student achievement in higher education in Lesotho. The purpose of this chapter is to explore and provide a general overview of quality in educational systems and processes and to shed more light on quality issues in education. The following themes will be addressed: definitions of driving forces for quality; history of quality; quality assurance in education systems and the hallmarks in implementing a quality assurance system. The chapter will also address the role of leadership in implementing quality assurance systems, staff development and quality improvement, as well as quality as a process of change.

The notion of an inverted pyramid will be adopted in presenting a literature review. This implies providing broader perspectives on quality in education systems and processes initially, moving to more specific perspectives of the theme of quality in education and related issues.

According to Ade Ajayi, Lameck, Goma and Ampah (1999:23) a mismatch between what higher education produces and the labour market has been argued for well over 100 years worldwide. To this effect Ade Ajayi *et al.* (1999:24), comment that deteriorating quality and accelerating demands of labour indicate that most of higher education institutions in Africa are a mere shadow of their earlier glory, despite the growing demand for high quality services and accountability. The above-mentioned and several other driving forces influence the quest for quality in higher education, and this has become a global controversy. According to Baijnath, Maimela and Singh (2001:83;156)

there is a growing need for accountability. This implies that the government, parents, taxpayers and all concerned groups need to be convinced that education is worth their money. Lello (1990:57) thus affirms that all institutions are accountable to a variety of stakeholders, who include students; employers; teaching and non-teaching staff; parents; government funding agencies; creditors; validators; editors; curriculum designers; assessors and others. Lello proceeds to indicate that each of these stakeholders have their own perspectives on quality. The changing purposes of higher education, as a result of the changing workplace and emerging career channels are other challenging issues to quality in higher education (Radford 1997:67).

Emerging mega-trends and issues of internationalisation (globalisation) also demand quality in all national and international activities and processes (Maharasoja, Strydom and Van der Westhuizen 2002:3). Internationalisation is important for the international mobility of students and international skills-share programs. Whisker and Brown (1994:151) emphasise that changing national employment patterns are increasingly demanding success from students; hence there is pressure for improved quality and success. Radford (1997:149) concurs that what the employers demand from higher education is technical expertise, which combines the ability to learn as new developments come forth; transferability of skills; positive personal traits; the communicative ability to work with others; adaptability; self reliance; diligence; proactive and general attitude to work.

Against the background of the foregoing reasons and others that will be discussed later, it is necessary to provide a background to quality in education. The next section subsequently considers definitions of quality in education.



## 2.2 Definitions of quality

As indicated in Chapter one (1.1), quality is a multidimensional concept. The definitions of quality change with the context, purpose and stakeholder perception hence they are highly dynamic (Westerheijden; Stensaker; Rosa 2007:210). Bradley (1993:65) affirms that it is indeed the client who determines the operational definition of quality. Research reports different definitions that vary due to contexts. Some of these definitions are, inter alia:

- Quality as fitness for purpose (Mayhew, Ford and Hubbard 1990:5; Ellis 1999:11; O'Neil and Kitson 1996:60; Taiti 1997:30; Rosa, Tavares & Amaral 2006:153).
- Quality as stakeholder satisfaction (Diamond 1989:4; Ellis 1997:11; Mayhew *et al.* 1990:5; West-Burnham 1993:18).
- Quality as a degree of excellence at an acceptable price and the control of variability at an acceptable cost (Mayhew *et al.* 1990:5).
- Quality as achieving or reaching for the highest standards (Taiti 1997:30).
- Quality as being exceptional (Taiti 1997:30; Du Toit 2002:159).
- Quality as a way of management and organisation (Thackwray 1997:35).
- Quality as perfection and constancy (Taiti 1997:30; Harvey and Green in Ashcroft 1995:6).
- Quality as transformation (Harvey and Green in Ashcroft 1995:6, Taiti 1997:30).
- Quality as value for money (Harvey and Green in Ashcroft 1995:6; Taiti 1997:30).
- Quality as value-addedness (Harvey and Green in Ashcroft 1995:6; Thackwray 1997:35; Taiti 1997:30).
- Quality as correcting and preventing loss, and not living with loss (Hoshin in Thackwray 1997:35).
- Quality as context (Baijnath *et al.* 2001:84).
- Quality as the minimal loss imparted by the product to society from the time the product is shipped (Taquchi in Thackwray 1997:35).

- Quality as threshold implies that it involves setting minimal norms and criteria (Bajjnath *et al.* 2001:84).
- Quality as transformation (Harvey and Green in Ashcroft 1995:4; Taiti 1997:30).
- Quality as a benchmark (Harvey and Green in Ashcroft 1995:6 and 13).
- Quality as excellence notions of high-class operations (Ashcroft, 1995:4).

The above definitions of quality provide evidence that quality is a multidimensional phenomenon. UNESCO (2000:30) affirms that quality in higher education is a multidimensional concept, which embraces all the main activities and functions in education. The multidimensional criteria of what quality in education entails are adopted in this study because the researcher holds the view that all these criteria enhance fitness of purpose, which is deemed to be the major and central aspect of quality in education and its processes. According to Radford (1997:150), quality in higher education also involves the product of higher education. He asserts that the issue is whether the students succeed and obtain qualifications. Radford further holds that quality involves educational values, what education ought to be about and what sort of product higher education is seeking. This implies providing learners with high quality experiences through the utilisation of best practices or principles in all the processes of higher education and in the assessment of student achievement in particular.

According to the researcher's point of view, quality in education is the mind of the clients. It involves what the stakeholders perceive as the best practice or characteristics of a phenomenon, which adds to the value of a product and or a service. Most importantly, quality is not static; it changes with the changing needs of the stakeholders. It must be noted that new needs, problems, interests and contexts emerge and subsequently affect what is defined as quality at a specific point in time.

The multiple definitions of the term “quality” demonstrate how diverse, contextual, multidimensional and dynamic the term is. In education and its processes, such as assessment among others, quality is determined by guiding principles (3.6). As a result quality may be judged against the principles as best practices. The differing contexts and the driving factors for quality also influence quality and determine the multidimensional nature thereof. Moreover, the concept of quality is perceived and experienced differently by different people.

Against the background of the above, a broader view of quality in education is adopted in this study since the researcher is of the opinion that the purpose of every activity in education determines what quality in context entails. Hence the ultimate definition of quality is considered as fitness of purpose while there is a continuing controversy of referring to students as customers(Lomas 2007 :38,39), the students as main stakeholder are considered as main clients and partners in education in this study. Several reasons come to the fore as push (driving) factors with regard to enhancing quality improvement in education and its processes. Some of the important driving factors for quality are discussed next.

### **2.3 Driving factors for quality**

For organisations to adopt the philosophy of quality education there are always some driving forces (Nightingale and O’Neil 1994:35; Scott 1994:80; Bowering-Carr and West-Burnham 1993:5).

#### **2.3.1 Existing policies, mission statements and quality in education**

A mission statement is a list of goals or general objectives which are meant to describe what the institution hopes to achieve in general terms (Radford 1997:140). Radford (1997:40) further indicates that breaking down practical goals is necessary for putting theory into practice.

According to Kruger and Van Schalkwyk (1997:49) the role of a policy is to provide guidelines for every activity and behavior. In this way, a policy serves as the foundation for every educational activity and process, including quality. For every quality system there must be a policy to provide direction and clear guidelines (West-Burnham 1993:78; Arcaro, 1995:98).

Freeman (1993:15) argues that sometimes there are unclear or confusing aims and expectations among colleagues (fellow workers), hence there is a need for a quality assurance policy so that the institution's approach to quality is well-defined and clearly documented.

The researcher's point of view is that a policy and its implementation seem to be aimed at achieving societal objectives. In line with this, a policy is also about the intentions of the legislature with regard to the expectations of society (Radford 1997:41; West-Burnham 1993:79). Existing policies enhance accountability and in turn; accountability itself provides evidence that the policies are implemented successfully to achieve the goals, which means that the practices fit the purposes of the education systems.

### **2.3.2 Accountability and quality in education**

To be accountable, means making public what one is doing or what one has done for judgment by others; in education this includes publication of results, pass rates, recruiting figures and student numbers as examples of the kind of information which might be involved in being accountable (Calder 1994:45).

Accountability is the voluntary or compulsory responsibility of reporting to other people about what one does, and being answerable to other people, both juniors and seniors ( Lello 1993:1).

According to Loder (1990:1 and 2) and Lello (1993:43) issues of quality and accountability are closely related and they have become the heart of reform and control since they play an important role in improving and maintaining the quality of education. The emphasis is that education is a tax supported service (Lello

1994:3) and institutions of higher education as part of the community must publicly demonstrate the high standards of their products such as the curriculum, learning and graduates(Sallis 1996:5). Ornstein and Hunkins (2004: 355) conclude that education is expensive, and the public is increasingly concerned with getting the best for their education dollar.

resources

The researcher is of the view that attaining high academic standards is a challenge and most importantly, accountability also implies that the quality of education should satisfy the taxpayer and all stakeholders for mutual understanding.

### **2.3.3 Globalisation and internationalism**

In the context of education, globalisation is exhibited as recognition of credits as well as internationalisation of qualifications and multicultural curricula; dramatic growth of distance education and student exchanges (Lemmer 1999:35). Moreover, the social and economic consequences and competitive market will also lead individuals to demand a greater deal from the global education service (Abuashake and Tamimi 1996:180; Calder 1994:46; Sallis 1994:4). The emphasis is that the aim of educational reform worldwide is to become economically competent (Pretorias in Pretorias and Lemmer 2004:128).

In the researcher's point of view, globalisation refers to all operations where countries world-wide cooperate beyond borders. This implies removing borders such that the world would become one village. The implications of globalisation on education include illustration of the value-addedness and fitness for purpose to meet both national and international demands. Another driving factor for quality in education is the increasing autonomy of institutions of higher education.

### **2.3.4 Increased autonomy of institutions of higher education**

Academic freedom and institutional autonomy are essential for the preservation of an institution as a community of free enquiry, in order to be able to perform its

creative, reflective and critical functions in society by selecting and matching community-related goals to the available resources to meet these goals (Aspin, Chapman and Wilkinson (1994:178 & White Paper (1992:8;9). What expires from this exposition is that academic autonomy, academic freedom and accountability cannot be divorced. For these reasons the researcher holds the view that there is a need for the institutions of higher education to set internationally accepted standards of performance and improved quality education for universal recognition.

### **2.3.5 Increased access to education**

Increased access is also a threat to the quality of higher education systems since it contributes to mass education, which in turn compromises quality in higher education. According to Loder (1990:75) higher education is being opened up to school leavers who are not sure of their own motivation and who have not performed particularly well in secondary education. Loder further indicates that higher education is also being opened up to adults who have not studied seriously for several years. This necessitates greater responsibility to ensure that educational experiences are worth having and suited to the needs and interests of the students. Radford (1997:7) argues that higher education has expanded dramatically and that this is likely to continue. Higher education is therefore charged with the responsibility to find affordable ways of assessing student achievement while still maintaining high quality in education. Access has resulted in mass higher education, which is discussed in subsequent paragraphs.

### **2.3.6 Paradigm shift from elite to mass education**

Mencken and Harvey (in Maharasoja *et al.* 2002:3; and also Baijnath *et al.* 2002:83) allege that one of the mega-trends, which constantly impact on higher education, is the rapid move from elite to mass or universal higher education. Lemmer (1999:185) refers to massification of education as the extraordinary growth in involvement, which marks the transition from elitist education to mass education and eventually (in some countries) to universal higher education. As a

result there is also a worldwide concern that mass education may have negative effects on the quality of education by lowering the academic results. Several reasons contribute to mass higher education. They include:

- More expanded and diverse student body; there are now greater numbers of students with varying entry qualifications, prior achievements, as well as experiences, needs and abilities.
- More diverse institutions of higher education in terms of mission and purpose, student profile, size and provision and new subjects of study have been introduced.
- New curricula structures (modularisation and unitisation), reorganisation of the academic year, new modes of instructional delivery and assessment are replacing traditional methods ;
- Less funding from central government and greater pressure on academics (to teach greater numbers, to produce more research, to meet the demands of external accountability and quality assurance arrangements) are present (Radford 1997:89).

Against the background of the above reasons, the challenge of all the educational systems is to maintain the high quality of education despite increased massification and diversity.

The impact of information technology on the quality of education is addressed next.

### **2.3.7 Information technology and its impact on the quality of education**

Du Plessis and Traebert (in Pretorius and Lemmer 2004:123) define technology as the actions by means of which man transforms natural resources and energy to serve his needs and applications. Information technology impacts on the quality of education in several ways, some of which are presented next:

Pretorias and Lemmer (2004:123) argue that since information technology is used in instruction and since students are equipped with skills in information technology; quality is enhanced in higher education. Furthering this argument, Maharasoja (2002:3) holds that the rapid change in technology impacts on education to such an extent that education has become more dynamic. According to UNESCO (1995:16), the dramatic and rapid development in information technologies resulted in a growing need for the applicability of various functions and needs in higher education. In a similar trend, the above authors indicate that this is pertinent for the reorganisation of teaching and research activities in higher education. UNESCO (1990:17) further declares that technology results in training programs and teaching methods at an ever-increasing pace. It is clear that education and its activities should be adapted to the ever-changing technology. Continuous and regular review of quality in education is imperative to improve the quality of education. However, UNESCO (2002:12) points out that information and communication technology must be harnessed to support educational goals since they have great potential for knowledge dissemination, and the effective learning and development of more efficient education services. UNESCO (1996:13) holds that information technology enhances quality in education.

Tipler (in Furlong and Smith 1996:70) argues that it may be possible to regard computers as persons in the near future. Furlong and Smith (1996:70) also insist that technology is transforming work to such an extent that the nature of the workplace is changing more rapidly. New jobs emerge and these jobs demand higher levels of skills. The ever-changing skills are another controversial issue. Education and its activities, such as assessment practices, should be adapted to the changes that come with information technology and other technologies. The implication of information technology has thus initiated certain changes and transformation in educational institutions and activities.



### **2.3.8 Transformation and winds of change in politics**

From the researcher's point of view, transformation always comes about as a result of political changes. What follows is a discussion of transformation and political change to point out their interrelatedness as driving factors of quality in education.

According to Seepe (1998:58) transformation is defined as the act or process whereby the form, shape or nature of a phenomenon is completely changed or altered. Lemmer (1999:185) elaborates that transformation and change in education entail transforming structures, contents and processes. In this view, transformation implies a massive change (Ainley and Bailey 1997:98).

Transformation of higher education has a dual purpose, which includes:

- Transforming in order to stay relevant and competitive in the international arena; and
- transforming to live up to the expectations of those who were previously denied access to higher education (Hay and Fourie in Maharasoa (2001:3).

The NCHE (1996:13) declares that to preserve what is valuable and address what is defective requires transformation. The NCHE (1996:13) further indicates that higher education can play a pivotal role in political, economic and cultural reconstruction and development. The aforesaid purposes of transformation might be politically, socially and economically driven because in a democracy, when new political structures come to power, they always introduce changes in the education system. The political manifestos change as the needs; problems and interests of the society change. Transformation in education results in the emergence of new purposes of higher education. For this reason, transformation is an essential process because it always comes with the improvement of quality in education.

### **2.3.9 Diversification in higher education**

One of the driving forces for quality in higher education is diversification (Du Toit 2002:159; Brown and Knight 1994:45; Lemmer 1999:185). According to UNESCO (1995:16) diversification in higher education refers to differentiation within the system with the main focus on institutional structures, programs, student population and funding sources.

UNESCO (1995:16) 7) reveals some of the main reasons for diversification:

- Increased social demand for higher education and the need to cater for a much diversified clientele.
- Drastic cuts in spending on higher education, thus compelling institutions to design alternative, more cost-effective programs and delivery systems.
- Constantly changing labour market needs that require higher education institutions to make provision for training in new professions, technological and managerial fields in new contexts, as a result of globalisation.

Furlong and Smith (1996:70) conclude that social diversity seems certain to continue to grow, and this is likely to include growing wealth differentials as well as other forms of diversity. Furlong and Smith (1996:70) declare that diversification will need continuous system reform. Student numbers are increasing since more students are being recruited from groups who have not traditionally participated actively in higher education (Brown and Knight 1994: 45). UNESCO (1995:18) concludes that although diversification is the most welcome trend in higher education systems, it must be underpinned by the concern to ensure quality of institutions and programs.

The researcher holds the perspective that, in spite of the concern that quality and quantity are not compatible terms, implementation of more systematic procedures to improve the quality of higher education systems, is necessary.

## **2.4 History of quality**

History indicates that quality notions have been adopted from industry and commerce (Arcaro 1995:5; Gawe and Heyns 2004:161). According to literature (Arcaro 1995:5; Bartol and Martin 1991:650; Nightingale and O'Neil 1994:71; and West-Burnham 1993:13), the quality philosophy emerged in Japan after World War II in 1940. These authors claim that two Americans, W. Edwards Deming and Phillip Juran, inspired quality.

In view of the above information, it is necessary to provide a brief history of quality.

In 1940, after World War II, Deming went to Japan with his ideas of quality, which had been ignored by the Americans. The Japanese welcomed Deming and his philosophy. His ideas were implemented with great success and the Japanese industries were revived at an alarming rate. Quality improved and the Japanese introduced the Deming Award for excellence in quality appreciation in recognition of Deming's philosophy. Ten years later, in 1950, another founder of quality, Phillip Juran went to Japan and also successfully implemented his quality ideas in Japanese companies. Both Deming and Juran developed models and ideas of quality into models of total quality.

Another important quality expert is Crosby. He came to be recognised late in the 20<sup>th</sup> century (Nightingale and O'Neil 1994:127), and his ideas focus more on practical principles than Juran and Deming

Taiti (1997:3) extrapolates that a quality assurance system can develop into a total quality management system through the spread of quality assurance processes throughout the institution including a commitment to continuous improvement through wide acceptance of teams.

For educational institutions to reap the fruits of success with regard to total quality, sound quality assurance procedures should be in place. Activities in institutions must be systematical for continuous and sustained quality as well as sound quality assurance system.

Conway's principles of total quality led to the development of the theory of total quality. The theory of total quality is mostly encouraged as the current approach to the successful implementation of quality in education and its processes. It is discussed in the following section.

## **2.5 The theory of total quality**

According to Everard and Morris (1996:182) the principles and theories of the aforementioned experts of quality have been developed into total quality management. According to Ornstein, Francis and Hunkins (1998:6) total quality is also called a systems approach. The latter authors further emphasise that the notion of total quality has been adopted from industry and commerce. They add that total quality emphasises client priority (in the case of education, the students), lack of hierarchical self-monitoring and inspection, collaboration, horizontal communication and team responsibility. Everard and Morris (1996:182) affirm that the principles of total quality are applied in most academic contexts. The definitions of total quality are however dependent on different contexts.

These are addressed in the next section.

### **2.5.1 Defining total quality**

Bartol and Martin (1991:648) define total quality as organisational (institutional) wide commitment, integration of quality improvement efforts with organisational goals, and inclusion of quality as a factor in performance appraisal. Bartol and Martin (1991:648) further indicate that total quality focuses on responsibility and autonomy of individuals in different but related departments working together

towards the improvement of quality. Harris, Bennet and Preedy (1997:166) affirm that total quality is an approach to improve the effectiveness and flexibility of an organisation as a whole. It is essentially a way of organising and involving the whole organisation, every department, every activity, and every single person at every level. They also indicate that for an organisation to be truly effective each part (faculty, department) must work together properly, with recognition that every person and every activity affects, and in turn is effected by others. Mokhoro (1996:3) extends the argument by stating that a total quality approach advocates for a company-wide adoption of quality. He continues that total quality acknowledges that a client expects more than just a good product but also other aspects such as delivery and accuracy of information. In addition, Mokhoro declares that quality is everybody's business and that all should have a well-defined responsibility for quality. A total quality approach resembles the views of Deming, Crosby and Juran in many ways.

### **2.5.2 Characteristics of total quality**

According to Arcaro (1995:31); Everard and Morris (1996:181); Harris *et al.* (1997:164); Parsons (1992:56) and West-Burnham (1993:26-27) the characteristics of total quality are inter alia:

- *Customer focus:* This is about meeting students' needs as . It must also be acknowledged that everybody in the educational organisation is the client and the client not the service provider, defines quality.
- *Achievement of quality through continuous improvement:* There is always room for improvement however small. Small improvement is worthwhile and could add to significant changes. This implies that organisations are constantly looking for ways to improve every educational process. Mistakes are treated as opportunities to

improve and prevent, and inspection is not emphasised. Self-improvement is at the heart of total quality and organizations are viewed as learning systems, and educational training and personal growth are necessary for continuous development.

- *Total involvement and commitment in quality matters and continuous improvement:* These are essential for the success of a quality system in which team ethos and acceptance of shared corporate goals are emphasised. It is only a valued workforce that can achieve quality.
- *Measurement entails that it is necessary to measure progress against set standards:* This needs superior quality information systems to provide timely measures of feedback on performance. Quality is about meeting stated needs, requirements and standards, and therefore regular reports of progress are necessary.
- *Total quality addresses quality of input, the process and the output:* Quality has to be the criterion for reviewing every decision, every action and every process at every level.
- *Quality has to pervade human relationships in the work and learning place:* The teams are the most powerful agents for managing quality. This implies that everyone in higher education is committed and should share the responsibility for trying to prevent problems when they occur.

The researcher adds that the implications of the characteristics of total quality are continuous improvement. Every improvement, however small or big, is worthwhile because small improvements add to significant change. Problems open up channels to success and mistakes provide opportunities for improvement. Lastly, shared responsibility and commitment to quality improvement in an institution are essential. The characteristics of the total quality

systems are further determined by underpinning principles. The principles of total quality are presented in the following section.

### **2.5.3 Principles of total quality**

The principles that underpin the successful implementation of total quality inter alia involve the following:

- *Customer focus*: Meeting the expectations of the clients so that their satisfaction is achieved is of tantamount importance in total quality. In an academic context, the customers(clients) are the students, parents, government employers and the donors. There are external and internal clients to an institution; the external clients may be employers and donors. The emphasis is that it is the clients who conceptualise quality (Everard and Morris (1996:180 and 182; Thackwray 1997:20; Harris *et al.* 1997:164-165).
- *Communication of expectations and capabilities*: This is essential so that the service provider as producer knows the needs and client expectations, and on the other hand, all the stakeholder have to know the capabilities of the service provider (Everard and Morris 1996:182). More importantly, total quality requires superior quality information systems to provide timely preventive measures and feedback on performance.
- *The idea of getting it right the first time*: This notion applies to the zero defect concept, which is a notion in which the employees strive to make a product or service conform exactly to the required standards. This emphasises investing in the effort of thorough preparation instead of investing in correction of mistakes. There is a tendency for people to spend little time preparing and planning. This costs much in terms of time, money and effort in checking and correcting. It is necessary to concentrate on the process rather than on the product. By utilising the internal client concept, the result of each process is viewed as a service and evaluation takes place immediately. Quality should therefore be a continuous process.

- *Specific and clear standards*: Clearly specified and defined standards are necessary. This implies that clear procedures and processes are basic to the successful implementation of total quality in an institution (Harris *et al.* 1997:164-165).

- *Continuous self-improvement*: This is at the heart of total quality. Total quality organisations are learning systems (Harris *et al.* 1997:165). The saying goes that experience is a great teacher.

- *Commitment and improved participation*: Total quality requires involvement and commitment of all organisational members in quality matters and continuous improvement. Team ethos and the acceptance of shared corporate goals should apply. Total quality applies to all involved in the delivery of services before, during, and after (Harris *et al.* 1997:165).

West-Burnham (1993:8) summarises the aforementioned key principles of total quality in a tabular form (Table 2.1).

**Table 2.1: Key principles of total quality**

Focus	Internal and external clients
Definition	Meeting client requirements
Scope	Every aspect of the organisation
Responsibility	Everyone
Standard	Right first time and fitness for purpose
Method	Prevention, not detection
Measurement	Zero defect
Culture	Continuous improvement

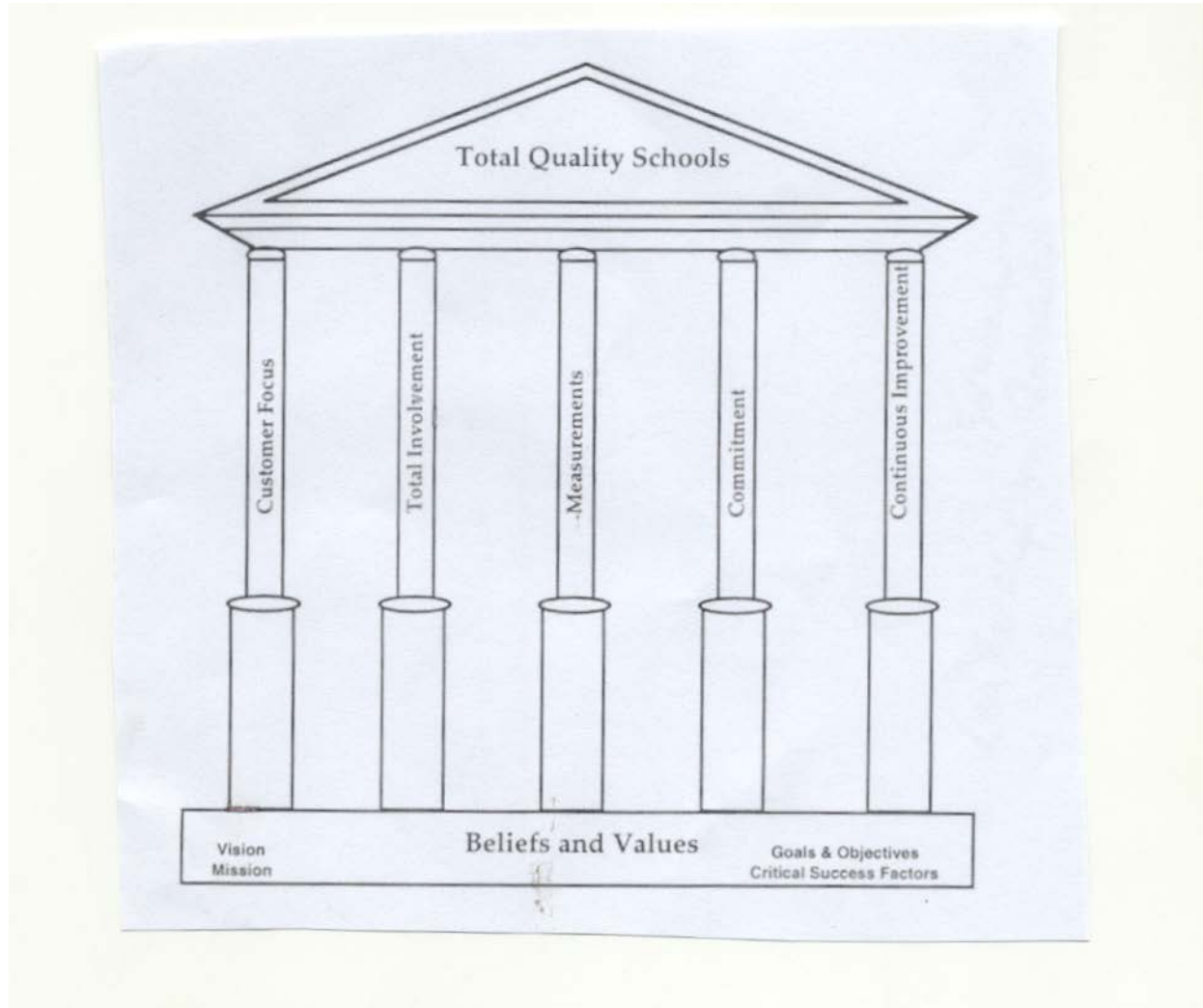
(Source: West-Burnham 1993:8)

Although quality exhibits a broad spectrum of views and principles, Arcaro (1995:10) argues that these principles do not operate alone. He points out that quality is an interconnected structure or a system anchored by five key principles,



which are basic criteria for quality in education. These are illustrated in the diagram (Figure 2.1: House of quality) which follows:

**Figure 2.1: Five principles of total quality as a house of quality**



(Source: Arcaro 1995:10)

Positive attitudes are also essential for the success of total quality systems. Some of these attitudes are presented next.

#### **2.5.4 Attitudes necessary for total quality**

Baijnath *et al.* (2001:62) emphasise that attitudes, such as the following, are essential for success in total quality:

- Pride in oneself and in one's work and acceptance of responsibility for one's own performance and for the performance of the team.
- Strong inclination towards continuous improvement (lifelong learning for educators as well as for learners) and humility and openness to peer and external evaluation as well as readiness to learn from these experiences.

Total quality has proved to be the key to success for most organisations and processes (Bartol and Martin 1991:649). What emerges from this exposition is that preparation for the development of the positive attributes of the inner person is an essential factor. Participants should always be prepared for total quality as a change process. Against the background of these views, the benefits of total quality are addressed next.

#### **2.5.5 Benefits of total quality**

Total quality is highly recommended for its benefits. Harris *et al.* (1994:165) argue that the benefits of total quality are inter alia:

- Sustained and continuous organisational improvement, which implies that with implementation of total quality, a sound quality improvement system to maintain standards is established. An increased level of external client satisfaction that implies continuous and effective research on stakeholder views on quality, and the market value of the academic services that are provided by the institution are also a necessity.
- Tangible and significant cost saving on operating quality, which implies finding cost-effective ways of maintaining and improving quality of services and products. This also implies that all the activities and processes of improving and maintaining are practical. A focus on interdisciplinary teams with a

combination of academic and administration staff including teamwork and efficient communication enhances the coordinated high quality organisation of institution-wide activities.

- Improvement of employee morale, commitment and motivation.

employee motivation is necessary, and the achievement of employees should be recognised and rewarded; staff satisfaction, should also be part and parcel of total quality systems. Total quality is an innovative way of managing organisations that promotes company wide goal congruence of accountability and involvement. Total quality is also beneficial to the institution since it enhances accountability and transformation that are performance indicators.

Taiti (1997:3) extrapolates that a quality assurance system can develop into a total quality management system through the spread of quality assurance processes throughout the institution and a commitment to continuous improvement through wide acceptance of teams.

For educational institutions to reap the fruits of success with regard to total quality, sound quality assurance procedures should be in place. Activities in institutions must be systematical for continuous and sustained quality.

The following section considers quality assurance systems in education.

## **2.6 Quality assurance in education systems**

Nightingale and O'Neil (1994:128) posit that with the present climate of increasingly student demands for accountability and the use of performance indicators to allocate resources, there is a demand for high quality education. This implies the need for institutions to design their own quality assurance systems to improve continuously. Baijnath *et al.* (2001:65) affirm that quality assurance is a tool to improve institutions. Since quality assurance systems are

multipurpose in nature, some of these purposes need to be highlighted in the context of this study.

### **2.6.1 Purposes of quality assurance in education systems**

Education is a highly dynamic phenomenon, hence the notion that quality in education is change. Bradley (1993:3) asserts that quality is ever evolving; what was quality in the past is not quality today, and what is quality today will not suffice as quality in the future. Bradley further maintains that what remains constant in the definition of quality is the basic requirement of meeting the needs and thus satisfying the clients.

Secondly, Bradley (1993:4), as well as Parsons (1992:54) point out that some institutions of higher education depend on external agencies to execute their strategic plans. In addition, MacGinity and Fish (1993:84), extrapolate that all the main providers of funds in higher education are demanding the introduction of quality assurance systems in institutions. Sound quality assurance practices are thus imperative in higher education institutions. These practices are necessary for control activities such as curriculum development.

Education is contextual, which implies that the basic requirement of meeting the needs and satisfying the clients are highly contextual. A variety of contexts determine the purposes of quality assurance systems. According to Calder (1994:38; as well as Parsons 2 1994:35; White Paper 3 1997:156; Monash University Secretariat 1999:20), the aims of a quality assurance system in education include the following:

- To constantly seek ways of improving quality and to prevent students' problems and to prevent non-conformity to their requirements and needs.
- To minimise risks and costs and to maximise benefits to achieve the required quality standards.

- To assist institutions to maintain and enhance the quality of educational provision for students by reviewing their quality assurance systems and to confirm that their internal arrangements reflect good practices.
- To furnish the ministries (of education) with a general basis for evaluating whether quality assurance in professional education is satisfactory.
- To increase awareness of quality that is based on requirements for the professional pedagogical, ethical and organisational aspects of the institution.
- To provide assurance to the public regarding the achievement of the requirements through provision of high quality learning experiences and the awarding of qualifications.
- To assist in institutional and systematic reform efforts. Quality assurance assists institutions to focus on defining their roles and developing their abilities to meet set goals and to establish quality within a common framework.

It is envisaged that quality assurance systems should focus on improvement and permanent existence of institutions since they enhance the market value of institutions and their products. The institution may receive recognition, both locally and internationally. Having stated and discussed the purposes of quality assurance systems, it is necessary to examine the concept of quality assurance.

### **2.6.2 The concept of quality assurance**

According to literature the concept of quality assurance is contextual. Some of the views or perspectives of quality assurance are inter alia:

- Quality assurance is the process whereby standards are specified for product service and steps are taken to ensure that these standards are constantly met (Ellis 1997:17) and the means through which an institution confirms that the conditions are in

place for students to achieve the set standards (Thackwray 1997:6).

- The British Academic Audit Unit (1990) (in Thackwray 1997:6) states that quality assurance is the process by which those with institutional responsibility for quality can be sure that they know whether or not the students are being given appropriate teaching and learning support and are reaching appropriate standards.
- Arcaro (1995:25) argues that assuring quality is being aware that there should never be resistance to change and a commitment to change because quality is change.

The researcher is of the opinion that perspectives on quality assurance systems are broad and varied. Most importantly, what quality assurance entails is determined by the needs, interests, expectations and the values of education in different societies. Quality assurance is a systematic and a procedural process. The implication is that logical steps must be followed for the successful implementation of a quality assurance program.

### **2.6.3 Steps in assuring quality**

Ellis (1997:62) posits that the following are some of the essential steps to follow in assuring quality:

- Knowing students' needs through extensive research is necessary to establish perceptions of quality with regard to services and designing educational programs that meet the students' needs. This implies planning on the basis of collected data in previous steps.
- Monitoring and re-examining of the processes to ensure the quality of products or services is necessary to guarantee performance; clear instructions for the use of the products or services should be provided. Use of efficient stakeholder feedback to improve the product or service hence research is

necessary to determine the clients' quality perceptions for continuous improvement and re-starting the quality cycle.

- Efficient communication is central to understanding how the product works and delivering the product or service punctually and provision of a back-up service for a product or service is necessary and fast response to stakeholder needs.

Against the background of the foregoing (2.6.2; 2.6.3 and 2.6.1), it appears that the emphasis is on the cyclic nature of quality assurance. It is a continuous process, which involves continuous review. Furthermore, the purposes, objectives and the procedural steps also determine the characteristics of quality assurance systems, some of which are discussed next.

#### **2.6.4 Characteristics of quality assurance systems in education**

It has been mentioned that quality assurance systems are contextual, however the characteristics are in most cases common. Ellis (1997:11); Fourie, Strydom and Stetar (1999:57); Baijnath *et al.* (2001:67) and Parsons (1994:18) indicate the following characteristics of quality assurance systems as educational changes:

- Focus on outcomes, which imply that the specification of standards for whatever is conceived as a product or service is an imperative.
- Identification of critical foundations and procedures that will be necessary to achieve these standards and documented clarity with regard to standards to be achieved and procedures to be followed to achieve these standards.
- Constant recourse to the consumer to set and monitor the accomplishment of standards and followed by taking action to remedy and rectify shortfalls coupled with a regular review of appropriateness of standards and procedures.

- The total involvement of all personnel and a commitment to development and training and initial self-evaluation followed by external peer assessment of the processes and the results of self-evaluation. Self-analysis and external assessment by peers are equally essential.
- Internal quality assurance systems through self-evaluation and the role of peers in external assessment which is organised and coordinated by independent bodies (agencies or committees). This is mostly conducted in terms of standards.
- External assessment has internal functions such as improvement, benchmarking and self-regulation and the results are usually made public. It must also be noted that quality assurance systems also have external functions such as accountability, quality labels and accreditation.
- Quality systems are manageable and they require little time and resources only to the extent that they provide a pay-off in return.

It has been indicated in several parts of this thesis that quality is multi-contextual and multi-dimensional (1.1; 2.2). The above features and characteristics of quality assurance systems may not be evident in other contexts or considered in other perspectives.

There is a general view that the characteristics of a system or a process are dependent on certain underpinning principles. The principles that govern quality assurance systems are discussed next.



### **2.6.5 Principles for the successful implementation of quality assurance systems**

For the successful implementation of quality assurance, the following principles apply. According to White Paper 3 (1997:161), as well as Arcaro (1995:3), the success of quality assurance systems depends on the following:

- Wide participation and effective channels of communication and collection of acceptable evidence including acceptance of responsibility by all staff and students.
- Commitment of institutions to staff development and training, and need for self-improving processes in institutions and in specific programs, as well as wide consensus and effective feedback mechanisms.
- Regular summative and formative evaluation and a clear understanding of the present situation of quality are necessary.
- Situational analysis of the status of quality is also necessary to determine the future; and a clear vision for the success of quality is necessary to ascertain a successful future.
- Clear guidelines for the implementation of quality assurance systems are necessary.

In the light of the above-mentioned principles, it is clear that the present determines the future. The principles are integral components for the enhancement of transformation towards self-improvement. They also serve as useful hints for the success of a quality assurance system.

### **2.6.6 Phases of implementing a quality assurance system**

Taiti (1997:59) posits that although quality assurance systems vary with regard to educational design and delivery methods, they all have fundamental phases. As reported in literature (Arcaro 1995:93-105; Baijnath, *et. al.* 2001:158; Taiti 1997:78; ) the process of the design and the development of a quality assurance

system advances through the following fundamental phases: defining the purpose; planning and policy-making; development; reporting; monitoring and evaluation; improvement with enhancement of quality; and involving the users.

#### **2.6.6.1 Defining the purpose**

It has been indicated that the purposes of quality assurance systems differ with context (2.6.1). A general belief is that a clear and well-defined purpose is necessary for the successful planning of a quality assurance system. Sallis (1996:102) argues that without clear direction the institution cannot plan quality improvement. This implies implementing the first principle of Deming: “creating constancy of purpose”. The South African Department of Education (1997) supports this notion and affirms that the underlying reasons for defining the purpose of a quality assurance system is to come to a common understanding of the purpose of implementing such a system in a particular institution, program or process. According to Nasta (1996:181), there is a need for all the stakeholders at junior, middle and senior levels of management to accept the need of quality assurance as an essential process to maintain and improve the quality of education. The vision, mission and values of an institution are established at this stage.

After defining the purpose of quality assurance systems it is imperative to look into the next phase, which involves planning and policy formulation.

#### **2.6.6.2 Planning and policy formulation in quality assurance systems**

According to Sallis (1996:105) planning for quality should be strategic or corporate. This may also apply to activities such as an instructional development plan and assessment strategies. It gives the details of the measures, which the institution intends to take to achieve its mission.

Shaw (1995:2) emphasises the need for a clear view of the path to be followed. A strategy or a plan acts as a criterion and a benchmark to monitor processes or

activities, as well as a constant reminder of the core purposes. An appropriate organisational structure enhances success during implementation. Parsons (1994:171) is of the opinion that planning includes appropriately documented activities and processes as well as the resources for achieving quality objectives. Sallis (1996:106) and Arcaro (1995:116-117) agree that the concept 'vision' is the statement that expresses the desired state of the future with regard to shared values and beliefs, while the mission statement articulates how the vision will be achieved by providing clear directions for the present and the future (2.7.1). Sallis (1996:107) suggests a possible planning sequence for a quality assurance system.

- Vision, mission, values, and the purpose of the quality assurance system are considered and determined.
- Market analysis or research is undertaken to identify the clients, their requirements, as well as their expectations including the methods needed for identifying students' needs.
- Exploring success routes by examining strengths, weaknesses, opportunities, threats, and critical factors for success.
- Determining and setting standards as well as considering methods of delivering quality and costs.
- Investing in people by fulfilling staffing and staff development requirements as well as, evaluating the process of planning.

The implications for planning and policy formulation may involve the following gathering relevant information with regard to quality assurance through market research involving all the stakeholders, introducing the strategies and the importance of a quality assurance system and planning implies being proactive and having a clear vision for the future.

A study of these phases confirms that the vision, mission, as well as the values should be translated into achievable goals (aims and objectives). It may therefore

be concluded that planning is a prerequisite for the success of all the phases of the quality assurance system. Policy formulation, together with a clear vision, enhances the practicality of the quality assurance program. For the quality assurance program to conform to students needs and expectations, it is essential that their perceptions of quality are determined during the development phase, that is addressed in the following section.

### **2.6.6.3 Development phase of quality assurance systems**

In this phase, client-perceived notions of quality are established. Sallis (1996:109) argues that thorough market research is essential for implementing quality. This implies listening to stakeholders. Relevant information is gathered to obtain input from all the concerned groups, including students, peers, parents, and employers. Baijnath *et al.* (2002:158) indicate that through information gathering, new ideas and suggestions and new insights into strengths and weaknesses are obtained.

During the development stage, relevant standards, functions and procedures are documented. Market research is undertaken, followed by the analysis of data. During analysis, screening, classification of data as well as application of statistics (where relevant) are undertaken. Sallis (1996:111) refers to this as a SWOT analysis. In a SWOT analysis, strengths, weaknesses, opportunities, and threats are analysed. This is the phase during which informed judgments and shared decision-making are made (Sallis 1996:112; Baijnath *et al.* 2002:159). The judgments are captured and properly documented for future reference. Market research provides up-to-date information since clients needs and requirements change. Strydom, Lategan and Muller (1996:34) indicate that since the students are the most important stakeholders in higher education, the role they play should be at the heart of the quality assurance system. This implies that the students should be involved during all of the planning and implementation stages of the quality assurance system. Following this argument it becomes evident that both internal and external market research are essential

because an institution has both external and internal clients. An efficient communication system, through which the progress of the program is reported to the concerned groups, is also necessary. For the harmonious functioning of the quality assurance system regular reporting on progress as well as process is the key to success.

#### **2.6.6.4 Reporting phase of quality assurance systems**

Reporting of all decisions made during the data analysis is essential since quality is everybody's business. According to Baijnath *et al.* (2002:159) the details of all the weaknesses and strengths of different aspects of a particular process or program should be communicated to the stakeholders. Continuous reporting is essential to improve, to build on strengths and to eliminate the weaknesses of the quality assurance system. As such, reporting of the progress of quality assurance contributes to the efficient monitoring of the process.

#### **2.6.6.5 Monitoring and evaluation in quality assurance systems**

Blake and Hanley (1995:234) consider monitoring as the idea of keeping careful, regular checks on various aspects of instruction. These may involve any aspect of the education process, such as numbers of applicants for a course; admission procedures; student dropouts; levels of attainment; forms of assessment or approaches to teaching and learning. Parsons (1994:172) posits that provision of on-going monitoring and evaluation of set performance objectives and standards is essential. Baijnath *et al.* (2002:159) argue that monitoring functions as a form of summative evaluation of the entire quality assurance process, since the data collected during the monitoring process may be used to evaluate the process. They further elaborate that monitoring has the advantage that prompt changes can be made and implemented. Parsons (1994:173) further asserts that the pursuit of a strategy for process control in a quality assurance system requires teamwork.

It can be deduced that, together monitoring and evaluation form a reflection and rethinking phase, which necessitates summative and formative evaluation and are also complementary. Summative evaluation is an essential step to take before preparing for a new quality assurance strategy to take off. The end becomes the beginning as the processes of evaluation and monitoring merge with the defining and planning of the purpose. Monitoring is about controlling, checking the effectiveness and decision-making in the quality assurance system. The results and the revelations of the monitoring process lead to reconsideration of the purpose through evaluation and review processes.

#### **2.6.6.6 Redefining the purpose**

Quality assurance is cyclic in nature. Sallis (1996:106) reiterates that new quality assurance strategies must commence with the establishment of a vision, followed by planning and the necessary procedures, which include all the other phases. Usually, documentation and decision-making are essential for every phase of a quality assurance system. The process of redefining the purpose implies that continuous improvement is enhanced since the mistakes of the previous strategy may not be repeated and ways of preventing problems before they happen may be found.

Despite the fact that the aim of a quality assurance system is to stop problems before they occur, there are always some stumbling blocks in the way towards quality improvement. Common stumbling blocks in the implementation of a quality assurance system are discussed in the following section.

#### **2.6.7 Stumbling blocks in the implementation of quality assurance systems**

According to Juran (in Arcaro 1995:17) problems are beneficial because their identification triggers responsive mechanisms to find solutions and preventative measures with the sole purpose of improving quality in education. Baijnath *et al.*

(2001:9) identifies the following obstacles in implementing a quality assurance system:

- Lack of institutional identity which results from the lack of a clear purpose and vision and also fear that quality assurance and evaluation may lead to penalties. Fear is always a threat to people, hence the resistance to change.
- Lack of appropriate information technology as a support for self-study is a necessity for increased participation, diversification and mass education. The latter requires the use of highly advanced technology.
- Cumbersome decision-making structures that prevent institutions from responding to changing conditions in a timely manner. This implies that quality assurance should be a step-by-step process.
- Lack of trust in institutional hierarchies, political culture and/ or command culture as well as, overall funding of higher education in terms of its volume and structure.

The above obstacles of quality assurance systems become challenges to be met and overcome (Juran in Arcaro 1995:17). The possible implications include staff development on quality assurance and evaluation, building trust amongst all the stakeholders by breaking a vertical hierarchy. As well as, minimising costs while maximising the benefits and reducing culture command, through increased responsibility and autonomy. Timely responsiveness to problems and changing conditions, as well as improved information technology to support self-study are also necessary.

There is a shared view that no system can run without problems or obstacles. The issues with regard to quality assurance systems are contextual. However, what is basic is that they are preventive and focus on continuous quality improvement and maintenance to enhance fitness for purpose.

### **2.6.8 Advantages of quality assurance systems**

Literature (Arcaro 1995:27; Baijnath *et al.* 2001:83, 156; MacGinity and Fish 1993:54; Riley and Nuthal 1994:45; Taiti, 1997:60) reveals that quality assurance systems are beneficial to institutions. A number of perspectives on these benefits are:

- Quality assurance systems are important since they provide answers to challenging questions with which higher education institutions are currently faced, and they bring considerable change to the institutions.
- Accountability of educational professionals should be enhanced (so that they may have to account for their actions).
- It is necessary to involve, inform and motivate all staff to constantly improve the quality of every educational process and to facilitate marketing of services and products. This is done so that institutions obtain quality labels that might be recognised nationally and internationally.
- Quality assurance systems facilitate the marketing of an institution. The debate is that funding bodies demand that institutions of higher education should have sound quality assurance systems, which can be used as quality indicators in the quality assessment of an institution.

In the light of the above stated advantages, it is clear that all the institutions of higher education need to be sensitised and encouraged to implement quality to continuously improve education and its processes. Identify strategic plans for development and improvement. Most importantly, funding bodies demand sound quality assurance systems in institutions of higher education.

### **2.6.9 Disadvantages of quality assurance systems**

Quality assurance systems also appear to put institutions in a tight corner because of particular disadvantages of such systems. Quality assurance systems have some of the disadvantages. Houston and Maniku (2005:213) insinuates that quality assurance systems in higher education systems are a mess. They are time consuming as much time is needed for planning.; they may seem



bureaucratic and stifling since they include processes such as monitoring and feedback (Taiti 1997:61). Taiti (1997:61) continues that quality assurance systems can be abused as a managerial weapon to enforce sub-servience. This can reduce creativity, motivation and independent thought.

Despite the disadvantages of quality assurance systems the advantages seem to outweigh the former. It is imperative to briefly consider the hallmarks of quality assurance systems in the next paragraph.

## **2.7 Hallmarks in implementing quality assurance systems**

The most important stepping-stones in implementing a quality assurance system are briefly discussed in this section. These may refer to the qualities of quality assurance systems.

### **2.7.1 The mission statement and its role in a quality improvement system**

The mission statement is of utmost importance in quality assurance. Baijnath *et al.* (2001:71) assert that in dealing with quality and self-analysis, the first priority is to consider the formulated mission statement, the formulated goals and aims, as well as the formulated objectives of the process of an institution. Bowering-Carr and West-Burnham (1994:25) maintain that the mission statement expresses the vision and values of the institution, describes the quality of service to be provided to clients, and sets out a commitment to the future. Scull (in Maxwell 1999:148) sheds light on the notion of quality by indicating that the future belongs to those who see the possibilities before they become obvious. Bowering-Carr and West-Burnham (1993:25) further argue that the mission statement serves the following purposes:

- Focusing all the activities of an institution in such a way that the institution fulfills its goals and becomes responsive to needs and demands, both locally and internationally as well as; characterisation of and identification

of the priorities for that particular institution as the goals of an institution become clear and specific.

- Provision of relevant benchmark for policy-making that is based on the mission statement of an institution as well as creation of a consistent vocabulary and culture to enhance consistency across all the faculties and team spirit of an institution. Shared challenges that create unity and team, whereby feelings of ownership prevail are integral to successful quality assurance system.

What emerges from the above stated purposes is the strong emphasis on the importance of the mission statement as an essential and basic stage for a quality assurance system.

### **2.7.2 Standards in quality**

According to Ashcroft and Palacio (1996:6), standards may be defined in terms of quality indicators. It has already been indicated that pressure factors result from the transition of higher education from elite to mass provision, mass participation, rapidly changing job markets, changing careers and personal needs, to mention but a few. There is a worldwide call upon institutions to demonstrate that standards are being maintained and enhanced (Bowering-Carr and West-Burnham 1993:21).

In response to this worldwide call, institutions of higher education have to persevere and achieve high levels of performance standards. Arcaro (1995:2) posits that quality improvement entails seeking for best practices as standards to measure improvement. As a result, specification of standards for services and processes is essential requirements for any quality assurance system.

In the light of the previously mentioned driving factors for high performance standards, one may deduce that standards are the best practices that may be

used as benchmarks to compare quality. Benchmark statements provide a broad indication of transferable skills developed in each discipline.

Several reasons pertain as to why there is a dire need to maintain and assure high levels of standards of provision and performance (QAAHE.evidence to the inquiry into HE.[www.qaa.ac.uk](http://www.qaa.ac.uk)).

There is an emergence of new stakeholders with new expectations to be met and new information that needs to be addressed. These may include new generations that go to the university for the first time, employers that recruit in the graduate labour market for the first time, and mature students looking for higher education to equip them with skills to cope with uncertain and rapidly changing job prospects.

Academic standards are public concern: the public Stakeholders care about standards and need to have confidence in institutions of higher education since they are the ones who are to set those high standards to be achieved by students. The standards should relate to the needs of the students and the skilled staff for successful careers and personal fulfillment.

Transition to mass higher education is a global phenomenon. As a result, higher education systems are charged with the responsibility to maintain and enhance quality and raise standards. Most importantly, this is necessary since higher education is expanding rapidly as governments identify high level technical and intellectual skills as the key to success in knowledge based economics.

There is also a shift in emphasis: a student should be an active autonomous learner rather than a passive recipient of knowledge. As a result new learning strategies are developing and emerging. Increased participation of private finance in higher education also calls for increased levels of performance and

provision and independent evaluation of quality and standards in higher education institutions.

Furlong and Smith (1996:69) predict that there will always be continued pressure from industry, the government and society for higher education standards. The reason is that education will increasingly depend on the skills, knowledge and imagination of the workforce, and most importantly, old jobs change or disappear and new jobs emerge. The need for academic quality and standards are a never-ending journey in higher education, and consequently benchmarking may also be necessary.

### **2.7.3 Benchmarking**

According to Macdonald and Tanner (1998:57), benchmarking is the process of identifying, understanding and adapting outstanding practices and processes from organisations anywhere in the world in order to help one's own organisation to improve its performance. In a similar trend, Yearout (1995) reports that benchmarking is the process of comparing and measuring organisations' operations or its internal processes against those of a best-in-class performer from inside its industry.

Greenwood and Gaunt (in Du Toit 2002:57) further indicate that benchmarking is described as a managed change process that uses a disciplined and structured approach, identifies how to change, implements the potential for improvement and creates the desire for change. It is a necessity for higher institutions to look for new ideas that can fit in their contexts (Robert and McGrower 2004:100)

What emerges from the above clarification of benchmarking is that quality assurance is a closely monitored and well-directed process.

### **2.7.3.1 Benefits of benchmarking**

Yearout (1995:34) posits that benchmarking holds rewarding benefits for an organisation. These include gaining ideas for improving the process and services from better or best organisations, and sharing knowledge and experience with others performing the same process in providing services or products that are critical to success.

More focus should be turned towards efficiency and effectiveness to ensure that processes and practices are competitive. Improved planning for targets and management of resources as well as continuous quality improvement identified by clients or stakeholders through performance information and establishing realistic action objectives for implementation of activities are a necessity. Lastly, striving towards excellence breakthrough thinking, and creating a better understanding of competitors and the dynamics of education by emphasising sensitivity to changing students needs are necessary.

Greenwood and Gaunt (1994:87) emphasise that benchmarking aims at improving upon the best practices and standards. They further indicate that benchmarking is essentially about finding good ideas and ways to improve existing practices in institutions, which are seen as leaders in the field of education. Furthermore, it must be noted that benchmarking changes with to match levels of student satisfaction in higher education systems(Kane, William & Cappuccini-Ansfield 2008:135).

What expires from this discussion is that benchmarking is important in the globalisation process, which demands that colleges and other institutions of higher education should perform and operate according to international standards. This is a requirement for international mobility. Benchmarking can be used to compare good practices in different areas.

#### **2.7.4 Communication in quality assurance systems**

Communication is the process where a sender conveys a message through some medium to a receiver, and to which a receiver then reacts or answers, giving feedback through a medium (Kruger and Van Schalkwyk 1997:58). The value of communication as the backbone of quality assurance systems is highly commendable (Kruger and Van Schalkwyk 1997:58). Furthermore, these authors emphasise that a lack of communication or closed communication channels leads to fragmentation of academic staff.

As such, efficient communication is essential for the life of an institution. To this effect, Chivers (1995:43) extrapolates that maintaining good communication entails essential factors that include clarifying the desired response, planning and preparing for communication, listening skills, giving and receiving feedback on performance, awareness of barriers to communication and action to avoid them chairing skills as well as communication between teams and the rest of the organisation.

In his model of the 'total quality implementation wheel,' Arcaro (1995:72) affirms that communication is necessary to clarify goals and to share information and ideas. He continues that these may be communicated through conferences, seminars, and information meetings as well as through publications and notice boards. Maxwell (1999:23) argues that without communication, one travels alone. He holds that educators take something simple and make it complicated, while communicators take something complicated and make it simple. Maxwell (1999:23) further asserts that communication plays a pivotal role in cascading information throughout the institution when giving instructions, establishing mechanisms and translating institutional information. Maxwell (1999:23) continues by pointing out that without proper communication channels, the working environment is like a car trying to run on only three tyres.

It can be deduced from the discussion of the role of communication that communication is a vehicle by which ideas are exchanged and adopted to improve quality in education. Communication is therefore the cement that binds the members of a team and the working teams in an institution together to achieve its goals. Communication is a network through which information is distributed and collected, including feedback mechanisms. Without a sound communication system the productive life of an organisation is at risk; and hence quality is questionable.

Team spirit is also essential for the success of an institution. The necessity of teamwork in a quality assurance system is discussed in the following section.

### **2.7.5 Team building in quality assurance systems**

Teamwork is essentially important in quality assurance systems. According to West-Burnham (1993:118) a team is defined as a quality group. Sallis (1993:81) adds that teamwork throughout any institution is an essential component of the implementation of total quality since it builds upon trust, improves communication and develops independence.

#### **2.7.5.1 Characteristics of a good quality team**

According to literature several features characterise a successful team. Chivers (1995:28); Sallis (1993:81) and West-Burnham (1993:118) are of the opinion that characteristics of effective teams have clear purposes and goals with specific and positive objectives; awareness of strengths, weaknesses and the opportunities for risk taking and threats; motivation of all team members, including collaborative decision-making; sound systems and procedures to facilitate effective teamwork for monitoring and problem solving; development of beneficial team behaviour and honesty; Lastly, a working plan to initiate operations, clear knowledge of accountability and limits of authority, appropriate tools to tackle problems to arrive at solutions, collaborative decision-making to

reach consensus, including formative review at defined stages of a process are a necessity.

Parsons (1994:173) argues that in pursuance of the strategy for process control, all teams are required to undertake a series of formative reviews at regular times during the process. Team spirit is an essential element in every institution. It develops the feeling of ownership in individuals. Chivers (1995:36) recommends that communicating to give and receive feedback in a thoughtful and constructive manner is an essential prerequisite for successful team-building. In support, Arcaro (1995:122) insists that a team's goal is to develop an effective communication process that provides people with information.

Against the background of the preceding paragraphs, it becomes clear that effective communication is the key to successful teamwork. A team is also characterised by oneness and one focus, which guarantees the success of the team. This is necessary to instill the spirit of unity in such a way that the success of one is the success of all.

The success of educational systems and processes also depend on efficient leadership. The role of leadership in the implementation of quality assurance systems is discussed in the next paragraph.

### **2.7.6 The role of leadership in implementing quality assurance systems**

According to Arcaro (1995:13) a quality leader is a person who measures his or her success by the success of the individuals whom he/she leads in the institution. West-Burnham (1993:98) argues that without appropriate leadership no quality system will work. West-Burnham (1993:98) also emphasises that only dynamic leadership can create the commitment to drive the quality strategy. To this effect West-Burnham continues and contends that the agenda of a quality leader should consider development and commitment to academic excellence, intellectual rigour; empowerment and encouragement of the staff, colleagues and



the students to pursue their own excellence; searching fighting vigorously for funding in the broader arenas of the system and the community as well as negotiating for the distribution of funds in an open, rational, fair and equitable manner; and putting trust into the abilities of other people charged with the financial responsibility within the context of shared commitment and ownership.

In addition, some important imperatives of quality leaders apply. Peters (in Chivers 1995:6), posits and generalises that the qualities required for a leader are commitment, passion, zest, energy, care, love, and enthusiasm. Peters also emphasises that leadership requires a strong passion for excellence. In addition, Gary (1993:14) continues by recommending that the notion of quality is a useful and relevant filter for the leader to come to terms with his or her accountability, both inside and outside the institution. Gary (1993:14) concludes that one of the inspirations of leadership is to make a real difference to the quality in an institution.

The implications of quality leadership in a quality assurance system include leading with people, instilling shared commitment, and building trust among all the stakeholders to ensure autonomy and ownership, as well as having a vision for the future, the power and the force to drive a quality system. One of the main objectives of quality leadership is to empower the staff through purposeful staff development programs. It is therefore necessary to relate staff development to quality improvement and maintenance.

### **2.7.7 Staff development and quality improvement**

Rambani (in Khaahloe 2002:98) defines staff development as a process designed to foster personal growth for individuals within a respectful, supportive organisational climate, aimed at the improvement of student learning, as well as continuous and responsible self-renewal of educators. This is essential for the successful implementation of a quality assurance system in education. According to Warner and Palfreyman (1996:203), the focus on human resources and staff

development is one of the main factors, which needs to be in placed at the center of each part of the organisation, to deliver quality. Arcaro (1995:3) extends the argument and states that quality is assured by ensuring that each individual has the building blocks necessary to do his or her job properly. Mapesela-Monnapula (2002:141) argues that staff development is necessary to prepare staff for their changing roles and the need for enrichment, acquisition of new skills and enhancement of mastery of the field, to assist academics in embracing globalisation as a challenge, as well as to cope with its demands. She continues that it is also necessary to enable academics to contribute towards knowledge production and to cope with its explosion, to train everyone in skills based on a process of needs analysis.

Aspin, Chapman and Wilkinson (1994:71) assert that educators become capable of doing things and effecting transformation, given some leadership skills. For this reason, Aspin *et al.* (1994:71) further infer that it is advantageous to program educators by allowing extensive periods of time to attend to competence acquisition and mastery in educational processes, such as curriculum design, innovation and change as professionals.

What can be inferred from the exposition of staff development in a quality assurance system is that, staff development entails provision of opportunities to staff with the aim of developing the necessary knowledge, skills and attitudes for improving and assuring quality in education and its processes. This also implies that purposeful and systematic staff development programs should be in place.

### **2.7.8 Quality as a change process**

Boone (1988:10) defines change as the alteration of a system. He continues by arguing that change is always a purposeful endeavour towards desired decisions to make improvements in a system or a process. This exposition emphasises the relationship between quality and change. In support, Arcaro (1995:25) affirms that change improves quality, and that ensuring quality is being aware that we

accept change and become committed to change. The word 'change' carries the meaning 'on-going'. This notion has existed for a very long time: about twenty years ago, Hopkins (1987: 3) made a case for change as a process, and not as an event.

Fullan (1993:25 and in Everard and Morris 1996:227) and Fullan and Miles (in Parsons 1994:61) have the following perspectives about the successful implementation of change: Change is learning and it is loaded with uncertainties, experiences risks and problems. It is a journey not a blueprint and a systematic process. Problems are beneficial since they enhance learning as they remain challenges to be solved. They further indicate that change is resource hungry, costs a lot of money and requires power to manage it. Lastly, people need to be prepared as change is often a threat as people tend to resist and resent other peoples' ideas. Change is mostly initiated to bring about quality improvement and enhancement in educational systems and processes. This implies that there should be strong leadership to drive the change process.

Today's societies live in an era of transformation and the world is now more intercultural and interdependent than ever before; societies throughout the world are more dependent upon skills and knowledge that go beyond the traditional educational basis: Critical thinking is required (Al-Khateeb and Alnabhan 1996:271). There is no phenomenon without ups and downs, change is always a necessity and it must be emphasized that education is a change agent ( Everard and Morris 1996:5-6).

The implication is that, in line with the rapid changes of the needs, demands and the values of society, as well as societal change itself, education systems need to respond and change. The most important aspects about change and quality are that improvement in quality is in fact a valued change, while on the other hand, change is quality because change is the consequence of quality improvement.

On the basis of the foregoing exposition of the hallmarks of quality in education and its activities, assessment of student achievement is not absolute. This implies that these aspects do not operate alone. They operate together as criteria for quality. However, the quality of education is as dynamic as education itself; what is quality today may not be regarded as quality tomorrow; all because of change.

## **2.8 Conclusion**

What emerges from this chapter is that quality is a multidimensional phenomenon. It is as dynamic as education systems themselves. Like education, it changes with the changing needs, values and interests of the society. The emerging needs, values and interests may be driving factors for quality improvement. Quality has a long history. It originated in the industrial and commercial world. Because of its flexibility the notion of quality has been adopted and incorporated into education systems worldwide.

This chapter addressed some of the different views and definitions of quality, the driving factors for quality, as well as the history of quality in education. Principles and characteristics of quality were addressed.

The discussion in this chapter also focused on the implementation of a quality assurance system and its related issues. The purposes, concept, principles, strategies, stumbling blocks as well as advantages, disadvantages and the hallmarks in implementing a quality assurance system were examined. The role of leadership in implementing a quality assurance system, staff development and quality improvement, as well as quality as a change process were also considered in this chapter.

The next chapter addresses quality and quality practices in assessment and related issues.

## CHAPTER THREE

---

### QUALITY OF ASSESSMENT PRACTICES IN HIGHER EDUCATION

#### 3.1 Introduction

Chapter two addressed general perspectives of quality in education. The purpose of this chapter is to explore theoretical perspectives on quality issues in assessment. The following themes will be addressed: Definitions of assessment; purposes and uses of assessment; paradigm shifts in assessment practices; challenges and problems; principles of quality assessment practices; quality and assessment; quality assurance practices in assessment and assessment as an agent of a change and a transformation process.

Assessment is a broad term; it is generic to a set of processes that measure the outcome of student learning with regard to knowledge acquired, understanding developed and skills gained. It is a highly multifaceted and problematic concept (Blenkin and Kelly 1992:3). According to Van Niekerk, Mellet and Potgieter (1998:5), assessment of student achievement is an integral part of teaching and learning, not just a means of monitoring or auditing student performance. It is a way of improving the quality of learning because teachers and students alike can use assessment information to adjust the teaching or learning experience. In affirmation, Gipps (in Ecclestone 1996:4) asserts that the role of assessment to improve the quality in teaching and the design of the curriculum is high on the agenda of all education and training systems around the world. Most, importantly, students are entitled to assessment that is relevant to the changing world, enabling the maximum potential of students, accessible and flexible and equipping students with the required skills and knowledge (Gawe and Heyns 2004:161).

Assessment as an essential process within entire educational systems everywhere in the world is hampered by some factors, which impact on quality.

These factors may include reduced financial support to institutions, increased participation, globalisation and internationalisation, transformation, accountability, market demands, massification and diversity. Brief details will be provided on the way in which these factors influence the quality of assessment practices (3.5) and what quality in assessment entails.

Brown, Racop and Bull (1992:12) report that, as a result of greater participation in higher and further education, and the reduction in the actual amount of resources per student awarded to institutions; it is proving to be impossible to extend traditional assessment and instruments to meet current demands of individuals and their communities. Assessment should be a continuous process; it should not be a passing event. In affirmation, Arcaro (1995:24) and McMillan (1997:56) note that assessment should take place before, during and after tasks have been completed. Arcaro (1995:41) further elaborates that assessment of learners must extend beyond traditional tests, which only assess how many facts can be spewed back, and that assessment should be considered as a process as well as a product. These challenges demand institutions to seek best practices to ensure the quality of assessment. Assessment as a process should involve steps such as collection, interpretation and synthesis of information as well as naming the characteristics on the basis of description.

Because of its multifaceted nature, several definitions pertain to the assessment of students; and these are provided in the next section.

### **3.2 Definitions of assessment**

Assessment pertains to a very broad spectrum in education. Hence there are different perspectives on what assessment entails. Several authors provide definitions of assessment, inter alia:

- Assessment is a systematic process of making inferences about the learning and development of students, the process of defining, collecting,

organising, interpreting and using information to increase student learning and development (Erwin in Sallis and Knight 1994:12).

- Assessment is the judgement of evidence of learning and achievement submitted by learners for a particular purpose (Ecclestone 1996:171).
- Assessment is a process which involves seeking data that might shed light on student achievement, analysing and interpreting the data and finally making judgements about the quality of learning by evaluating evidence in the light of standards (James 1998:16).
- Assessment is a generic term for a set of processes that measure the outcomes of student learning in terms of knowledge acquired, understanding developed, and skills mastered (<http://www.qaa.ac.uk/public/cop/COPaosfinal/contents.htm>).
- Assessment is checking that appropriate processes, practices and procedures have been observed according to agreed standards (Thackwray 1997:58).
- Assessment entails a series of measures used to determine the complex attribute of an individual or a group of individuals (Oosterhof 1994:7).

What transpires from above definitions is that they characterise assessment, and the following common aspects can be identified:

- *Purposefulness*: Assessment is carried out for valid purposes, such as selection of students for the next level of the program or certification.
- *Process and series*: Assessment comprises interrelated or serial processes such as defining, collecting data, analysing data, interpreting data and the efficient use of information.
- *Value judgement*: In assessment, the evidence provided by the results of assessment is used to measure the value of an activity or a process as well as a product.

- *Information driven judgement*: In assessment, evaluation which involves making judgement about the value of a phenomenon, is made on the basis of available evidence (the collected information).

In addition to the above definitions, Baldrige (in Arcaro 1995:41) integrates the different definitions of assessment with various perspectives of quality. He extrapolates that assessment is ensuring that:

- What is supposed to happen actually happens;
- everything that is done has added value;
- what is done provides value to the students and other stakeholders;
- work is done effectively;
- constant strive to improve output; and
- there is never any resistance to change.

The purpose and use of an assessment system also determine the characteristics of the system. Some of the purposes and the uses of assessment are presented next.

### **3.3 Purposes and uses of assessment**

The purpose and use of an assessment system are interdependent. The intended use of the results of assessment determines the purpose of an assessment system. Assessment is a multipurpose process and it thus serves many purposes, depending on the needs of the stakeholders in respect of purported use of results (Race1999:115 and Race 2001:35). Ashcroft (1995:118) emphasises that the purposes of assessment should be closely related to those of education and society. Ecclestone (1996:10,12) adds that assessment is carried out to achieve a range of purposes to provide information for different stakeholders such as the government; funding bodies; awarding bodies; employers and admission committees in higher education; parents and students.



The main purposes of assessing learners and the ultimate use of the results of assessment are discussed in the next sub-section.

### **3.3.1 Assessment for initial guidance**

Assessment for initial guidance is necessary to guide decision-making before a program or a module starts. This is known as pre-instructional assessment, which is both formative and diagnostic. It informs decision-making as a starting point with respect to skills and knowledge already acquired (prior knowledge), and the individual needs of the learners (Ecclestone 1996:2; Brown, Race, and Smith 1996:17; McMillan 2004:29; Oosterhof 1994:18). The idea of a starting point and addressing the individual needs is diagnostic because it enhances the prevention of problems before they start. Another implication is that the initial assessment informs planning for improved instruction and the curriculum since the level of skills, needs and abilities of the learner, as well as the weaknesses and strengths of instruction and the curriculum are identified timeously. Most importantly, guidance provides the necessary learner support with regard to the nature of the outcomes and the expectations of assessment (Whisker and Brown 1994:12). Whisker and Brown further note that the initial guidance also provides external stakeholders with more coherent evidence upon which to base their judgement.

### **3.3.2 Assessment for the purpose of selection**

Assessment can be executed for several reasons. One of the important purposes of assessment is selection. Assessment for the purpose of selection for admission informs decision-making for exemption from entry requirements, entry and potential to benefit from a program, potential to follow a program or a module to progress, readiness to learn new skills; and recruitment for employment (Brown and Knight 1994:16; Kane and Mitchell 1996:1).

Assessments results are always used to select students for progression to the next academic levels, as well as for employment and for entry into a program.

### **3.3.3 Assessment for in-program purposes**

This form of assessment is implemented during a program or a module offering. It informs decision-making for improvement of instruction through diagnoses of problems, needs, strengths and weaknesses of the students as well as to shed light on appropriate learning targets (Ashcroft 1995:132; Black and Atkin 1996:94; Brown and Knight 1994:15;). Further more, assessment for in-program purposes is also used for the purposes of provision of evidence for a grade, progression as well as achievement of competence, classification of students for different levels and for improving student achievement through use of effective feedback (Ashcroft 1995:132; Brown, Race and Smith 1996:16; Ecclestone 1996:21; Kane and Mitchell 1992:1; McMillan 1997; Wraggs 1997:20).

According to research (Black 1998: 31; Kane and Mitchell 1996:1; Kellaghan and Greaney 1992:1.) assessment plays a vital role in improving the quality of instruction and ensuring student success. Most importantly, the results of assessment are used to inform decision-making with regard to curriculum provision, allocation of appropriate resources and instruction. Positive and constructive feedback is necessary to help students to reflect on their work and plan for improvement. Feedback and follow up mechanisms improve the quality of learning( Wilson & Scalise 2006:644). Educators also benefit from assessment feedback since they are in a position to reflect on their instructional delivery modes. Planning is informed and the expectations of the program (or a module or a course) are communicated to all.

More importantly assessment functions as a mode of instruction and it also reveals weaknesses and strengths of individual students and instruction. As a result it enhances continuous quality improvement.

### **3.3.4 Assessment for certification of student achievement**

Assessment is also implemented to confirm achievement of students. This assessment mostly sums up all achievements of the learner for final decision-

making. Currently, continuous assessment also contributes towards final decisions of certifying achievements. Summative assessment is usually carried out at the end of a module or a program, which enables grading for degree or diploma level classification (Ecclestone 1996:20; Kane and Mitchell 1996:1; Kellaghan and Greaney 1992:1). Certification of student learning and achievement is integral to the academic development of students. The results of assessment provide overall evidence of attainment against identified criteria with regard to knowledge, understanding and competences.

### **3.3.5 Assessment for accountability**

Heywood (2000:66) indicates that in accountability the question is whether the agreed objectives have been achieved or not. Institutions of higher education are charged with the responsibility to report to the public and international stakeholders whether assessment is indeed promoting learning (Headington 2000:68). Gronlund (2003:56) adds that the results of assessment also enhance communication of students' progress to parents, teachers and the community at large.

James (1998:25) provides a detailed list of commonly quoted purposes such as diagnosis; screening; allocating resources; feedback to students; aid to learning; target setting; feedback to tutors and students; improvement of curriculum planning and instruction; grading; student grouping; transfer of information; prediction; guidance; selection; certification and accreditation; monitoring of standards within and across institutions and educational systems; evaluation of programs of study, performance of teachers, as well as accountability. According to Black and Atkin (1996:94); Brown and Knight (1994:15); James (1998:26) and Wraggs (1997:20), these purposes and uses can be categorised or classified into forms on the basis of use as shown in Table 3.1.

**Table 3.1: Classification of forms of assessment according to purpose and use**

<b>Forms</b>	<b>Purposes and use</b>
Formative assessment	To provide information about student progress, to inform decisions about further learning.
Diagnostic assessment	To recognise strengths and weaknesses about individual students to maximise their abilities.
Summative assessment	To recognise and record overall attainment.
Evaluative assessment	To use results to inform decisions with regard to curriculum provision, teaching and learning styles as well as allocation of resources and others.

As indicated earlier (3.3.1) uses and purposes of assessment of student achievement are interdependent, hence it is justifiable to derive uses of assessment from their purposes. The purposes and uses of the results of the assessment of student achievement are changing with the changing values of higher education. These changes have resulted in paradigm shifts in assessment practices.

### **3.4 Paradigm shifts in assessment practices**

According to Gipps (1998:1) a paradigm is a set of concepts, which provide a framework within which a particular problem is viewed and understood. Kuhn (in Gipps 1998:1) contends that a paradigm shift or a scientific revolution occurs when the old paradigm is unable to deal with outstanding problem or problems. Educational systems and their processes are highly dynamic; this is the result of paradigm shifts. Paradigm shifts also occur in the assessment of student achievement. Gipps (1998:1) asserts that assessment is undergoing a paradigm shift from psychometrics to educational assessment, and from a testing and examination culture to alternative assessment. When assessment of students undergoes a profound change, reforms also occur with regard to learning goals, content standards, curriculum instruction, teacher education, and relationships among parents, communities, schools, government and business (<http://www.fairtest.org/prinind.htm>). These changes result from the changing needs of

societies. Boron (in van Niekerk, Mellet and Potgieter 1998:58) affirms that there is a move towards new educational values, hence a corresponding move towards new assessment strategies. These changes have lead to paradigm shifts in assessment. Some of the paradigm shifts are presented in Table 3.2.

**Table 3.2 Paradigm shifts in assessment**

<b>SHIFTS</b>	
<b>FROM</b>	<b>TO</b>
Psychometrics.	Broader models of educational assessment.
Sole emphasis on outcomes.	Assessment of a process.
Isolated skills and isolated facts	Integrated skills and application of knowledge.
Objective tests based on paper and pencil tasks and characterised by proportional knowledge recall.	Authentic tasks based on performance tests characterised by a wider range of skills, cognitive and personal qualities.
Decontextualised tasks Single correct answer.	Contextualised tasks. Many correct answers.
Secret standards and secret criteria.	Public standards and public criteria.
Individuals.	Groups.
Post-mortem assessment that takes place after instruction and provides little and negative feedback.	Diagnostic assessment that identifies problems during instruction and provides considerable positive feedback.
Normative referenced, characterised by external evaluation.	Criterion referenced in competences, performance criteria and a range of situations characterised by student self-evaluation.
Single and sporadic assessment characterised by standardised tests carried out for the purpose of selection.	Multiple and continual assessment characterised by informal tests designed to enhance learners' ability to learn.
Conclusive.	Recursive.
System centered assignments that result in passive learners.	Learner centered assignments which are flexible and result in active learners who are responsible for own learning by setting targets and assess own performance.

Adapted from: McMillan (2004:15); Ecclestone (1996:58) and Schurr (1999:34).

Jardin and Holly (1994:35) summarises that these paradigm shifts should be integrated with instruction to enhance learning processes rather than being separated and fragmented learning experiences. Furthermore, Blenkin and Kelly (1992: Preface) argue that as a result of paradigm shifts in assessment, the major features of assessment should be more formative than summative; more judgmental rather than statistical, more holistic rather than incremental; and build on strengths rather than identify weaknesses.

Nightingale and O'Neil (1994:131) comment that these paradigm shifts are necessary to recognise and overcome deeply entrenched problems, attitudes and behaviours. The paradigm shifts are a continuous chain of innovative perspectives, which result as a quest for quality improvement in education and its processes. Williams (1997:69) asserts that the changes that result from paradigm shifts can only be supported by alternative assessment, as well as a moving away from total dependence on traditional assessment. Assessment practices are pressurised and influenced by any emerging issue in education. The impact of these issues (3.1) will be explained in the next section.

### **3.5 Issues in assessment practices: challenges and problems**

Some factors, as well as emerging issues challenge and cause problems in the assessment of student achievement in higher education worldwide. The impact of some of these problematic issues on the assessment of students in higher education is briefly considered in the next sections.

#### **3.5.1 Mission statement and the vision for the future**

According to Brown and Knight (1994:159), the current challenges of higher education, such as ageing population; unemployment; public borrowing deficit; competence based education; increasing reduction in public spending and others may determine the future of assessment in higher education. According to West-Burnham (1995:106) a vision statement communicates the ultimate purpose of an institution and/ or an educational activity.

### **3.5.2 Standards and assessment**

Specification of standards in assessment may be a necessity in situations where an institution or an educational activity is undergoing transformation. The implication is that assessment will also respond to the transformation process (Lemmer 2001:132).

### **3.5.3 Transformation and assessment**

The quality of assessment is also influenced by transformation. This aspect is further discussed in Section 3.9 of this thesis. Lemmer (2001:132) indicates that during any transformation process all structures, such as curriculum and assessment undergo reform. This author (Lemmer 2001:132) further asserts that it is also imperative to re-think assessment practices during any period of transformation

### **3.5.4 Accountability and assessment of students in higher education**

According to Black (1998:31), institutions are charged with the responsibility to report evidence of how they improve the quality of learning and assessment since it is the public who provides funds for higher education. The author concurs that institutions have to provide evidence that they are indeed promoting instruction in the interest of the public. Biggs (1999: Preface) affirms that institutions of higher education are faced with the challenge of developing assessment practices or systems that are technically sound and pedagogically useful since most students are increasingly paying more and more for their education. As a result, students and their parents demand value for their money. Khattri and Sweet (1996:33) allege that there is increasing pressure that accountability cannot only be based upon paper and pencil assessment. Other kinds of information on what the institutions of higher education are doing to fulfill the aims of the society, is necessary. Williams (1997:69) argues that accountability for central funds increases the emphasis on both internal and external measurement of quality, and most importantly the necessity for explicit procedures on the way in which institutions provide quality. Higher education is



consuming a significant amount of public funds; it is only proper that they should be accountable for this (<http://qaa.ac.uk/aboutqaa/evidence.htm.2004-09-02>).

The implication here is that for assessment to fulfill the purpose of accountability, the best practices in assessment of student achievement have to be determined and put into practice. Institutions of higher education are also accountable and responsible to produce high quality personnel through improved assessment practices of student achievement. The impact of market demands and changing job prospects on the assessment of students is addressed next.

### **3.5.5 Market demands and changing job prospects**

Kane and Mitchell (1996:3) and Khattri and Sweet (1996:1) are of the opinion that there is a concern from the business community that students entering the workforce are not sufficiently competent. The above authors further indicate that the voices of business and industry demand that their employees should be able to think creatively, write well, work flexibly, have social competencies and be able to work in groups. Kane and Mitchell (1996:1) endorse the idea that for a workplace to operate successfully, employees must possess competences such as interpersonal skills, foundational skills in reading and writing, numeric and thinking skills. All these necessitate the reform of assessment practices to enhance the acquisition of the necessary competences.

### **3.5.6 Competence based qualifications and innovative ways of learning**

New job demands, international mobility, as well as technology demand skills necessary to fit into the global village. Ashcroft (1995:110) posits that competence based qualifications and the associated shifts in students' profiles must have an effect, not only on the content of the curriculum in higher education, but also on the way it is assessed. Ashcroft (1995:110) further argues that new ways of learning such as work based learning, computer based learning, and independent learning and peer tutoring demand new ways of assessing student achievement. The implication is to assess transferable skills

as well as content to suit these new modes of delivery (Williams 1997:79). Competence based qualifications and innovative ways of learning may enhance international mobility; most importantly because internationalisation and globalisation are high on the agenda for quality improvement in higher education. This necessitates innovative ways of assessment that can provide valid evidence that the products (graduates) of higher education can compete in the global economy.

### **3.5.7 Globalisation and internationalisation in assessment**

One of the driving forces to rethinking the quality of assessment practices is the realisation that the skills needed for the global village are of an acceptable standard (Smith 1996: 642). Smith further indicates that since each country is forced into greater international interdependence, memorising of facts and one-dimensional interpretation of social issues are no longer sufficient. Globalisation and internationalisation of markets, benchmarking of qualifications and standards (Fourie 2000:50) demand critical rethinking of assessment methods. Smith (1996:642) asserts that to be competent in the global economy, students need skills in critical thinking, analysing divergent cultural perspectives on current and emerging issues, as well as problem solving across cultures. It is necessary for institutions to tune in to other institutions in higher education (Race1999:119) Acosta (1996: 682) concludes that one of the goals of higher education is to produce well-rounded graduates who are globally competent and ready to join the regional, national as well as international workforce.

In assessment, globalisation and internationalisation imply that assessment should produce valid evidence that the product of higher education (the new cohort of graduates for the labour market) is competitive in an ever-evolving global economic climate. Most importantly, globalisation is beneficial in that it enhances international mobility and greater participation, both locally and internationally.

### **3.5.8 Increased participation and massification in assessment**

In most countries institutions of higher education find themselves subject to increasing numbers of students, and as a result governments worldwide find themselves unable to financially support a mass participation system at the rate per student that was affordable in a smaller elite system (<http://www.qaa.ac.uk/aboutqaa/evidence.htm:2004-09-02>).

Another crucial aspect is that, despite the alarming increase in student numbers, there is a reduction of staff which results in increasing pressure on the personnel tutoring system, as well as limited time spent with students (Cox and Ingleby 1996:106). Mass education is a taunting threat to the quality of assessment of student achievement. Massification as well as semesterisation has led to increased assessment loads (Bennet *et al.* 1996:24; Williams 1997:68). According to Anderson and Specks (1998:6), the problem of increased assessment loads due to increased numbers of students justifies initiatives for reform in assessment practices in higher education.

In conclusion it must be noted that the undesirable load of assessment practices, which is the result of mass education, poses a threat to quality in the assessment of student achievement. The staff is faced with the daunting task of overcoming work overloads.

Another factor, which is integrated with increased numbers of students, is diversity. Increasing student numbers imply increased differences in students' profiles, which impact on the way in which students are assessed to address these differences. Mass education has resulted in, amongst others, the diversification of the student profile in higher education. The impact of diversity on the quality of assessment is addressed in the next section.

### **3.5.9 Student diversity and assessment**

Another controversial issue in assessment is the increasing diversity in student profiles. Diversity has become an important aspect in educational innovation and

development (Ashcroft 1996:5). Student diversity is exhibited in various ways, such as age, experience, socio-economic status, abilities, entry qualifications, background, race, learning styles, and others (Biggs 1999: Preface; Williams 1997:79). This increasing diversity of students entering higher education has an impact on the quality of assessment, and as a result lecturers in higher education are required to reconsider their assessment practices (Ashcroft 1995:111). The heterogeneity of students' profiles in higher education, increasing participation and massification of higher education, all pose a daunting challenge to the quality of assessment practices. The possible solution to this problem may be utilisation of different approaches to assess the multiple achievements of students in an attempt to address the differences.

### **3.5.10 Assessing multiple achievements**

Assessing multiple abilities through the implementation of multidimensional assessment practices is an innovation in assessment of student achievement (Lubisi 1999:138). Lubisi asserts that in multidimensional assessment there is no right or wrong answer and the students are given opportunities to apply multiple approaches to solve problems. Lubisi (1999:138) further indicates that the assessment of multiple achievements can only be achieved through the recognition of the theory of multiple intelligences.

Against this background, it is clear that open and multidimensional assessment that require multiple approaches are necessary to satisfy all the talents of the students, their differing needs and abilities. The implication is that a wide range of assessment methods may have to be employed to provide ample opportunity for the development of multiple talents and potential.

### **3.5.11 Financial implications of assessment**

Evidence of the changing nature of higher education worldwide is that central funding in higher education has not kept pace with the rapid increase in student numbers (Williams 1997:69). According to Ashcroft (1995:15), quality has

become the criterion in funding decisions, and as a result sound quality assurance systems must be in place. Biggs (1999: Preface) argues that the population in higher education is increasing against fixed or falling units of resources, and as classes increase in size, less staff are teaching more students in large classes. This is the result of decreased funding by central government (Williams 1997:79). Most importantly, Biggs (1999: preface) argues that the cost of higher education is increasing at an alarming rate, and as a result current pressure on assessment and learning in higher education is to find more cost-effective ways of assessment, while still maintaining standards. Despite dwindling financial support by governments and funding bodies, institutions of higher education are expected to report to all the stakeholders to indicate that they are indeed achieving their missions and the goals of society. In other words, higher institutions must satisfy the requirements of accountability. Moreover, the cost of higher education has increased alarmingly. Increased institutional autonomy in higher education has also contributed to impinging financial constraints in relation to the required resources. Governments and funding bodies are demanding sound quality assurance systems for all the processes and activities in autonomous institutions.

### **3.5.12 Increased institutional autonomy and assessment**

Since most of the institutions have been granted autonomy, they are self-administrating. They are free to run their own affairs, make their own choices, and make decisions with regard to activities such as assessment. According to the CHE (2001:18) autonomy may be related to freedom, but it does not mean freedom. The CHE (2001:18) further defines autonomy as the status of an institution whereby an institution is totally dependent and self-regulatory. In the light of this definition, it is clear that to maintain high quality in assessment practices, efficient quality procedures and quality assurance frameworks must be in place.

High quality assessment of students may be achieved through the application of best practices in assessment, which may be described as the principles of assessment. These are addressed in the next section.

### **3.6 Principles of quality assessment practices**

Principles are sound practices that facilitate the identification of problems and ways of addressing these (James 1998:390). These principles reflect the ideal: what is believed to be the best that assessment can be and do (<http://www.fairtest.org/princind.htm> 17/10/2004). James (1998:390) postulates that principles determine procedures which guide the practices. He argues that principles can be used as criteria to evaluate the practice. In assessing student achievement, governing principles become procedures to be followed in the implementation of high quality assessment practices, while they also become the criteria for judging the quality of such practices.

Everyone who participates in the development or implementation of an assessment system is responsible for helping to ensure that high quality in assessment is a concern at every stage of the process. The stages include: planning and designing; selecting and developing assessment practices; scoring; recording and reporting and using results (<http://www.gower.k12.il./staff/Ass> 04/04/2004). Since almost all the principles may apply at all the stages of the development of an assessment system, general principles that apply at every stage are provided in subsequent paragraphs.

#### **3.6.1 Policy in planning and design of assessment practices**

According to Cook (1991:43) the major aim of quality systems should be that student learning experiences are worthwhile, well-managed and meet rigorous standards of academic, vocational and professional achievement. One way of achieving the aims of quality is to plan and design a policy document that strives to meet the needs of stakeholders as effectively as possible within the resources available. This emphasises the importance of policy planning and designing of

assessment practices for success and improved quality. James (1995:45) posits that a clear vision of an assessment policy and a general strategic plan for development are top priority in high quality assessment practices. The emphasis is that assessment should start with educational values, foundations of education, as well as an educational mission (<http://www.qaa.ac.org/assessmentprinciples.htm> 11.27.2003). The purposes of assessment also need to be clear to every stakeholder. These purposes should be in line with clear and explicitly stated purposes of the program which the assessment seeks to improve (Brown and Knight 1994:57). Clear policy guidelines are necessary to help align assessment practices with value statements and educational objectives.

### **3.6.2 Matching assessment practices to educational objectives**

Assessment requires attention to outcomes, but also and equally important, to the experiences that lead to these outcomes. Assessment should be an integral component of course design and not something bolted on afterwards (Brown, Race and Smith 1996:36; Gravett and Geysler 2004:56; <http://www.aache.org/assessmentprinciples.htm> 11.27.03). The implication of this is that assessment should be integrated with instruction.

### **3.6.3 Integrating assessment with instruction**

Assessment should be based on an understanding of how students learn (James 1998:83; Ashcroft 1995:112). It should consider and support individual learning. This implies that assessment must be formative to provide staff and learners with opportunities to reflect on their practices and their learning. Since assessment is an integral part of learning, it should involve higher order cognitive skills (Brown and Knight 1994:58; Geysler 2004: 183; James 1998:83) Assessment of learning is a key factor that changes learning (Roberts 2006: 65). Quality improvement in education through high quality assessment requires use of appropriate assessment methods and techniques. Roberts (2006:67) emphasises that

assessment and instruction must be in harmony and assessment should go beyond measuring mere production of information.

#### **3.6.4 Appropriateness of assessment methods and techniques**

Methods and techniques should allow maximum learning and performance to such an extent that assessment is incremental and developmental by providing feedback that enables rectification of mistakes, thus aiming to improve quality of instruction (Ashcroft 1995:112; James 1998: 83). Assessment methods and techniques should fit the purposes of assessment. Assessment methods and techniques should therefore not only be appropriate, but they should also be varied.

#### **3.6.5 Using a wide range of assessment methods and techniques**

A wide range of assessment methods and techniques are necessary to fit every purpose of assessment, individual learning styles and to enhance holistic assessment (Gravett and Geyser 2004:84). Varied methods may include self-assessment, peer assessment, group-based computer assisted assessment and work-based assessment (James 1998:83; McMillan 2002:36).

#### **3.6.6 Practicality of assessment**

According to Gravett and Geyser (2004:99); and McMillan (2004:36), assessment should be practical and feasible within available resources and time. This implies that the assessment load should be manageable within reasonable time, such that learners can finish the tasks and lecturers can provide timely feedback. Resources should be accessible to the learners for the assessment process and relevant information should be provided to learners well before the assessment tasks. These refer to assessment rules and regulations. Also of importance is that the venue for assessment should be announced in time. The academic and developmental levels also enhance the feasibility of assessment tasks.



### **3.6.7 Fairness in assessment**

Gravett and Geysler (2004:98,109); Macmillan (2004: 36) and Siebörger and Macintosh (1998:13) and Race 2001:34) assert that assessment systems should be fair to all students. This may be expressed in terms of the same treatment of learners regardless of ethnic group, gender, socio-economic status and others. Fairness may also mean the utilisation of a wide range of assessment methods and techniques to suit different learning styles and talents; equivalence between the amount of assessment and work covered; clear instructions and questions that can be understood by all learners; equal access to resources; appropriate methods of administering assessment, conditions under which assessment is conducted, as well as methods of marking, fair grading and evaluation. Any form of bias such as gender bias, ethnic bias and others should be avoided.

### **3.6.8 Transparency in assessment**

Information about assessment must be communicated to all the stakeholders. This implies information, amongst others, about expectations of the assessment, indicators of poor and good points to be considered in carrying out the assessment; and a weighting system; submission dates; and access to assessment regulations; guidelines for carrying out and handing in of assignments (Cox and Ingleby 1997:88).

### **3.6.9 Reliability in assessment practices**

Reliability is the extent to which the same assessment practice would yield similar results by similar learners under the same conditions (Ashcroft 1995:112). These involve assessment methods, processes, instruments, as well as the assessment environment. Assessment instruments and processes should be reliable and consistent. Assessment processes entail: Moderation of assessment practices, marking and grading of students' tasks, and briefing learners on the level of details necessary for their responses; providing equal opportunities to students for consultations; and equal opportunities to students to ask about

criteria and constant administration and continuous review of assessment practices (Bajjnath *et al.* 2001:88).

### **3.6.10 Validity of assessment practices**

According to (Ashcroft (1995:112), validity in assessment means that assessment should directly measure that which it is intended to measure. The objectives and/or outcomes of assessment should be clear and explicit, and methods and techniques should be appropriate.

### **3.6.11 Manageable workload in assessment**

Brown and Knight (1998:143); and Gravett and Geyser (2004:39), suggest that coordinated activities of assessment processes through planning are necessary to avoid unmanageable workloads. This entails coordinated timetables, deadlines for submission of assignments with the aim of spreading workload evenly for learners and staff. Bennet, Foreman-Peck and Higgins (1997:25) indicate that very heavy burdens of assessment lead to students adopting dysfunctional learning strategies. This exposition suggests that assessment should be equitable within a period of time, and that resources to enhance deeper learning and therefore the quality of assessment process, should be available.

### **3.6.12 Prompt and constructive feedback**

Ashcroft (1995:118) is of the opinion that feedback should be informative; it should inform students and lecturers about the strengths and the weaknesses of individual students, and their instruction.

Assessment should provide feedback to learning processes (<http://www.qaa.ac.uk/public/Cop/COPaosfinal/contents.htm>. 2004.09.02). The following should be considered to provide constructive feedback:

- Negative feedback should be turned into positive feedback. Starting with good news and ending with a high positive note is a requirement in striving towards beneficial and supportive feedback.
- Timeliness in providing feedback to student is a crucial matter for development and self-improvement. Since feedback informs instruction, this implies that feedback should be provided in time so that it fulfils its role of improving instruction.
- Specification of the nature and extent of feedback that students can expect in relation to particular types and units of assessment is a necessity.
- Effective use of comments on returned work and relating feedback to assessment criteria, for illumination of strengths and weaknesses are necessary. This means that feedback must be descriptive, explicit and expressed in specific points.
- Quantitative feedback may be supplemented with qualitative assessments, and on the other hand, written words may be supplemented with oral feedback. The emphasis is that feedback should not depend on numerical grades only; verbal facts (comments) are also necessary. The lecturer may use numerical grades as well as written comments in marking.

What emerges from the discussion of prompt and constructive feedback is the emphasis on the importance of feedback to improve the quality of assessment practices. Some guidelines for effective feedback are provided. Feedback motivates deeper learning, hence it raises the standards of educational systems. Relevance of assessment practices is enhanced.

### **3.6.13 Relevance of assessment criteria**

Assessment criteria need to be understandably explicit and public. Expectations and accountability of employers and others in the outside world must be clearly communicated. Identification and application of relevant assessment criteria should derive from objectives, be closely linked to the objectives; and be expressed in clear language (Ashcroft 1995:112).

Criteria and standards may be related but they do not mean the same thing. Criteria are means of measuring and judging standards, while standards are the measurements (Ashcroft 1995:27). Explicit assessment criteria have positive implications on improving the quality of instruction and student achievement. Assessment criteria may also be used to benchmark assessment practices with what other countries do. Most importantly students may also use the criteria to benchmark their work.

### **3.6.14 Ongoing assessment**

Assessment should be ongoing, not episodic. Gravett and Geyser (2004:101), as well as James (1998:34, 37), posit that as a process, assessment is continuous and cumulative; and must involve a series of activities taking place over time. In summing up, assessment is a continuous collection of data on the continuous improvement and development of students. The implications are to assess regularly, to integrate assessment and instruction, to adopt incremental assessment such that small units of assessment should build up to a final mark or grade.

### **3.6.15 Redemption and flexibility in assessment**

Assessment should be redeemable (Gravett and Geyser 2004:101; James 1998:34; 37). This implies provision of opportunities for redemption of failure when things go wrong. In other words, students have opportunities to be reassessed. Whisker and Brown (1994:165) assert that a major shift in higher education would be to attune assessment to the developmental needs of individual students and give credits for individual student progress, and thus

move away from fixed national standards of achievement. Redemption may be practiced through “special” examinations or tests, “sick” examinations, supplementary examinations and others.

The achievement of students in assessment is always used as evidence that institutions of higher education are achieving national goals. This implies accountability, which is briefly discussed in the next section.

### **3.6.16 Accountability and assessment**

Assessment should enhance accountability to a wider public community (<http://www.aahe.org/assessment/princip11/27/2003>). It is through the assessment of student achievement that the effectiveness of an educational institution is judged. The results are used to indicate to all the stakeholders that the institution is achieving important national goals (Black 1998:31; Kane and Mitchell 1996:1). This implies that sound quality assurance procedures in the assessment of student achievement are necessary to produce high quality personnel as educational investment return. Quality assurance in assessment is addressed next.

### **3.6.17 Quality assurance and assessment**

One of the important quality indicators of assessment is that assessment systems should be liable to sound quality assurance procedures.

Efficient assessment systems or practices should be backed up by a sound and well-documented quality assurance system (Gravett and Geysler: 2004:99). To maintain and assure quality in assessment, the following aspects must be considered: Use of diverse methods of assessment to suit individual differences, adopting deep, active and reflective learning and providing opportunities for flexible application of knowledge to solve new problems in new contexts.

The implication of quality assurance in assessment in higher learning is the demand for sound quality assurance systems, both internally and externally. Most importantly, more emphasis is put on the continuous review of assessment

practices for continuous quality improvement. Collegiality and collaboration are essential for quality improvement and maintenance.

### **3.6.18 Collaboration in assessment**

Collaboration is an essential aspect of assessment processes (James 1998:88). It is necessary that all stakeholders undertake shared decision-making at all levels. This implies that consensus and shared decision-making are necessary with regard to issues such as assessment criteria; appropriate and varied methods and techniques of assessment; dates for submission; and dates of written assignments for even distribution of the assessment load of both students and staff. Gravett and Geyser (2004:220) are of the opinion that this principle illuminates the need for on-going professional development with regard to assessment issues. Ashcroft (1995:112) concludes that there should be coherence in assessment systems across departments or lecturing teams. This necessitates collaborative decision-making as well as sound staff development programs with regard to the development of competence skills in assessment.

### **3.6.19 Staff development in assessment**

Educators, administrators and policy-makers should all have expertise in a variety of assessment methods so that they are able to construct sound assessment practices and use them effectively to gather the desired information about students.

Gravett and Geyser (2004: 220); and Heywood (2000:45), assert that institutions should ensure that all staff is involved in the assessment of students and that they are competent to undertake their roles and responsibilities in assessment. They propose that in staff development: development institutions should consider promotion of the understanding of theory and practice of assessment and its implementation; enabling staff to learn about new approaches to assessment, as well as the best ways to operate existing or traditional methods; provision of induction on assessment practices for new staff and those with new

responsibilities and meeting the training needs of administrative staff involved in assessment procedures and processes.

According to Ashcroft (1995:119), staff development is necessary to improve the reliability and the validity of assessment practices. However, James (1998: 38) indicates that the quality of assessment practices rely on sound principles as the best practices in assessment.

Following the literature report, it emerges that staff development is one the most important tools to improve the quality of assessment in higher education. Necessary skills and expertise are essential towards continuous quality improvement in assessment practices.

### **3.7 Quality and assessment**

The variety of definitions of quality in literature provides to be a daunting challenge. However, in this study the definition of quality as fitness of purpose, which entails fulfillment of all stakeholder requirements, expectations, needs and/or desires (Jonathan 2000:46), will be adopted. Luitjen (1991:9) indicates that assessment should be connected to the ultimate purpose of education, which is to encourage the development of citizens who are socially, culturally, and technically flexible. The researcher is of the opinion that to enhance fitness of assessment practices to its purpose, and because purposes change and differ, several principles or best practices underpin the assessment of students, hence the multidimensional view of quality in assessment.

#### **3.7.1 The notion of quality in assessment**

In assessment, quality is considered in a wider context. Therefore, wider notions of quality apply to emphasise fitness of purpose. Ashcroft and Palacio (1996: 34) argue that quality in assessment may be considered in various ways, depending on an analytic or holistic approach, that is, whether one takes a narrow or a wider view of the phenomenon. Cox and Ingleby (1997:88) affirm that assessment of the quality (or effectiveness) of student assessment is done from an analytical

point of view. The following are considered: links with objectives of the program; focus on central aspects taught; focus on skills and their transfer; use of assessment and the extent to which assessment promotes the development of deep, and active and reflective learning.

Ashcroft (1995:109) asserts that principles indicate what is meant by quality in assessment. Principles as best practices may be used as quality indicators and performance indicators. Performance indicators are measurable characteristics of educational processes and procedures used to deliver services to students. They are also useful in tracking down performances and evaluation processes in achieving continuous improvement, which tie all activities to a common quality goal (Baijnath *et al.* 2002: 157).

Viewed holistically, the quality of assessment implies principles such as matching the purposes and the intentions; sets of rigorous high level standards; a range of techniques; existence of sound quality assurance procedures; validity in terms of the extent to which the assessment practices are fit for their purposes; and the extent to which assessment covers the full range of skills, knowledge and attitudes. The researcher holds that if assessment practices are based on the foregoing principles, the particular assessment practices will fit the purpose adequately.

The principles of assessment may determine the quality indicators of high quality assessment practices, which are presented in the next section.

### **3.7.2 Quality and quality indicators in assessment**

Arcaro (1995:22) alleges that the aim of any quality process is the delivery of ever-increasing value to the students and the community. Ashcroft and Palacio (1996:33) argue that the quality indicators of an assessment system may include coherence across the department or faculty and employing a range of techniques



and being subject to quality assurance procedures and policy, as well as comparison, which involve benchmarking.

### **3.8 Quality assurance practices in assessment**

The quest for quality through the implementation of quality assurance systems is becoming the norm in many institutions worldwide (Jonathan 2000:20). It involves several procedures and processes such as policy formulation and planning; specification of standards; verification; moderation; accreditation; auditing; documentation and reporting (Bajinath *et al.* 2000:134). These procedures and processes will be described briefly, while more details will be provided with regard to moderation. Ashcroft (1995:134) argues that quality assurance in assessment involves a system of accountability, internal and external moderation, and continuous review of assessment practices, as well as checks against performance criteria. The next paragraph addresses different views on what quality assurance entails in assessment.

#### **3.8.1 Defining quality assurance in assessment practices**

Literature reveals that despite the fact that different authors define quality assurance differently, quality improvement and maintenance remain a central goal of quality assurance systems. Some definitions of quality assurance are the following:

- Quality assurance is the determination of standards, appropriate methods and quality requirements by an expert body accompanied by a process of inspection or evaluation that examines the extent to which practice meets these standards (Murgatoyd and Morgan 1993:45).
- Quality assurance is the application and achievement of agreed standards (Calder 1994:36).
- Quality assurance is linking procedures for internal and external verification and moderation and providing information for learners, teachers and parents about assessment (Arcaro 1995:9).

All the above definitions of quality assurance depict its central goal, which entails continuous improvement and maintenance of quality.

### **3.8.2 Policy formulation and planning**

According to James (1998:36; 37) a policy is directed by stipulated principles (or best practices) (cf. 3.6). Fourie (2000:52) asserts that policy guidelines are necessary for the following reasons: They define purposes and set the standards for the organisation and the activity. They also determine the way in which the procedures is implemented to put the policies into practice, and ultimately the way in which the policies and procedures are reviewed to ensure that the quality of an organisation or a process is improving. This implies that policy formulation and planning must precede all the activities, procedures and processes of a quality assurance system. The formulated policies determine specifications of standards and expectations. These are presented in the next section.

### **3.8.3 Specification of standards and expectations**

Standards are the expected levels of performance (Headington 2000:86). They also refer to determined criteria to measure performance levels of learners. Ashcroft (1995:6) argues that standards may be defined in terms of quality indicators, while Headington (2000:86) further indicates that standards are always determined from the best practices or principles with regard to the following: policy guidelines; design; implementation; conduct of assessment; student performance; as well as monitoring and evaluation. Williams (1997:69) advocates the necessity of standards being explicit since funding costs for higher education compete with other public and social needs. Williams (1997:70) further points out that the standards in institutions may differ because institutional purposes vary. Most importantly, Williams (1997:70) insists that the aims of assessment and programs of study have to match the differing needs and abilities of students and the demands of industry and commerce.

It summing up, standards apply at all levels of the assessment process. One of the reasons why standards are described as expected levels of performance is that they are based upon underlying principles. They may also be referred to as quality indicators; hence they act as interlocking factors that can be used to measure the quality of assessment practices.

#### **3.8.4 Moderation of assessment practices**

Moderation is one of the essential mechanisms of assuring the quality of assessment in higher education. Headington (2000:39) defines moderation as the process by which teachers, when acting as markers, come to an agreement on the awarding of marks or levels. Headington further elaborates that moderation involves negotiation, which focuses upon the interpretation of criteria in the context of the students' work. The author further asserts that moderation enables reliability and promotes accuracy and consistency through objective analysis. Moderation is also viewed as the process of making judgements on the quality and results of formative and summative assessment (Murdock and Grobbelar 2004:116). Quality assurance in the assessment of student achievement may be executed through the following:

- The use of an external examiner whose functions are to ascertain whether questions are consistent, fair and reflect appropriate standards, as well as to verify that the grading of scripts is done in a consistent and fair manner. External examiners may be involved during the design, delivery and assessment stages (Murdoch and Grobbelaar 2004:113). Jonathan (2000:45; 48) adds that this is the most commonly used quality assurance mechanism in almost every institution of higher education, with the purpose of re-examining the assessment and the assessed work of the students.

- The use of internal and external moderation, involving three main stages; reporting on moderation; corrective actions where necessary; and review of the moderation system and the process (James 1998:102).

- The use of sound criteria in the process of moderation. The criteria must be in place as an approved moderation system, and designed well before the process of moderation (James 1998:103). James (1998:103) further notes that the moderation system entails objectives and performance criteria for judging consistent collaboration. Group moderation is undertaken for shared understanding and collaboration with regard to performance criteria (James 1998:166; Headington 2000:39).

The emphasis in this section is that collaboration is essential in moderation. Important crucial processes such as validation of assessment practices, accreditation, monitoring, auditing, verification and review of assessment practices will be discussed next.

### **3.8.5 Validation of assessment practices**

Validation relates to standards. Thackwray (1997:48) posits that validation of student assessment is checking that appropriate processes, practices and procedures have observed agreed standards. Gravett and Geysler (2004:121) refer to this as a verification process through which information is gathered on the findings of the assessment and moderation process, focusing on the quantity of assessment and procedures with the purpose of quality improvement.

### **3.8.6 Accreditation**

According to Calder (1994:37) accreditation is the formal recognition by a recognised body that the level of provision (assessment in this context) is of an agreed standard. James (1998:163) adds that accreditation is a process whereby a body responsible for an award approves an institution or a center to carry out assessment and award qualifications. This emphasises the necessity of accreditation in the selection of candidates for employment, admission into other institutions, progression to the next educational level as well as the enhancement of international mobility. Accreditation requires that assessment processes are

monitored to detect problems and solve them in time. The next section investigates what monitoring in assessment entails.

### **3.8.7 Monitoring of assessment practices**

According to James (1998:20) monitoring is necessary to aid problem-detection and problem solving (or problem coping). James continues that monitoring involves auditing, documentation, reporting and evaluation. He insists that in assessment practices, continuous checks have to be made to control certain processes and procedures (mentioned in this section). The implication is that close monitoring of the process and all the procedures is necessary to gather relevant information from which valid judgements can be made concerning the quality of assessment processes and practices.

#### **3.8.7.1 Auditing and verification of assessment practices**

Auditing and verification of assessment may be carried out to evaluate scoring and assessment content to ensure that appropriate assessment standards are met (O'Neil and Linn in Gipps 1998:109; Ashcroft and Palacio 1996:34). An auditing system checks whether the institution has developed the systems for monitoring the quality of the existing processes, ensuring that policies are adhered to (Baijnath *et al.* 2000: 133; and James 1998:22).

#### **3.8.7.2 Documentation, communication and reporting in assessment practices**

An efficient system of communication is the key to the successful implementation of a quality improvement system in assessment at any level of an institution. Lack of communication may impact negatively on quality and most importantly on the commitment and attitudes of the staff (Holtzhausen 2000:12). Headington (2000:64) emphasises that reporting is an integral part of assessment. It is a way of communicating learning progress and learning needs to interested parties. It is both formative and summative. Reporting procedures in assessment may include policy documents on assessment; moderation reports; passed

assessment tasks; student assessment guidelines; student records and records of progression (Ingleby and Cox 1997:107).

To achieve the goal of continuous quality improvement, enhancement and assurance, regular review of assessment practices is a necessity. The issue of evaluation and review of assessment practices is discussed in the following section.

### **3.8.7.3 Evaluation and review of assessment practices**

An evaluation of assessment practices is necessary to determine the extent to which assessment functions as it is supposed to be. James (1998:163) indicates that this involves the way in which assessment is presented, interpretation of standards and the decision on possible changes regarding tasks and procedures. Ingleby and Cox (1997:97) conclude that monitoring, communication, documentation and reporting in assessment practices provide evidence for making informed value judgements of individual student procedures and processes in these practices.

It can be argued that evaluation and review of assessment practices provide information to make informed decisions on areas that need improvement, practices that can be continued and those that can be rejected. Decisions made as a result of evaluation and review of assessment practices may lead to transformation. This is aligned to the notion that evaluation and review of assessment practices involves quality assessment of assessment practices.

### **3.9 Assessment as an agent of change and transformation**

Black and Atkin (1996:108) posit that changes in assessment are important because they contribute to instructional renewal. According to Ashcroft (1995: 14) transformation is qualitative change where the quality of experience is enhanced. This relates to value-addedness whereby achievement of students is

changed or added to by educational experience, such as assessment of student achievement.

On the basis of the above exposition of transformation, it may be argued that when educational structures entirely or partially change, activities and processes in assessment practices cannot be left behind. Feedback plays an important role in the quality improvement of the system, but is even more important in improving the quality of instruction as well as of assessment practices.

### **3.10 The role of feedback and the quality of assessment**

Feedback is a crucial aspect in influencing the quality of instruction. Current approaches to assessment require that assessment should be integrated with instruction. Researchers argue that in meeting the needs of students for feedback on their progress and attainment, institutions must consider important critical factors outlined in 3.6.12.

The implication is that effective feedback results in simultaneous quality improvement and assurance in assessment and instruction. A last aspect of assessment that may influence the quality of feedback on student assessment is workload. This is explained in the next section.

### **3.11 The impact of workload on the quality of assessment in higher education**

It has been stated (cf. 3.6.11), that the assessment load of students should be manageable within given conditions and opportunities. However, it is necessary to investigate the way on which the assessment load can affect quality in higher education. According to Whisker and Brown (1996:114) heavy workloads, including too many assessment practices, may lead to the habit amongst students of postponing independent study until a period when they have to write a test or submit assigned work. Surface approach learning (superficial learning) jeopardises the quality of instruction as a whole (William 1997:70). The

implication is that educators may focus on covering the syllabus while the students focus on meeting the deadlines for handing in the assigned tasks without achieving important objectives.

### **3.12 Conclusion**

This chapter contextualised and examined what quality in assessment entails by addressing definitions of assessment; the different purposes of assessment; paradigm shifts; as well as issues (trends) in the assessment of student achievement. The chapter unfolded by looking into the quality of assessment of student achievement through providing details of the principles of high quality assessment practices; the notions of quality; indicators of quality; quality assurance practices in assessment, which include moderation, validation, accreditation, monitoring, communication, documentation, reporting, evaluation and review of assessment practices and their role in the improvement of quality in assessment. Finally the chapter reported on assessment as an agent of change and transformation and the role played by feedback in assessment, as well as the impact of workload on assessment practices in higher education.

There is a continuing controversy and reaction to the heavy emphasis on paper and pencil assessment that still dominate assessment practices in higher education worldwide. The next chapter addresses theoretical perspectives on the way in which to balance the use of paper and pencil assessments by adopting alternative assessment to improve the quality of assessment practices in higher education.



## CHAPTER FOUR

---

### THE USE OF CONTEMPORARY AND TRADITIONAL ASSESSMENT IN ASSESSING ACHIEVEMENTS

#### 4.1 Introduction

The previous chapter (Chapter 3) explored the quality of assessment. This chapter focuses on the use of contemporary assessment (alternative assessment) and traditional assessment (paper and pencil assessment). Discussions will focus primarily on examinations since it is the most commonly used traditional method of assessment (paper and pencil assessment) in Lesotho. The chapter concludes with an emphasis on the need to shift from a total dependence on pencil and paper assessment to more authentic methods of assessment.

According to the term alternative assessment intends to distinguish this form of assessment from traditional, fact-based and multiple-choice testing as well as examinations (Kane and Mitchell 1996:3) while alternative or performance assessment implies active student production of evidence of learning (Kane and Mitchell 1996:9). Alternative assessment comprises of alternative procedures that provide alternatives to paper and pencil assessment (Gronlund 2003:6; 23). In alternative assessment students are required to demonstrate their achievement of understanding and skills by actually performing a set of tasks (1.8).

As indicated in Chapter one (1.2), alternative assessment is recommended because it is more authentic and prepares students for the workplace and adult life. This feature is deficient in paper and pencil assessments. Research findings reveal that it is not a sound practice to be committed to only one method of assessment (Brown and Knight 1994:44; Gipps 1999:12). This consequently

suggests abandoning total dependence on traditional assessment (tests and examinations).

There is a general opinion that different methods and techniques of assessment should be applied to supplement each other so that the 'whole learner' is assessed. This may suggest that affordable alternative ways of assessing student performance to improve the quality of assessment have to be found. The problem of over-dominance of paper and pencil assessments on other assessment approaches and techniques have to be alleviated.

There is a continuing debate on the use of alternative assessment to improve the quality of assessment in higher education. Several researchers (Biggs in Eckstein and Noah 1992:23) agree on the continuing controversy of replacing traditional assessment with contemporary (alternative) assessment. In third world countries especially in Africa and other environments where there is lack of financial resources and other educational resources are limited and unequally distributed among institutions, adoption of alternative assessment may not be successful.( Kellaghan and Greaney (1992:11 & 65) and Heynemann and Ransom 1992:100).

It is clear that examinations will still be important forms of assessments in some countries. Kellaghan and Greaney (1992:11) are also of the view that examinations may fulfill an important role in effecting reform in developing countries since they can be used as instruments of accountability. In affirmation, Cook (1991:33) is of the opinion that currently, assessment may involve students in practical, oral and aural tests, projects, or any other major works for assessment in addition to traditionally written examination papers. This justifies the need to improve examination-driven assessment through the incorporation of alternative ways of assessing students.

Based on these arguments, it is envisaged that the use of alternative assessment can reduce costs since properly constructed alternative tasks assess multiple

abilities of the students. To expound on this, it is evident that one alternative task may be equated to many paper and pencil assessments with regard to returns and benefits. The implication is that it seems that despite the worldwide concern to abandon traditional assessment, for many countries examinations may continue to be the only convenient means of assessing learning because of limited resources.

In the light of the foregoing exposition, it is necessary to examine theoretical perspectives on the use of both paper and pencil assessment and alternative assessment. It must be noted that in using alternative assessment, examinations and tests are inclusive. What matters is to strike a balance and use varied assessment methods and strategies.

This chapter attempts to provide theoretical perspectives with the aim of discussing and comparing alternative and paper and pencil assessment. Definitions, characteristics, the drive to reform examinations and the drive to use alternative assessment, as well as the benefits and disadvantages of the two assessment approaches will be discussed respectively. The roles played by the two approaches in improving quality in education will also be explored. The chapter will make a case for different types of alternative assessment. A detailed discussion on the use of portfolios in assessment of student achievement will be presented. Traditional assessment will be explored alternatively with paper and pencil assessment, while paper and pencil examinations will be discussed as examples of paper and pencil assessment used in Lesotho.

## **4.2 Paper and pencil assessment**

Luitjen (1991: 9) states that paper and pencil examinations entail traditional assessment procedures requiring candidates to perform the assignments set for them or to answer questions after which they will receive a certificate. These examinations refer to written sets of tests that are set at the end of the year (Heywood 2000:219). Heywood (2000:219) further notes that the timing of

examinations has changed as a result of semesterisation and terms. This implies that examinations can also be written at the end of a semester, a term or a module. As indicated earlier, paper and pencil examinations are the major determinants of the future of the students in higher education in Lesotho. The judgment of student achievement is based on what is written on paper only, while the actual performance (actions or products) is not included. It must be noted that examinations and tests are the most commonly used examples of paper and pencil assessment tools in higher education. As a result, the discussions in this chapter will focus on the use of traditional assessment (paper and pencil examinations). It follows that in the context of this study, examinations will be used as examples of traditional assessment tools; hence they may be referred to as paper and pencil assessment.

#### **4.2.1 Characteristics of paper and pencil examinations**

Some common characteristics of examinations are the following:

- Examinations require that at a certain academic level a student be awarded a certificate for further studies or for entering the world of work (Howe and Plamp 1996:11).
- Examinations are traditional forms of assessment. They are generally written for two to three hours (Gravett and Geysler 2004:200).

The characteristics of examinations may contribute to views that propose that paper and pencil assessment should not be totally rejected, but instead be reviewed for continuous quality improvement and the maintenance of standards in education.

#### **4.2.2 The drive for improvement and reform**

Despite of the criticism of this form of assessment, and the disadvantages thereof, examinations continue to occupy a leading position in education systems

in most countries, especially in the third world. The reasons for the move towards improvement and reform of paper and pencil assessment are inter alia:

- Inadequate instructional and ignorance about the way in which these resources can be used and managed.
- Rising population growth rates, slowed economic growth and the amount of foreign debt in developing countries mean that there are more children to educate with meager resources (Heynemann and Ransom 1992:105).

Smith (1996:265) asserts that paper and pencil assessment may be combined and used together with alternative assessment to improve and enhance the quality of assessment practices. Total dependence on paper and pencil assessment is not encouraged; more specifically, examinations and tests are critiqued for the common malpractices that they are associated with. Some of these malpractices will be discussed in the next section.

#### **4.2.3 Common malpractices in paper and pencil examinations**

There is a concern that since too much emphasis is placed on examinations as assessment results, malpractices such as cheating, bribery, threats, and physical abuse may occur. Cheating in examinations is often done deliberately (Carroll 2002:22). According to Greaney and Kellaghan (1995:7), common malpractices in examination systems are inter alia:

- Leakage of confidential information and impersonation, where a non-candidate takes the examination for a registered student with full knowledge of the supervisor.
- External assistance where a supervisor provides answers to learners or where the markers alter the scores, or where computer operators tamper with the scores as well as smuggling of unauthorised material into examination halls.

- Copying from a nearby candidate, collusion where two or more candidates exchange information during the examination and substitution of scripts whereby scripts written during examinations are substituted with ones written before or after the actual examinations.

Ongom (1991:114) asserts that the growing phobia surrounding traditional assessment has resulted in negative perceptions about examinations. Because of the malpractices associated with examinations, there is a great concern with regard to the quality of the product (graduates) of higher education as members of the prospective labour force. As a result of these malpractices, there is a decreasing interest and faith in the traditional and external forms of assessment.

Although examinations seem to be prone to corruption and malpractice, they have many advantages, some of which are discussed next.

#### **4.2.4 Advantages of paper and pencil examinations**

Despite the continuing critique of examinations in literature on teaching, learning and assessment (Gipps 1998:78), some researchers still declare that examinations can be beneficial and significant to improve the quality of teaching and learning and other related issues. Eckstein and Noah (1992:147) affirm that one of the powerful mechanisms for change and reform in education is an external examination system. The advantages of examinations are addressed next.

Examination grades constitute basic information that can be used to predict the success of the students they serve as a tool to identify and compare class levels, schools and institutions. They help in assessing the extent to which the instructional process has succeeded in meeting specific educational goals. This implies that examinations are also important accountability tools and they assist in assessment of the quality of instructional methods, as well as the quality of teachers. Weak and strong areas of instructional activity are revealed and

relevant measures can be taken. Further more., examination examinations lack grading subjectivity. They are objective and fair hence they do not exert much pressure on teachers ( Gipps and Stobart in Gipps 1998:40; Kellaghan and Greaney 1992:41; 65).

Examinations are re-emerging as tools for educational and occupational selection; and interviews for entry into programs and employment are often accompanied by a short paper and pencil examination. Further more, examinations provide feedback to teachers, curriculum bodies and educational policy makers in that valuable information becomes accessible for use by all stakeholders; they also have positive effects on social status, employment opportunities and individual life opportunities (Brown and Knight 1996:34; Heywood 1977:4; 20;.

They promote motivation in that it is a general incentive for the motive of completion of a program and they raise educational standards although they are competitive in nature. The maintenance of standards and acceptance of certificates at international level are important in developing countries hence they enhance social mobility both internationally and locally (Eckstein and Noah 1992:3).

It appears that the above advantages of examinations may contribute to the controversy of total abandonment of these forms of assessment. The issue is whether to abandon examinations totally or to improve them by incorporating alternative forms of assessment. Having presented the advantages of examinations it is necessary to examine the other side of the issue by discussing the disadvantages of this form of assessment in the next section.

#### **4.2.5 Disadvantages of paper and pencil examinations**

There is a decreasing interest and faith in traditional external forms of assessment (Black 1991:23; and Cook 1991:39), while there is a growing interest

in internal assessment (Kellaghan and Greaney 1992:44; and Kreef 1991:109). The current examination and test approach is criticised all over the world for its numerous defects.

On the basis of the criticisms, of the above mentioned authors some disadvantages of examinations are discussed in the following paragraphs.

:

Examinations encourage command of superficial content. The result is surface-learning because students do not always prepare for examinations to understand the material, and relatively too little attention is given to higher order thinking skills since the examinations tend to force teachers to focus more on what can be tested easily than what is important for students to learn. Moreover, examinations may sometimes be badly set.

Examinations seem to focus on measuring how good students are at answering questions rather than how well they have learnt. Examinations are not valid measures of progress for slow learners because scores may not be pertinent to students' level of functioning, and they may lack content validity and they give a snapshot of learners' performance.

Creative students are disadvantaged since the questions are always based on memorisation and repetition. Students are confined to what the syllabus prescribes. Recall and recognition of material take preference, rather than application of principles to new situations. They distort teaching and learning in other words, examinations tend to determine and restrict curricula when their contents are incorrectly viewed as valuable educational outcomes.

Extrinsic motivation due to examination is caused by fear to fail. As a result, motivation is short-term, and most educators are concerned that in the long run this may result in antagonism and phobia associated with study material. This expose teachers to undue pressure as grades become indicators of their



instruction. This causes emotional stress, anxiety, and unease, all which can ultimately lead to nervous breakdown and depression amongst students;

Examinations also have a broad social-selective significance that enforces ethnic and social gaps. It may discriminate against the socio-economic status of learners, as well as between students living in rural and urban areas. In other words, examinations may often lack context; they pay little attention to more practical skills and the content tends to be academic in nature and life outside school is ignored as they contain very little reference to the every day life of students.

There is also a dilemma of language used in examinations, some students lack proficiency in second language (English and French) because they rarely use a second language outside classrooms. Students with limited knowledge of language, will initially be handicapped in the acquisition of concepts and skills. It is clear that if examinations are conducted in a foreign language, certain ethnic groups are disadvantaged while others are favoured. Examinations always provide little or no feedback. As a result, they may not improve learning since only the end results are published.

To close the gap between theory and practice, the researcher is of the opinion that ways of improving the quality of assessment practices should be found so that higher education fits its purpose of producing skilled personnel for the labour market. Furthermore, examinations do not always provide a true picture of a students' competencies. The challenge is that the principles of high quality paper and pencil assessment should be considered when designing and implementing this form of assessment.

#### **4.2.6 Principles of high quality paper and pencil assessment**

Paper and pencil assessment, such as examinations are also governed by a set of principles for quality improvement. Some of these principles are provided below.

Heynemann and Ransom (1992:110-111) and Kellaghan and Greaney (1992:56-60) put forward the following arguments about the quality principles of examinations:

Examinations should focus testing more than the ability to recall isolated facts, but also test the ability to apply knowledge and skills in situations outside the classroom and in every day life to improve the quality of life. This implies that examinations should be linked to the goals of the national curriculum. Further more Assessment should reflect integration of existing and new knowledge. This aids in avoiding compartmentalisation of the curriculum.

Examination items should be open-ended for students to generate their own answers and select the best solutions to the problems. Assessment of skills such as the ability to observe, experiment, interpret, reason, draw informed conclusions, solving problems, making decisions in new situations in context, as well as creativity, analyse, synthesise, evaluate and transfer acquired knowledge and skills and imaginative skills should be considered. They should also measure the content from the official curriculum rather than mastery of the language of the examination;

In Constructing questions for the examinations, students should be required to restructure information rather than simply reproduce it. This requires that students should be able to apply knowledge and skills in different contexts (scholastic and out of school situations). Assessment should answer questions

such as *why* and *how*, rather than *what*, *who* and *where*. The implication here is that examinations should not be content-based, but should include questions that require students to demonstrate amongst others, deeper understanding and critical thinking by being able to explain and describe a phenomenon, as well as to critically examine an issue. The emphasis is that examinations should challenge higher order thinking skills.

Detailed feedback should be provided to schools, administrators, and other stakeholders to encourage deep learning, and not just surface learning. Feedback helps to reveal the strengths and weaknesses of the system, the candidates and the instruction. Feedback should be sufficiently detailed to inform students and schools. Scores should differentiate between candidates on the basis of the characteristics relevant to the opportunities. And past performance of students should be considered in decision-making about students.

According to Adams and Smith (1996:640) there is no one best method of assessment. The criticism leveled at examinations may not suggest total rejection of examinations but their improvement and the use of balanced assessment approaches to improve the quality of assessment systems in institutions. This may also suggest that if the use of examinations is retained in education systems, the examinations may be used together with other approaches of assessment to strike a balance.

#### **4.2.7 Examinations and quality in education**

Despite the critique leveled at examinations, some authors still maintain that examinations have the potential to raise and maintain standards in an education system.

Eckstein and Noah (1992:4; 5); and Kellaghan and Greaney (1992:5) argue that examinations improve quality for the reasons: Examinations improve standards

since they stimulate student achievement. The results are used as quality indicators or performance indicators in higher education. This implies that examinations are used for accountability. They also indicate that examinations also define the curriculum for teachers, as well as direct teaching and learning. This underlines the argument that expertise is encouraged in implementing examination systems so that good content coverage is enhanced.

Lastly, Eckstein and Noah (1992:4; 5); and Kellaghan and Greaney (1992:5) continue that examinations provide taxpayers and administrators with information about the quality of their education systems. The implication is that examinations are used for accountability purposes. Furthermore, institutions are evaluated on the basis of student performance because results are compared. As such, the results are used as evidence of the effectiveness of the institutions and the educational system. Examinations are also economically important because they prepare students for further education, adult life and the workplace.

Because of their multidimensional purpose, examinations play an essential role in education, and more importantly, they provide certification and control access to further study (Eckstein and Noah 1992:5). Luitjen (1991:9) also points to the importance of the connection between examinations and the purpose of education, which is to encourage the development of citizens who are socially, culturally and technically flexible. The researcher is of the opinion that this refers to the quality aspect of examinations that can be further developed and improved by the use of alternative assessment, since the latter encourages flexibility and adaptability in individuals.

The above exposition shows that examinations are still a valuable means of assessment, but the question is how to improve them in such a way that they assess the skills, capabilities and competences necessary to satisfy the requirements of the labour force and society. The exposition also justifies the

view of reducing or abandoning total dependence on paper and pencil examinations and a move towards alternative assessment. The use of alternative assessment may enhance balance in assessment, which means that assessment strategies and approaches (including examinations) should be varied.

The next section examines quality aspects of alternative assessment.

### **4.3 Alternative assessment**

According to Kane and Mitchell (1996:2) the term performance assessment or alternative assessment has become a buzzword for change in education circles. Kane and Mitchell (1996:2) further argue that alternative assessment is not a new assessment approach, but that essays, oral presentations, projects, and assigned papers and reports have been featuring in some teaching-learning situations in higher education. These authors point out that it is the emphasis on alternative assessment in education reform that is new.

Different researchers provide different definitions on alternative assessment. Their definitions differ based on the contexts in which they are used. These are considered in the next section.

#### **4.3.1 Definitions of alternative assessment**

The following are definitions of alternative assessment:

- Alternative assessment comprises of a range of assessment methods designed to take the place of, or to supplement standardised traditional tests (Hart 1994: 6) (cf. also 1.8).
- It is a type of assessment that requires a student to actually perform, demonstrate, construct and develop a product or a solution to a problem under defined conditions and standards (Khatti and Sweet 1996:3).
- Alternative assessment is a system of assessment that attempts to

measure learners' ability to use previously acquired knowledge in solving novel problems or completing specific tasks. Simulated assessment exercises are used to elicit original responses, which are directly observed and are rated by a qualified judge (Gipps 1998:98).

In the context of this study the definition of alternative assessment will be focused on assessment implementing a variety of methods, including paper and pencil assessment, but avoiding over-dependence on any one assessment technique or approach.

In the light of the above views of alternative assessment, it is imperative that alternative assessments should take place in real situations and be varied to supplement standardised, traditional assessment; be evidenced by action and/ or a product and should involve solutions of real problems; and involve extended criterion performances and the use of acquired knowledge in solving novel problems.

It should be noted that, in the context of this study, alternative assessment include the use of tests and examinations. What matters is to strike a balance by using varied methods and techniques of assessment to avoid total dependence on traditional assessment. Further more, the above definitions of alternative assessment illustrate particular characteristics. It is thus necessary to present some of these characteristics in the next section.

#### **4.3.2 Characteristics of alternative assessment**

Nitko (2004:238-239); Paris and Ayres (1994:289); and Payne (2003:12; 3) The characteristics of alternative assessment are provided in the following paragraphs.

According to The Miami Museum of Science (2001:3), meaningful and challenging assessment tasks that require the students to use their knowledge in new contexts are provided to them. The tasks should challenge critical thinking, as well as incorporate multiple approach strategies with the possibility of reaching multiple solutions. In other words, the value of assessment should go beyond assessment itself.

In alternative assessment students perform, create, produce, or do something that requires higher-level thinking or problem solving skills. The implication is that performance assessment requires the students to use a combination of knowledge, skills and abilities. Alternative assessment provides opportunities for student-constructed responses because actual behaviour, as well as product, is observed and assessed (Payne (2003:12; 3).

Paris and Ayres (1994:289) posit that the tasks are set in a real context and they closely resemble simulation to produce justifiable responses, performances or products such as roles that are likely to be encountered in adult life. This particular feature of alternative assessment emphasises that assessment and instruction should go beyond classroom walls to real life outside the classroom walls. The implication is that assessment should reflect local (societal) values and exhibit the local characteristics of community life and they address or include complex processes and behaviors, which always involve the assessment of a product.

The criteria and standards for performance assessment are public and known in advance (Nitko 2004:238-239). It is necessary to specify standards and criteria for assessing the multiple correct answers, performances or products. The benefit of this is that the students are in the position to self-assess. Metacognition and self-reflection skills are developed. Multiple approaches to problem solutions are also emphasised. Most importantly, the validity and reliability of student

achievement, as well as adaptability of assessment to individual differences are enhanced since multiple data of sources are explored.

Multidimensional grading is also an essential feature of alternative assessment (Paris and Ayres 1994:289. Formative and diagnostic scores are more valuable than summative scores. The interpretation of this view is that quantitative (numerical) and qualitative grading during instruction and/or a program are more rewarding than numerical grading, which is always rewarded at the end of the program.

Integration and combination of skills and knowledge are enhanced because alternative assessment is multidimensional in nature and diverse evidence of student learning is collected from multiple activities. Students construct knowledge as they seek solutions to new problems. This is closely related to the innovative learning theory of constructivism in which learners construct knowledge (4.3.9.1).

It may be concluded that these characteristics indicate that the use of alternative assessment enhances the development of the 'whole person'; the ability to transfer knowledge and skills; adaptability of students in different contexts; positive attitudes; and most importantly the ability to survive in the workplace and to live with others as a responsible citizen in a community.

### **4.3.3 The drive for alternative assessment**

There is an international call to abandon over-dependence on one method of assessment and the need to change from total dependence on paper and pencil tasks to performance assessment (Kane and Mitchell 1996:3). According to Anderson and Specks (1998:65); Brown, Race and Smith (1996:47); Khattri and Sweet (1996:1); and the Kentucky Department of Education (1995:3) issues that drive the move towards the use of alternative assessment in higher education are, inter alia:



- Public accountability cannot be based upon multiple choice assessment, paper and pencil tests and norm referenced assessment that greatly distort instruction. Teaching and learning for tests or examinations have become an increasingly notorious pedagogical strategy as opposed to assessing to teach and learn. Accountability is the ability to demonstrate to all concerned that higher education is achieving the aims of assessment. The objective of accountability can only be achieved through valid evidence of student achievement.

- Current theories of constructivism and multiple approach assessment assume that effective learning cannot be achieved by paper and pencil tasks only. Alternative assessment considers different learning styles, inclusive education and innovative learning theories. Opportunities should be created for contextualisation in assessment to enable students to work on assignments that mimic the kinds of multi-faceted problems that the students may encounter in adult life.

- Workforce demands that students entering the workplace are competent enough to compete in an ever-increasing technical and global economy. This necessitates assessment that takes place in real contexts and that requires multiple solutions to real problems. The call from industry and business demands employees who can think creatively, solve problems, write well, work flexibly and possess social competences to be able to work in groups.

Hart (1994:vi) argues that alternative assessment is believed to provide a more authentic trustworthy picture of student achievement.

Following the above exposition, it may be concluded that alternative assessment, in the context of this study, refer to assessment approaches that include paper and pencil tests and examinations. Alternative assessment appears to be

educationally sound because it is compatible with emerging innovative learning theories, such as the theory of learning styles, constructivism and Gardner's theory of multiple intelligences (4.3.9).

Different types of alternative assessment are distinguished.

#### **4.3.4 Different types of alternative assessment**

Alternative assessment that involves observation of a person performing a complex task such as reading a text, writing a report or solving a problem, is referred to as performance assessment (Brown and Knight 1994:83; Douglas 1992:89-90; Khattri and Sweet 1996:5; and Paris and Ayre 1994: 35). In this type of assessment educators observe and gauge students performing actions or samples of various performances. A rubric scale, which is a set of criteria to use in judging the performance of the learners, is always predetermined and used as a measure of student achievement (Payne 2003:290). Some examples of forms of alternative assessment are presented below:

##### **4.3.4.1 Project assessment**

According to Khattri and Sweet (1996:5) a project is an in-depth assessment technique that measures the student's ability in real life tasks and situations. It is an extended form of assessment that may include performance-based assessment. Projects are usually rich in design and they generally involve a period of time to complete. The students may be presented with a topic, or they may select a topic to demonstrate their mastery thereof. They simulate real world challenges and thus provide students a real world role in a real world setting. The students are confronted with real problems using alternative solutions. There is no one right answer (Miami Science Museum: <http://www.miamisci.org/ph/lpdefine.html>).

##### **4.3.4.2 On-demand tasks**

These are tasks that require students to construct responses through writing or experiments to a prompt or to a problem within a short period of time. It may be

deduced that on-demand tasks may include student experiments and writing a report after an excursion.

#### **4.3.4.3 Demonstrations and exhibitions**

These are assessment tasks that take the form of presentations of project work. They are often used together with project assessment. In practice, students demonstrate the use of their products such as model cars and measuring instruments while the assessors (judges) observe and assess them.

#### **4.3.4.4 Oral presentations**

Oral presentations such as debates, pupil-led conferences, presentation of papers and journals are well-known ways of assessing students. They are considered authentic assessment since they take place in real situations.

#### **4.3.4.5 Portfolio assessment**

A portfolio involves a collection of student work and developmental products such as drafts of assignments (Brown and Knight 1994:82). A portfolio is a purposeful collection of work that helps to define the student's effort and achievements in a specified area(s) (<http://www.miamisci.org/ph/lpdefine.html>)2005). A sample of collected portfolio materials may include reports on case studies, artifacts, designs, drawings and plans (Anderson and Speck1998:55).

Having presented the different types of alternative assessment, it is also necessary to examine some of the advantages of this type of assessment. These are considered next.

#### **4.3.5 Advantages of alternative assessment**

Many authors concur that alternative assessment has a number of benefits and advantages over traditional forms of assessment (Anderson and Speck 1998:55;

Gipps 1998:22; Hart 1994:9; 23; 40; James 1998:118; McDonald 1997:189; McMillan 2004:95; Glasser in Ornstein and Hunkins 2004:354; and others). The above authors indicate the following important advantages of alternative assessment:

- Autonomous learning is encouraged since alternative assessment permits students to work at their own pace and to achieve at their own level. This implies that individual differences are recognised, and self-referenced growth is promoted through self-determination, self-monitoring, self-evaluation and self-reflection. Student diversity, which includes varying abilities, working and learning styles as well as cultural background. Freedom of students to respond in unique ways enhances a display of originality and creativity.

- More than one objective or outcome can be achieved, which means that evidence for several objectives can be produced in one task. This emphasises the notion that alternative assessment assesses both processes and products. Emphasis is also made on multiple intelligence development because multiple approaches to tasks and problems are important features of alternative assessment, since there is no single correct answer or solution to a problem or a task. Assessment is based on multiple views of student work.

- Alternative assessment is also holistic in nature and since the holistic development of an individual is enhanced, many skills are developed simultaneously. Alternative assessment methods are powerful tools for assessing a wide range of skills, including communication skills in various modes. A multidimensional, holistic view of student performance, which illustrates various domains of student attitudes and capabilities, is enhanced. A variety of quantitative and qualitative grading and reporting methods are employed, which means that individual differences and differing contexts are considered and provided for.

- Alternative assessment enhances meaningful learning, which requires the use of interdisciplinary skills because achievements extend across the curriculum and important aspects of achievement from other subjects are assessed.

- Promotion of instruction is enhanced because learning and assessment

are integrated. Assessment is used to support learning rather than just being an indication of past achievement. Alternative assessment correlates with what students learn and this assists them to gain confidence in their abilities.

- Assessment and learning are contextualized. Learners are assessed as they perform or work in professional settings. Students can be assessed when finding a solution to a problem or when constructing and designing a product. Alternative assessment measures understanding and thinking skills in real contexts.

- Alternative assessment is consistent with a constructivist approach to learning, which is a highly recommended current theory of learning. According to a constructivist approach students use prior knowledge to build new knowledge structures. This approach of assessment is socially situated assessment since knowledge is constructed socially because social working groups are a common feature of this type of assessment (4.3.9.1).

Having pointed out the advantages of alternative assessment it emerges that most of these types of assessment are authentic in nature even though the degree of authenticity may vary. Authentic assessment entails assessment tools that mirror educational and societal values. At this juncture it is important to examine the disadvantages of alternative assessment.

#### **4.3.6 Disadvantages of alternative assessment**

Despite its many good qualities alternative assessment has some limitations. Gipps (1998:67); Linn and Gronlund (1995:130); McDonald and Van de Horste (1997:130); as well as and Cole, Ryan and Kick (1995:228) list the following prominent disadvantages of alternative assessment:

- Alternative assessment is time consuming. Enormous amounts of time

are required to conduct these assessment methods. It should be noted that alternative assessment may involve lengthy tasks, which are assessed over time. A limited number of tasks is always needed and has to be prepared, and the sampling of results is unavoidable. This adds to the limitations of this form of assessment.

- Knowledge is still a necessary component of program curricula.

Inefficiency in measuring knowledge of facts is a prominent weakness of alternative assessment. This implies that there must be a sound balance in assessment of student achievement by employing methods that assess knowledge.

- Low reliability always results from inconsistency in scoring and from the limited number of the samples of tasks. This notion suggests corporative marking where a group of assessors may be engaged to reduce subjectivity. However, it is important to realise that subjectivity is the gist of alternative assessment where students are required to perform an action, to construct a product as well as to solve a problem from their own point of view since multiple approaches, which in many cases result in multiple solutions to problems, are acceptable.

- Resources are often not adequate and available and the expertise of the assessor is necessary. This implies that capacity building with regard to the use of alternative assessment is necessary. The issue of resource scarcity may also be addressed by training sessions on the utilisation of the environment for instruction and any other form of improvisation where possible.

- Judgment may be subjective. Hence professional judgment and competence are necessary. This is understandable because students approach the tasks differently and present their answers differently. What matters is for the students to be able to explain how they reach their solutions. This implies that the expertise of the assessor to be flexible is also necessary.

Considering the advantages and the disadvantages of alternative assessment, the researcher is of the opinion that the beneficial effects of the advantages of alternative assessment surpasses its disadvantages.

Following and applying certain principles may alleviate the impact of the disadvantages of alternative assessment. The next section addresses some of these principles.

#### **4.3.7 Principles of high quality alternative assessment**

To follow a specific set of principles in any educational activity is a crucial issue because in many cases the principles are in line with the policy of the education system and the needs of the society that the system serves.

Schutz (in Wiggins 1993:71) provides an analogy to architecture: In alternative assessment (especially in performance formats), the design issues resemble those facing the architect. Schutz further points out that the ground to be covered is comparable to the syllabus; the logistics of making the design fit the site, to the making of large-scale assessment work in an institution; the building codes to psychometric norms; the town elders to school board members and district assessment directors.

This analogy, underlines that planning, clear guidelines and correlating assessment practices to the curriculum requirements are essential steps towards improvement of quality in alternative assessment. More importantly, this emphasises that decision-making in alternative assessment should be a cooperative effort in which all the stakeholders are involved.

At this juncture it is necessary to examine the principles that are apply to alternative assessment:

- Performance tasks should yield multiple solutions. This means that there is no single correct answer or solution to a problem. Student differences are recognised and appreciated and this enhances the development of positive self-esteem in students;

- there should be predetermined criteria that may be compared with others such that they are liable to open criticism. This implies transparency and openness; and
- there must be some form of uncertainty so that not everything about the task is known. This correlates with constructivist views since students have to construct knowledge during each step in the process of finding solutions to the problem in order to help them discover and acquire new knowledge on the basis of their prior knowledge(Hart 1994:9;23;40; James 1998:118).

It is also necessary to follow a set of principles to align assessment practices with the needs and demands of the labour market, both globally and locally. The next section addresses the issue of using portfolios to balance assessment practices.

#### **4.3.8 Using portfolios to balance assessment of student achievement**

According to Paris and Ayres (1994:34) portfolio assessment seems to be a suitable tool to measure the development of the learner and learning progress. A general view is that portfolio assessment assesses a wide range of skills. Different perspectives on what portfolio assessment entails, are presented next.

##### **4.3.8.1 Different perspectives of portfolio assessment**

It is important to provide different definitions of a portfolio because these definitions reveal the different purposes and the benefits of using a portfolio:

- A portfolio is a container that holds evidence of individual skills, ideas, interests and accomplishments (Hart 1994:23).
- A portfolio is a purposeful collection of student work that exhibits students' efforts, progress and achievements in one or more areas, which provides



a complex and comprehensive view of student performance in context and the real world (Mullen in Anderson and Specks 1998:75).

- A portfolio is a collection of task performance products, which include records of performance at various stages of task completion, as well as final performance products (Wiley 1996:68).
- A portfolio is an organised collection of a student's work (or products) assembled over a lengthy period after the entire year (Wiley 1998:68), that demonstrates what the student has done, the very best that he or she can do, and by reference what a student is capable of doing (Abruscado 2002:97; Ysseldyke 1995:266).
- A portfolio is a systematic way of collecting and reviewing samples of work that illustrate personal accomplishment processes and styles (Paris and Ayres 1994:34).

What emerges from the different perspectives is that portfolio assessment is the gradual collection of a student's completed tasks that are assessed to provide evidence of the student's development and progress. A portfolio assessment may stretch over a year or throughout a program or a course. In the end judgment about student achievement is made about the student's development and progress.

The different perspectives on portfolio assessment also reveal that the use of a portfolio is contextual. The next section addresses the reasons why portfolios are used, or may be used in the assessment of student achievement in higher education.

#### **4.3.8.2 Rationale for the use of portfolios as assessment tools**

Biggs (1999:139) argues that a portfolio is not just another assessment technique, but it is a powerful learning tool and it is also ideal for assessing unintended actions.

The use of a portfolio as an assessment tool is highly commended universally. Stiegelbauer (1998:44) asserts that portfolios exhibit most of the qualities of alternative assessment and for this reason; most of the institutions worldwide have adopted portfolios as an important assessment tool. Portfolio assessment may also be used for formal assessment Black and Atkin (1996:108. Abruscado (2000:65) add that this form of assessment can be used as educational innovation to assist in balancing assessment of student achievement in higher education. Furthermore, portfolios are ideal for the assessment of unlimited outcomes (Biggs 1999:156) and most importantly, portfolios are not merely assignments; they are learning tools for students (Biggs 1999:136).

The foregoing reasons show that portfolio assessment is of educational and academic value to students. Some of the major benefits of portfolio assessment are addressed in the next section.

#### **4.3.8.3 Benefits of portfolio assessment**

The different reasons for using portfolios as an assessment tool, is underpinned by the varied purposes and benefits of assessment as discussed in earlier sections of this chapter (3.4.2.7; 4.2.3; 4.3.6; 4.3.7). A reading of literature confirms the benefits of using portfolios (Abruscado 2000:65; Biggs 1999:156; and Black and Atkin 1996:108).

- Curriculum fidelity is enhanced. Reflection of the learned curriculum is clear since portfolios relate directly to classroom teaching and learning, local standards, and the content of prescribed text books.
- Efficient communication networks exist among stakeholders. A portfolio is a concrete vehicle for student-teacher, parent-teacher and parent-student discussion, hence it becomes a communication instrument.
- It is a cross-section lens that provides evidence for future analysis. It enhances comparison of work. The implication of this is that portfolios allow prediction about student progress.

- It provides a variety of student works since diverse work samples from the collected portfolio items reveal steps taken to complete the tasks. In this way the teacher has evidence to identify the students' stumbling blocks.
- The use of portfolios has both assets and liabilities. This implies that despite the many benefits of portfolio assessment, there may be some losses.

Portfolios as a method of assessment are applied worldwide because of the benefits thereof. They exhibit most of the good qualities of alternative assessment as valuable assessment instruments in higher education. They correlate with contemporary ways of learning.

The next section focuses on the correlation of current innovative learning theories and the use of alternative assessment.

#### **4.3.9 Alternative assessment and current theories of learning**

Anderson and Specks (1998:23) indicate that the drive to abandon traditional assessment and to move towards alternative assessment is motivated by the compatibility of the latter with current recommended theories of learning (cf. 4.3.9.1; 4.3.9.2; 4.3.9.3). There may be many other current, innovative theories of learning which are compatible with the principles of alternative assessment. However, for the manageable size of this study, constructivism, the theory of learning styles and Gardner's theory of multiple intelligences will be discussed and related to alternative assessment. The three examples suffice to point out the compatibility of alternative assessment with new ways of learning.

#### **4.3.9.1 Constructivism and alternative assessment**

This section explores the relationship between constructivist views and the use of alternative assessment. By drawing on a synthesis of current work in cognitive psychology, philosophy and anthropology (Abruscado 2000:26; Ornstein and Hunkins 2004:116), the following are considered:

- Knowledge is defined as temporary and developmental. It is socially and culturally mediated by prior knowledge. It is constructed by students as a result of their natural world;
- learning is non-objective. Subjectivity is valued since it enhances multiple approaches in problem solving; and it is a self-regulated process of resolving inner cognitive conflicts. (Brooks and Brooks in Anderson and Specks 1998:7; Gravett and Geyser 2004:170; James 1998:180, 182; and Ornstein and Hunkins 2004:116).

Bosker and Scheerens (1996:44) assert that the only legitimate way of assessment is performance-based on actual learning. Bosker and Scheerens (1996:44) further argue that distinct external assessment procedures do not do justice to the specific meaning of a particular learning experience for students. In a constructivist view, assessment procedures should be goal free rather than fixed on a particular objective and more formative rather than summative. The interpretation of this is to integrate learning and assessment such that assessment is ongoing (occurring before, during and after instruction); and oriented to the learning process rather than aimed at mastery of subject matter (Bosker and Scheerens 1996:44, 45).

Cunningham (1998:61); and Abruscado (2000:33) affirm that constructivist views are compatible with alternative assessment techniques that require students to construct responses using their prior knowledge.

The compatibility of alternative assessment and constructivist views is evident (4.3.5). students construct their own responses; the teacher assumes the role of a facilitator; assessment tasks portray real life; posing problems of immediate relevance to learners; assessment tasks are context-bound; active participation is emphasised; multiple approaches to solving problems; multiple dimensional tasks; multiple data sources and multiple solutions to problems. This implies that there is no single correct answer; there are many answers because students have their own points of view.

To conclude, the importance of the application of alternative assessment in student assessment in higher education is emphasised. The multiple dimensional views in constructivism are related to the theory of learning styles, the assumptions of which also match the principles of alternative assessment (3.8).

Various learning styles are discussed and related to alternative assessment in the next section.

#### **4.3.9.2 Learning styles and alternative assessment**

Abruscado (2000:32) draws attention to the fact that each person has his or her own way of learning and that an understanding of individual learning styles can assist in preparing experiences that allow students to approach tasks differently. Research on learning styles further provides valuable insights into appropriate approaches that may be adopted for instruction and assessment (Heywood 2000:245).

There are multitudes of learning style theories. However, Kolb's theory of learning styles will be discussed to illustrate the relationship between enhancement of quality in assessment practices and recognition and application of learning styles in instruction. Learning styles are defined as preferred ways to learn something (Ornstein and Hunkins 2004:115). In the context of this study, learning styles entail the best learning methods and techniques that enhance an

individual's effective learning. It must be noted, that alternative assessment also considers learner diversity and multiple solutions to problems. The challenging issue of different learning styles is how to assess in a way that assessment tasks match these differing learning styles. Kolb identifies four experiential learning styles that describe the ways in which students learn and adapt to daily life situations. According to Abruscado (2000:32), Kolb's learning styles of individual learners are classified as accommodators who are able to receive knowledge, divergers who are open-minded and have the ability to approach open-ended tasks ,convergers who are focused and can therefore tackle close-ended tasks and assimilators who receive and internalise acquired knowledge to be able to apply the knowledge in new situations.

The theories of different learning styles have implications for any educational delivery, including assessment of student achievement. The implication of different learning styles is that students have their own styles of learning and they exhibit them in different ways. This means that assessment approaches and techniques should be varied so that student differences are addressed and provided for in assessment.

The ideas of the theory of differing learning styles are compatible with alternative assessment because they permit students to adopt multiple approaches to find multiple solutions to their problems, using multiple sources (4.3.9.1). In alternative assessment, there is no one answer to a problem (4.3.2; 4.3.6).

Alternative assessment implies the provision of different learning environments in which student diversity may be addressed. Student diversity is one of the challenges of quality in higher education (4.3.9.2). This implies that the students should be exposed to a variety of carefully designed assessment tasks and instruction, with the purpose of addressing different forms of diversity, including learning styles.

Parallels can be drawn between learning style theories and multiple intelligences. Howard Gardner argues that eight intelligences determine how individuals can learn best (Gardner 1993:17) (cf. 4.4.10.3).

The compatibility of multiple intelligences with alternative assessment is examined in the next section.

#### **4.3.9.3 Multiple intelligences and assessment**

Gardner's theory of multiple intelligences is a recent theory that advocates the presence of multiple intelligences in human beings (Gardner 1993:25). He also refers to intelligences as 'gifts' or 'talents'. Gardner thus introduces a radically new vision about intelligence. Abruscado (2000: 26-27) extends that intelligence is the ability to solve problems or create a product of value to society. Gardner's approach to the pluralistic human spirit assumes that people have different cognitive powers and that these intelligences cannot be measured in a one-dimensional way (Rozner and Moore 1996:602; and Gardner 1993:17; 25). According to literature (Rozner and Moore 1996:602; Gardner 1993:17; 25), the following eight intelligences in a human being can be identified.

- *Musical intelligence*: This pertains to the acquisition and development of appropriate skills such as the ability to compose songs, write songs, create pictures on the basis of a composed song(s), as well as to manipulate music to solve problems or express understanding of a phenomenon.
- *Visual and spatial intelligence*: This refers to the awareness of a sense of space and colours in activities such as drawing plans and maps, taking photographic pictures and painting; as well as the ability to represent spatial aspects in the mind.
- *Movement intelligence*: This involves the ability to use and move body parts or the whole body to solve problems, as well as to manipulate objects, activities such as driving and operating machines, dancing and sports, to mention but a few.

- *Logical mathematical intelligence*: Ability to reason in a properly coordinated manner; including the ability to manipulate numbers and to reason logically on the basis of numerical data.
  
- *Linguistic intelligence*: This refers to the acquisition of four language skills and the appropriate application of these skills in writing stories, debating, discussions and being able to use language to express oneself and understand others in general;
  - *Interpersonal intelligence*: This refers to social intelligence that may be exhibited by being a responsible citizen and being able to live with others;
  - *Intrapersonal intelligence*: This is the ability to understand oneself, to know the self, as well as to love and protect the self; and
  - *Naturalistic intelligence*: This refers to the ability of an individual to understand nature and to appreciate it in different ways (Abruscado 2000:26; Gardner 1993:25; Lubisi 1999:60; Nitko 2004:251; Rozner and Moore 1996:602).

Gardner argues that each student has a different measure of each of the intelligences and in order for the student to be able to express his/her strongest skills or intelligences, instructional and assessment methods, as well as techniques, should be varied and adapted to the different intelligences (Rozner and Moore 1996:609). Dryden and Vos (1997:116); and Gardner (in Rozner and Moore 1996:602) further question assessing students in one-dimensional ways or identical approaches, which require students to know and produce series of facts on which they are tested by means of regular paper and pencil tests and standardised tests. As illustrated, Gardner (1993:29) uses an analogy of the tail that wags the dog. By this analogy, Gardner indicates that paper and pencil assessment, especially examinations, determine what should be taught (curriculum and instruction). For these reasons, Gardner (1993:29) strongly recommends that in the context of assessing of student achievement, assessment and nurturing of students should occur in different ways to match the differing ways in which intelligence is manifested at the various developmental



levels of students. What follow are the implications of Gardner's theory for instruction and assessment:

- To use varied instructional and assessment techniques and approaches to match differing student intelligences. The application of the multiple intelligence theory is important in addressing the ever-increasing student diversity in higher education as well as to provide assessment tasks in differing contexts to match the various abilities of the students.

- To be aware of the need to assess students' intellectual strengths in contexts; as this may influence the quality of assessment and learning as well as success in the lives of students, to match assessment activities to learning targets so that students perform to the best of their abilities and to provide students with well-defined assessment criteria since these may assist students to self-reflect as they work through their tasks.

There is a general view that the application of Gardner's theory may have the potential to reduce over-dependence of assessment practices on paper and pencil assessments. This theory may help to improve the quality of assessment practices in higher education. It is also clear that the application of Gardner's theory may enhance the use of alternative assessment, which in turn may enhance the identification of talents or gifts as well as recognition of student diversity (3.5.9).

Gardner's fear that assessment of student achievement is the determinant of the curriculum may be reversed, so that the dog (curriculum) wags the tail (assessment).

It can be assumed that alternative assessment may fulfill most of the principles of the current learning theories.

#### **4.3.10 Conclusion**

What emerges from the discussions in this chapter is that the debate on the total abandonment of paper and pencil assessment continues. There are contrasting views on the issue of the use of alternative assessment. However, there is general consensus that alternative assessment should include high quality paper and pencil assessment (examinations and tests). The term alternative assessment therefore implies the use of varied assessment approaches and techniques, including paper and pencil forms. Assessment of student achievement should be holistic such that a wide range of abilities are assessed. To conform to the theory of multiple intelligences, paper and pencil tests and examinations should be varied with the use of other assessment techniques.

The definitions and the characteristics of both alternative and paper and pencil assessment were provided. The drive to reform paper and pencil assessment (especially examinations) and the drive to abandon total dependence on this type of assessment, and the shift to alternative assessment were explained. The chapter also examined common malpractices of examinations, the advantages and disadvantages of both alternative and paper and pencil assessment, the principles of high quality assessment for both approaches, as well as the role they play in improving the quality of higher education. Furthermore, some of the forms of alternative assessment were reported on, and more details were provided on the use of portfolio assessment. Finally, current learning theories were presented to show the compatibility with alternative assessment.

The next chapter focuses on research methodology, methods and procedures applied in investigating the status of quality of assessment practices and the extent at which alternative assessment is used in higher education in Lesotho.

### RESEARCH METHODOLOGY

#### 5.1 Introduction

Chapter one provided an outline of the statement of the research problem, chapters two, three and four provided theoretical perspectives on the general aspects of quality and assessment in higher education. Aspects such as the quality of assessment practices and improving the quality thereof through the use of alternative assessment to supplement the existing content-driven paper and pencil assessment, to reduce over dependence on traditional methods of assessments, were reported. This chapter focuses on the research design and methods and their application in this study. The theoretical perspectives on research methodology applied in this study are considered to provide a framework that allows a particular understanding, as well as explanations and predictions.

The purpose of the research design is to describe and analyse methods, to shed light on their limitations and resources, to clarify their presuppositions and consequently, to relate to existing knowledge (Creswell 2005:79). The research design also focuses on the tools used in this study. The instruments comprise of sampling strategies, data collecting tools, the collection of data, data presentation and the analysis of the empirical data. Follow-up activities, reliability and validity, objectivity of the researcher as well as various research methods and procedures followed in undertaking this study, are also discussed.

Formal, systematic procedures and applications of a scientific inquiry approach to the problem of this study were followed to collect the data, as well as to analyse data logically for the given purpose (Gay and Airasian 2003:59). The purpose of this study is to investigate the quality of assessment practices and the extent to which alternative assessment is utilised in higher education in Lesotho.

This procedural study is undertaken to try to gain a better understanding of the quality of assessment practices and the use of alternative assessment in higher education in Lesotho, as complex human interactions (Macmillan and Schumacher 2001:9). There appears to be a continuing problem of overdependence of assessment practices on traditional methods and strategies (paper and pencil assessments). The problem persists in higher education in Lesotho despite international calls to use alternative forms of assessment. As a result, the focus of this study is to investigate the quality of assessment practices in the higher education system of Lesotho.

There are two types of research, applied and basic research (Best and Kahn 2003:12). In applied research, the purpose is to apply the research findings to solve the problems, while in basic research the purpose is to explore the possibilities of new knowledge. This study is based on both applied and basic research and as such, it is envisaged that the findings of this study may be utilised to improve the quality of assessment by incorporating alternative assessment more productively and systematically into the assessment system of higher education in Lesotho. New knowledge with regard to assessment practices in higher education system in Lesotho will be contributed by this study.

Ethical issues in research are essential for the protection of the participants in the study, and to avoid legal consequences. It is therefore necessary to report on the way in which ethical issues have been addressed in this research.

## **5.2 Ethical issues in the research**

According to Gay and Airasian (2003:81); and McMillan and Schumacher (2001:195), the issue of ethics in research is critical, and includes corresponding legal implications. Some of the sensitive factors that have to be considered are:

- *Informed consent*: The participants' consent need to be obtained when

investigating controversial issues. The researcher may request the participants to complete a special form as evidence that they were informed of the possible risks that may be taken in participating in the research. This implies that the participants have to sign an agreement with the researcher to participate in a research project and that they must feel free to give their consent. For the study this was not necessary because the participants (lecturers, students and instructional leaders in the department of higher learning) are directly involved in issues of education, including assessment practices.

- *Security from harm:* The security of the participants were assured in the covering letter (Appendices A, B, C.), guaranteeing their anonymity and the confidentiality of all the information that they provided.

- *Request to conduct a research study from the authority:* Literature reveals that it is also necessary to seek permission to conduct research before the actual start of the study on a site (Creswell 2005:151). Formal letters requesting permission to conduct research in the selected institutions of higher education in Lesotho from the sector for higher education in the Ministry of Education, were written and addressed to the relevant offices. The purpose, the benefits of the research to the institutions, the way in which the data were to be collected, as well as the time specifications for data collection were stated in the letters (Creswell 2005:151). Permission to conduct the research was subsequently granted.

The function of ethics in research is to assure the utmost protection of the participants and to avoid legal consequences, as well as to build trust between the researcher and the participants, and more importantly to protect both the researcher and the participants.

Having provided a brief exposition of the afore-mentioned ethical factors and the way in which they were addressed in this study, it is necessary to provide

theoretical perspectives on the research methodology and methods pertaining to this study.

### **5.3 Research methodology and design**

Epistemology refers to a branch of philosophy that investigates the origin and methods, which at the same time also limits knowledge (Sikes 2004:17). Scott (1998:61) indicates that the epistemological ideas of research paradigms are important and cannot be avoided in research. For this reason, it is necessary to provide a brief exposition of the philosophical origins of this study. Methodology refers to the philosophical origins and assumptions of the research, while the design refers to all the procedures and processes followed in undertaking the research study (Leedy and Ormrod 2005:157). Sikes (2004:17) contends that methodology is also concerned with the description and analysis of research methods. It is necessary to describe the philosophical origins of quantitative and qualitative researches. This study is more inclined towards a quantitative research paradigm. Quantitative research paradigms have their philosophical roots in positivism, which is characterised by positive evaluation of science and the scientific method (Wiersma 1995:91).

The empirical research, the research methods and procedures that were applied in this study, are described in the following sections.

Important aspects of the empirical research of this study are addressed in the following sections. These are: paradigms employed in the study; data collecting tools; sampling techniques and procedures; piloting procedures of the questionnaires; distribution of the questionnaires and their application in this study; reliability and validity; limitations of the research tools; processing and presentation of data, as well as evaluation. This will be followed by relevant findings, deductions, a conclusion and recommendations made on the basis of the results of the study.

### **5.3.1 Empirical research**

Empirical research is research that is guided by evidence, data and/or sources (McMillan and Schumacher 2001:589). As such, this study is guided by existing literature on theoretical perspectives of the quality of assessment practices in higher education (Chapters 2; 3 and 4), and research methodology, design and methods (Chapters 5; 6 and 7). Both qualitative and quantitative research approaches were applied in this research. The next sections provide the theoretical perspectives underlying quantitative and qualitative research approaches.

#### **5.3.1.1 Quantitative and qualitative approaches to research**

Both quantitative and qualitative approaches have been applied in this study. Throughout the history of educational research, quantitative and qualitative research designs dominated research (McMillan and Schumacher 2001:19). Each of the two approaches in this study has distinct epistemological characteristics, which are compared next.

#### **5.3.1.2 Comparing quantitative and qualitative approaches to research**

Qualitative and quantitative research approaches have identifiable characteristics. Some basic assumptions underlying the above approaches in the context of this study are compared in this section:

- As part of the qualitative investigation, the researcher was the main instrument by conducting interviews with instructional leaders from selected institutions of higher education in Lesotho (Creswell 1994:4; Anderson 1990:70). However, the researcher was not directly involved in the gathering of the quantitative data, and was unattached from the research process (Niemann, Niemann, Brazelle, Staden, Heyns and De Wet 2000:286; Usher 1998:12).

- In quantitative research the main focus is on the product, while in

qualitative research, the emphasis is on the process as well as on the product. According to Franken and Wallen (1990:78; and Usher 1998:12) the implication of this is that the qualitative researcher is interested in 'how' things occur (e.g. how phenomena are perceived and experienced, as well as the way in which the participants make sense of their world), while the quantitative researcher is interested in 'what' happens (facts, causes and effects). In this study, the quantitative approach sought facts about the quality of assessment practices and the extent to which alternative assessment is used. The qualitative research of the study probed into the opinions of the instructional leaders on the way in which they experience the quality of assessment practices.

- Quantitative methods of data collection are strictly regimented and closed as opposed to qualitative methods which are open, flexible and non-regimented (Niemann *et al.* 2000:185; 683; as well as Scott and Usher 1996:60; and Usher 1998:12). Semi-structured questionnaires for lecturers and students were used to collect the quantitative data, while open-ended interviews were used to collect the qualitative data.

- Finally, according to the quantitative approach reality is objective, while in qualitative research reality is regarded as subjective and multiple, as experienced or perceived by the participants (Best and Kahn 2003:27; Creswell 1994:162; Niemann *et al.* 2000:283; and Usher 1998:12). Objective multiple options on the quality of assessment practices were provided in the questionnaires, while multiple views (opinions) of the participants were probed through the open-ended interviews and the open-ended items in the questionnaires.

It was appropriate to employ both quantitative and qualitative approaches to establish the way in which students and lecturers experience the quality of assessment practices in their institutions. More importantly, it was clear that the participants were able to express their inner feelings about the status of the



quality of assessment in higher education in Lesotho by means of the research approaches that were applied in the study.

Despite the fact that quantitative and qualitative designs are different, they also share some characteristics or assumptions. The next paragraph addresses the similarities between quantitative and qualitative approaches to research.

### **5.3.1.3 Similarities between qualitative and quantitative approaches**

Some common characteristics between qualitative and quantitative approaches are outlined in the as follows:

Both approaches share in logical thought and empiricism. They are empirical by nature, implying that they are based on evidence, and both approaches generate knowledge to improve educational practice. Quantitative as well as qualitative approaches to research are disciplined enquiries. They search for knowledge and both can be seen as scientific enquiry that seeks to verify knowledge. Both quantitative and qualitative approaches use open-ended questions, which allow the participants to express their opinions as in interviews. Quantitative and qualitative approaches also use statistical methods to analyse data (McMillan and Schumacher 2001:6; Preece1996:42; and Scott 1998:59).

Some details on the way in which quantitative and qualitative approaches were applied in this study are provided next.

## **5.4 Quantitative research**

Quantitative research is defined as the collection of numerical data to explain, describe, predict and control the phenomenon of interest (McMillan and Schumacher 2001:34). This study is descriptive by nature. According to Best and Kahn (2003:141) descriptive research focuses on the analysis of relationships between variables and the development of generalisations that extend beyond the sample observed. Gay and Airasian (2003:10) reiterate that researchers employ quantitative methods to describe current conditions. This study

quantitatively investigated the current status of the quality of assessment practices and the extent to which alternative assessment practices are used in higher education in Lesotho. Statistical techniques were used to interpret and analyse the results of the study. In this way, the status of the quality of assessment practices and the use of alternative assessment in institutions of higher education in Lesotho were reported on. Although the study employed a multi-method approach, which used quantitative as well as qualitative strategies, it is oriented more towards the positivistic paradigm and it is therefore a descriptive survey.

What follows is a summary of theoretical perspectives on the survey undertaken in this study.

#### **5.4.1 A survey study on the quality of alternative assessment in Lesotho**

A descriptive survey involves a large area and population. This study involves institutions of higher education in Lesotho, together with large populations of lecturers and students. As a result, a quantitative approach was found to be the most appropriate for this study. A survey is a descriptive study that attempts to collect numerical data to answer questions about the opinions of people, about a topic or an issue from a large and dispersed group of people (Leedy and Ormrod 2005:118). In this study; the opinions of the students and lecturers about the quality of assessment practices and the use of alternative assessment in higher education in Lesotho were sought and collected by means of a survey. The main purpose of the survey was to collect data from a sample of students and lecturers from institutions of higher education in Lesotho about the quality of assessment practices, and the use of alternative assessment in the higher education system of Lesotho. In this way it was possible to learn and generalise from the sample of the population, so that inferences could be made about the opinions of the students and the lecturers (Creswell 1994:118; as well as Leedy and Ormrod 2005:184). Leedy and Ormrod (2005:118) also affirm that the goal of a survey is

to learn about a large group of people. The students and the lecturers from the five selected institutions represent a large population.

Furthermore, a survey is the most popular type of quantitative research method because it is cost-effective, and data can be collected cheaply over a large area (McMillan and Schumacher 2001:35; and Creswell 1994:118). As a result, this method was found to be suitable for this study. Creswell (1994:118) further argues that a survey is beneficial because it has the capability to identify the characteristics of a population from a small sample of individuals. One of the most beneficial aspects of a survey is its capability to investigate a variety of educational problems and issues, such as assessment of attitudes, opinions, preferences, demographics, practices and procedures (Gay and Airasian 2003:277). Consequently, the rationale for opting for the survey method was because it enabled the researcher to collect data from a large population on a variety of phenomena associated with the quality of assessment practices and the use of alternative assessment in the higher education system of Lesotho. The participants' opinions (lecturers, students and instructional leaders) were sought so that generalisations could be made. The quality of assessment practices was assessed, together with the extent to which alternative assessment is being used in Lesotho.

In addition, a survey is economic in design and data can be collected rapidly over a large area. It also permits identification of the attributes of a larger population from a small group (a sample) of individuals (Creswell 1994:118). A descriptive survey was also used in this study because it is capable of involving a larger area and a large population. The quantitative (survey) approach was consequently found to be the most suitable and beneficial method for this study.

This survey is cross-sectional because the questionnaires for both the students and lecturers were used to collect the data about the quality of assessment practices and the extent to which alternative assessment is employed in higher

education in Lesotho, at one point during a specific period in time Creswell 1994:119; Leedy and Ormrod 2005:170; and McMillan and Schumacher 2001:109)..

Two self-administered, semi-structured questionnaires for the lecturers and the students respectively, were prepared (cf. 5.3.2.1; and Appendices A and B) and used as data collecting tools in this study. These questionnaires were delivered personally to the selected institutions of higher education. Face-to-face interviews were conducted with instructional leaders to enquire about government initiatives on quality issues, with particular emphasis on assessment practices, their opinions on the quality of assessment practices and the use of alternative assessment in higher education in Lesotho (Appendix C).

The questionnaires were chosen as data collecting tools because they permit rapid collection of data over a large area within a short time. The aim of the survey was to collect data from a large area (Gay and Airasian 2003:278). The interviews were used to seek in-depth opinions about the quality of assessment practices from instructional leaders (from the Department of Higher Education), as the experts in the field of higher education and its activities, including assessment practices (5.3.4.2).

Description of data collection techniques is essential in the survey. It provides the logical procedures followed in a research process. The next section describes data collection techniques and the way in which they were applied in this study.

#### **5.4.1.1 Data collection in a survey**

In a survey structured interviews and questionnaires are used. However, the most common tool for collecting data is a questionnaire (McMillan and Schumacher 2001:308). In this study, semi-structured questionnaires and semi-structured interviews were utilised to collect the data. The next paragraph considers the questionnaire and the covering letter.

#### **5.4.1.2 Questionnaires**

Questionnaires were chosen as a data collecting tool for their many benefits. According to McMillan and Schumacher (2001:257) a questionnaire is the most commonly used data collecting tool because it is relatively economical and it has the potential to ensure anonymity and confidentiality. These attributes enhance the building of trust between the researcher and the participants. Hence, collected information tends to be more truthful and valid. More importantly, confidentiality is assured by anonymity.

Gay and Airasian (2003:590) define a questionnaire as a written collection of self-report questions, to be answered by a selected group of research participants. Hart (2005: 357; 358) continues that a questionnaire is always used as the basis of the survey to find out 'what', 'how much', 'how many' and 'how often'; to draw information from a large number of people. In this study, enquiring into the quality of assessment practices is enquiring into 'how good', while enquiring into the extent to which alternative assessment is used, reveals 'how often' the alternative assessment is used to assess students. Data was collected by using semi-structured questionnaires (Appendices A and B) in this particular study. The purpose of using the questionnaire was to collect data about the status of the quality of assessment practices and the extent to which alternative assessment is used in institutions of higher education in Lesotho. Large samples of students and the lecturers from a large area were involved.

A semi-structured questionnaire contains both open-ended questions and close-ended questions (Gay and Airasian 2003:284). The semi-structured questionnaires were also used to allow the collection of both quantitative and qualitative data about the quality of assessment practices and the use of alternative assessment in higher education in Lesotho. The rationale was that some questions had predetermined responses while some sought free responses. For this particular study, two semi-structured questionnaires, one for

lecturers and one for students were used as data collecting tools. The type of items in a questionnaire determines the answerability of a questionnaire.

The questionnaire items may either be open-ended or close-ended. Both questionnaires for students and lecturers contained open-ended and closed-ended items. Both questionnaires contained many open-ended questions to allow free and deep expression of the respondents' views. The lecturers' questionnaire contained 54 items while the students' questionnaires contained 36 items (Appendices A and B).. A questionnaire should not contain too many items since this may render the questionnaire unattractive to the participants (Gay and Airasian 2003:285).

Open-ended items are unstructured format items in which the participants construct their own answers and express their own opinions freely were used in both students' and lecturers' questionnaires (Gay and Airasian 2003:283). As mentioned previously, both questionnaires contained various open-ended questions to allow free and deep expression of the respondents' views. The open-ended items also permitted the participants to provide as much detail as possible without any prompts and to express their inner feelings freely to provide truthful information (Verma and Mallick 1999:118). The participants were therefore given the opportunity to speak for themselves (Brown and Dowling 1998:67). Likert-scales were used and spaces were provided in the questionnaires for the options 'other(s)' to provide information that the researcher might not be aware of (5.4.1.3).

Close-ended items, which are structured and rigid were also used. These did not allow the participants to express their own views or opinions. They are objective-type items and require direct information. Possible options were provided so that the participants could choose the option, check a list, or number preferences, to mention a few examples (Gay and Airasian 2003:51). For this particular study, both the questionnaires contained close-ended and open-ended items. Direct

questions were used in the initial parts of both the lecturers' and the students' questionnaires to gather biographic information.

What emerges from the discussion of the item format used in this study is that the researcher chose to use two types of items to enrich the collected data. The researcher is of the opinion that the validity and the reliability of the data collected through both the lecturers' and the students' questionnaires was assured by combining open-ended and close-ended items. A Likert-scale was used in the questionnaires and a short explanation of the way in which the Likert-scale was employed in this study, is provided in the next section.

- **Likert-scale items:** McMillan (2004:402) and McKernan (1996:197) point out that Likert-scale items are questions that request the participants to rate the extent of agreement or disagreement with a statement on a rating scale containing a series of statements. An example would be, in response to the provided statements, for participants to indicate whether they strongly agree, agree, disagree or strongly disagree with each statement (Gay and Airasian 2003:50). In this study, a Likert-scale was chosen for its potential to allow flexibility to include the item 'other(s)' for the participants to supplement any relevant information that the researcher was not aware of. Another reason for choosing a Likert-scale is that such a scale is also beneficial in providing a context for the participants.

Furthermore, a wide range of items can be attempted without difficulty. Likert-scale items were used on a four-point scale ranging from strongly disagree (1); disagree (2); agree (3); strongly agree (4); to never (1); sometimes (2); most of the time (3); always (4) (Appendix B). The four- and five-point Likert-scale items for the lecturers' questionnaire ranged from very poor (1); poor (2); good (3); very good (4) and never (1); rarely (2); occasionally (3); frequently and very frequently (5) (Appendix A).

It has already been indicated that the questionnaires (Appendices A and B) were used as major data collecting tools in this study because of their benefits (5.4.1.4). At this point it is necessary to provide theoretical perspectives of the benefits (advantages) of questionnaires as data collecting tools.

- **Advantages of a questionnaire:** The implementation and advantages of the questionnaire as a data collection tool, as well as the way in which the use of the two questionnaires benefited this study, are explained according to views of several authors (Gillham 2000:6; Leedy and Ormrod 2005:185; Gay and Airasian 2003:282) in the next paragraphs.

Questionnaires were sent to a large number of people in close-by and far away institutions of higher education in Lesotho. They helped to save both time and money since it was possible to collect information from a large sample of population of students and lecturers in a short time-span. More importantly, the researcher could choose to save traveling expenses by sending questionnaires by post. This affirms that the use of questionnaires can be cheaper and sometimes more efficient than other data collecting tools.

Questionnaires enhanced straightforward analysis of answers to closed questions was enhanced and there was also less pressure for an immediate response since respondents completed the questionnaires in their own time. The distance of the researcher from the survey participants ensured their anonymity hence the participants tended to be more truthful when responding to sensitive and controversial issues. Furthermore, the objectivity of the questionnaires was enhanced by anonymity and confidentiality; and they lacked interview bias.

The questionnaires were administered in person. Administering questionnaires individually enabled the researcher to build a rapport with respondents and explain unclear items if any.



In practice questionnaires have both disadvantages and advantages. Despite the advantages stated above, the questionnaires used in this study also had some disadvantages, which are presented next.

- **Disadvantages of a questionnaire**

According to Gay and Airasian (2003:282); Gillham (2004:26); Leedy and Ormrod (2005:185), questionnaires have certain disadvantages. These authors identified the following possible disadvantages of using questionnaires, which relate to this study:

Initially, there was a low return rate (response rate) since some participants did not return the questionnaires. However, follow-up activities were made by administering questionnaires for the second time to non-respondents. It was difficult to motivate the respondents because in a survey the researcher is always at a distance and cannot interact with the participants. It was also difficult to brief the respondents and therefore simple questions were necessary because misunderstandings could not be corrected, since information was sought by asking questions only.

Literacy (reading and writing) problems may have occurred since by nature people talk more than they write or read. However, some unusual terms were explained to reduce this possible problem. The respondents did not have the answers available in an organised fashion hence misinterpretation of one or more questions could occur, hence the questionnaires were pre-tested to avoid this possibility. There may be controversies on seriousness and honesty of answers and the respondents may also be uncertain about what happens to the data.

A questionnaire has its unique characteristics (Gay and Airasian 2003: 283). Some of the major characteristics are provided in the next section.

#### **5.4.1.3 Major characteristics of a good questionnaire**

When constructing the questionnaires the following characteristics of a good questionnaire were considered (Gay and Airasian 2003:283):

- *Brief questionnaires:* The questionnaires should be brief and to the point to motivate and invite the respondents. Long wordy questions should be avoided.
- *Questionnaires which are easy to respond to:* The items in a questionnaire should be clear and understood by the participants so that valid information is drawn from them. Simple language and clear instructions are essential to the quality of a questionnaire.
- *Attractive questionnaires:* Well-designed questionnaires with a clear and attractive cover page and a good layout arouses the interest of the participants to page through and respond to the items. The quality of the paper also counts and the formatting of the text should be such that there are some blank spaces.

Certain guidelines were considered when preparing and administering questionnaires in this study and they are described in the next paragraph.

#### **5.4.1.4 Preparation and administering of questionnaires**

When preparing and administering a questionnaire, some guidelines are applied (Gillham 2002:26). The following guidelines were considered for this study:

- Clarity and relevance of items are necessary to enhance understanding and consistency in the interpretation of the question and items which focus on a single idea should replace double-barreled items which carry two items as this results in incomplete responses, which are difficult to interpret and analyse. Negative items are always confusing to the respondents because there is a likelihood of omitting negatives such as 'no' and/or 'not'. If these negative words

are used in a questionnaire, they should always be highlighted (e.g. by italics, underlining, bold or higher case).

- Biased items and words were avoided and items were short and simple so that they can be easily understood and interpreted by the respondents. A questionnaire should be administered to participants who are experts in the field of the study or who experience the problem directly. In this study, the lecturers are the experts in the field of assessment of student achievement, while the students directly experience the assessment practices (Gillham 2002:26).

In constructing the questionnaires, the content was informed by theoretical perspectives on what quality assessment entails (1.1.1; 2.3 and 3.6). One of the essential requirements of a questionnaire is a covering letter. It is therefore necessary to provide a brief exposition of the role played by a covering letter in this research in the next section.

#### **5.4.1.5 Covering letter**

A covering letter is a crucial component of a questionnaire. The purpose of the covering letters was to explain the purpose of the study (Appendix D), to emphasise its significance and to provide valid reasons for the need of the respondent to participate. For this study, the purpose of the lecturers' questionnaire (Appendix A) was to probe into the quality of assessment practices and the use of alternative assessment in a higher education system. The purpose of the students' questionnaire (Appendix B) was to investigate how the students experience assessment practices, and the extent to which alternative assessment is used in higher education in the Maseru area.

The covering letters, together with the assurance of the respondents' security, confidentiality and the time for completion of the questionnaires constituted the main components of the covering letters for the questionnaires used in this study. The covering letter assures truthfulness and validity of the collected information. (Gay and Airasian 2003:307). Furthermore, the covering letters were endorsed

by the signature of both the supervisor and the researcher (Appendices A and B). The intended time for the completion of the questionnaire was two weeks for each of the clusters; however, the time for collection became longer because of intervening factors such as absence of lecturers, negligence and slow response to the questionnaires.

Gratitude and appreciation of the respondent's participation was expressed in advance at the end each of letter.

Prior to the distribution of the questionnaires, a pilot study was conducted to its test feasibility as explained in the following section.

#### **5.4.1.6 Pilot study**

A pilot study is an exploratory investigation to test and to determine the feasibility of a questionnaire. It is crucial in a survey, which employs questionnaires as data collecting tools (Leedy and Ormrod 2005:192). A pilot study was conducted in this research to test and determine the feasibility of the questionnaires (Appendices A and B). The pilot study of the questionnaires also provided information on the estimation of the time required to complete the questions as well as an initial idea of the likelihood of the pattern of the responses (McMillan and Schumacher 2005:185; 307).

A pilot study (pre-testing) of each questionnaire was undertaken with a small number of individuals from a sample population of lecturers and final year students. Leedy and Ormrod (2005: 192) suggest that a questionnaire can be given to about six individuals (friends or colleagues), to actually complete so that the researcher is in a position to check the likely responses. For this specific study, five colleagues and five final year students were selected as pilot respondents to ensure that the pilot samples have similar characteristics to the actual sample of the study (5.4) to enhance the validity of the pilot studies (Hart 2005:205; Gay and Airasian 2003:297).

The pilot studies benefited this study by revealing minor ambiguities in sentences; directions; some repetition; complexity of some technical terms used in the questionnaires; and a few grammatical mistakes. Corrections were made and other defects were addressed and rectified accordingly. The final drafts of the questionnaires were done, based on the data provided by the pilot studies, the views from the literature review and the inputs from the supervisor.

#### **5.4.1.7 Distribution of questionnaires**

Endorsement to conduct research in an organisation is one of the ethical and essential issues in research. To comply with this ethical issue, letters (Appendix C) requesting permission to conduct research in the selected institutions were written and delivered by hand to the relevant offices of the institutions. The researcher was granted permission. The researcher delivered the questionnaires to the lecturers and the students in some of the selected institutions of higher education in Lesotho. In the remainder of the institutions the heads of departments and registrars acted as coordinators.

#### **5.4.1.8 Request to conduct a research study**

Formal letters requesting permission from the sector for higher education in the Ministry of Education to conduct research in the selected institutions of higher education in Lesotho were written and addressed to the relevant offices. This also applied to the interviews (5.2).

#### **5.4.1.9 Response rate**

It is important for questionnaires to have high response rates to be able to generalise the results with confidence (Creswell 2005:367). In a survey 350 participants is an acceptable number. However, for this study, the questionnaires were distributed to 200 lecturers and 600 students, and the return rate for each sample is shown in Tables 5.2 and 5.3. A total of 800 questionnaires were thus distributed (Table 5.4).

One of the major disadvantages of employing a questionnaire as a data-collecting tool is generally that not all the questionnaires are returned. Literature reveals that several factors may influence the return rate of a questionnaire (Leedy and Ormrod 2005:193,194; Gay and Airasian 2003:288; and also McMillan and Schumacher 2001: 187). Hence, the following were considered:

- *Timing:* Timing is crucial in data collection. The questionnaire should be distributed at a convenient time when it is highly likely that most participants will be available and will have time to respond. Despite the fact that the questionnaires for this study were ready in February 2006, the researcher found it necessary to distribute the questionnaires at different times of the year because the academic year is not the same in all the institutions of higher education in Lesotho, and this caused a delay in the data collection. Most importantly, in February, March and April some of the lecturers and the students were engaged in teaching practice and revision for the end of the year examinations.

- *First impression:* The questionnaire must be attractive, for example, there must be adequate margins, the questionnaire must not be too long and its overall appearance must enhance a relaxed mood in the respondents.

- *Motivation:* The purpose of the questionnaire must be clear, meaningful and relevant to the needs and interests of the prospective participants. For this study, the students and the lecturers in higher education were directly involved in assessment practices. A covering letter is always sent, together with a questionnaire to clarify the purpose and to assure the anonymity of the participants (5.3.2.7).

- *Promise to offer results:* If participants are promised that after the completion of the study they will be given some feedback or a copy of a research report, they tend to be more motivated.

- *Self-administration of the questionnaire:* For the purpose of this study, the

questionnaires were distributed by hand. This is beneficial because it provides for close monitoring of the questionnaires.

- *Gentle reminder*: It is suggested that the researcher should not be too pushy. Telephone calls were used to remind the participants about the questionnaires where possible, and casual calling to some of the offices was also used as a reminder. The response rate was calculated and established (Table 5.2).

There are differing views on acceptable response rates. McBurney (1994:202) argues that in a survey research, the percentage of individuals in the sample who return the completed survey is still acceptable in the range 50-90 per cent. On the other hand, Babbie and Mouton (2001:261); and Creswell (2005:367) are of the view that a 50 per cent response rate may be accepted for analysis and reporting, 60 per cent is accepted as good, while 70 per cent is considered as very good. Leedy and Ormrod (2001:185) consider 70 per cent as a high response rate. In this study the calculated return rate (response rate) was found to be 60.5 per cent for the lecturers and 59.9 per cent for the students respectively, as indicated in Tables 5.2; 5.3 and 5.4. The response rate for the sample of lecturers per institution is presented in Table 5.2:

**Table 5. 2: The response rate for the sample of the lecturers per institution**

Institutions	Number of population of lecturers	Representative fraction	Representative proportional sample size	Number of returned questionnaires	Response rate (%)
Institution A	59	0.15	30	4	13.3
Institution B	180	0.46	92	44	48.8
Institution C	45	0.12	24	23	97.9
Institution D	16	0.04	8	5	62.5
Institution E	90	0.23	46	45	97.8
<b>Overall totals</b>	390	1.00	200	121	<b>Average = 64.1%</b>

The response rate for the sample of the students per institution is illustrated in Table 5.3:

**Table 5.3: The response rate for the sample of students per institution**

Institutions	Samples sizes	Number of returns	Response rate (%)
Institution A	120	54	15.1
Institution B	120	88	24.8
Institution C	120	80	22.4
Institution D	120	42	11.8
Institution E	120	93	26.1
<b>Totals</b>	600	357	<b>Average = 59.5%</b>

The response rate for the participants of this study (students and lecturers) is illustrated in Table 5.4.

**Table 5.4: Response rate for the students' and lecturers' questionnaires**

	Participants	Number of the participants	Number of returns	Response rate (%)
<b>Group A</b>	Students	600	357	59.9
<b>Group B</b>	Lecturers	200	121	60.5
<b>Totals</b>		800	478	<b>Average = 59.8%</b>

The overall response rate for both students and lecturers was 59.8 per cent, and this is within an acceptable range. Gillham (2002:36) maintains that if the respondents and non-respondents have many similar characteristics, the results can be generalised to the sample and the population.

Follow-up activities are always necessary to improve the response rate of the questionnaires. The follow-up activities in this study are explained next.



#### **5.4.1.10 Follow-up activities**

Follow up activities are important in assuring the highest possible return rate of the questionnaires. In solving the problem of non-return, the participants were reminded through telephone calls with the aim of avoiding being too persistent (Gay and Arasian 2005:289; and Creswell 2005:111). Where possible the researcher visited some offices to collect the questionnaires personally without exerting pressure, and a second questionnaire was issued where necessary (Creswell 2005:368).

Having provided some theoretical perspectives on the quantitative methods employed in this study, it is necessary to provide an exposition of the qualitative method applied in the study.

### **5.5 A qualitative approach**

A qualitative research approach entails research that relies on views of participants; asks broad, general questions; collects data consisting largely of words from the participants; describes and analyses these words for themes; and conducts the enquiry in a subjective, biased manner (Creswell 2005:39). Interviews are the most commonly used data collecting tools in a qualitative approach. The next section addresses the interviews and the way in which they were applied in this study.

#### **5.5.1 Semi-structured interviews**

This study employed a multi-method approach (cf. 5.4). Gay and Airasian (2003:308) explain that conducting of an interview is essentially an oral and personal administration of a questionnaire to each member of a sample. In this study, semi-structured face-to-face interviews were utilised to probe the opinions of the instructional leaders from the participating institutions of higher education in Lesotho concerning the quality of assessment practices, as well as the government initiatives to improve quality in these practices. The reason for interviewing the five instructional leaders was to justify the problem and the

significance of the study. Verma and Mallick (1999:118) advise that interviews provide for the collection of complementary and relevant data as well as for supplementary data. The data collected from the instructional leaders complimented and supplemented the data collected by the questionnaires on the quality of assessment practices in higher education in Lesotho. Semi-structured interviews were conducted with three instructional leaders who are considered as experts in the higher education sector of Lesotho. They are fully engaged in all relevant issues of higher education. For this reason, the researcher found it necessary to probe the opinions of these officials on the quality of education in higher education in Lesotho, and also to determine government initiatives in improving the quality of this education sector of Lesotho, focusing mainly on assessment practices.

Semi-structured interviews containing structured and open questions may be used together with questionnaires to obtain clarification or to probe a person's reasoning (Leedy and Ormrod 2005:184). One-to-one interviews were used in this survey to elicit in-depth information that was not possible to obtain with questionnaires about the quality of assessment practices and the use of alternative assessment in institutions of higher education in Lesotho (Creswell 1994:354; Gay and Airasian 2003:308). An interview protocol, which is a form for recording data during interview sessions, was developed (Creswell 1994:48). This form was used during the interview sessions with the instructional leaders. At the beginning of the interview the purpose of the interview was stated, the permission to tape-record the interviews was requested, and the permission was granted. At a later stage, the data collected from the interviews was transcribed.

### **5.5.2 Pre-testing interview protocol**

Interview protocol requires pre-testing similar to any other research tool. It was necessary to pre-test the interview protocol (procedure) to determine the quality of the information that may be collected from the interview and the feasibility of the process of the interview (Gay and Airasian 2003:308). There were three

critical questions (Questions 1-3). The critical questions had supporting questions. A small pilot sample was selected and the feedback from the pilot study was used to improve the quality of the interview procedure, clarity and its feasibility (Gay and Airasian 2003:308; Gillham 2002:82). In addition to the foregoing exposition of the preparation and administration of the interview protocol for this study, Gillham (2002:82) warns that it is the quality, and not the quantity that counts. Gillham (2002:83) continues by indicating that three or four carefully analysed interviews lasting half an hour each can bring vitality to the research study.

Given this background, a small sample of three instructional leaders was used in face-to-face interviews to enrich the data collected by the questionnaires. The interviewees hold high positions in their institutions and all of them was assistant director, the other one a faculty dean while the other one was the head of the department . The purpose of the interview was to probe into the opinions of the instructional leaders regarding the quality of assessment, the use of alternative assessment in institutions of higher education in Lesotho, and government initiatives to improve the quality of assessment practices.

It is necessary to provide some theoretical perspectives on the multi-method approach, which has become an imperative in research to improve the quality of research projects. The next section addresses the issue of a multi-method approach and the way in which it was applied in this study.

## **5.6 Multi-method approach**

Wiersma (1997:14) and Best and Kahn (2003:83) contend that qualitative and quantitative approaches have their own distinct characteristics, but when applied in educational research their distinctions reflect a continuum rather than a mutually exclusive dichotomy. Although qualitative and quantitative methods are at the extreme ends of the continuum their nature permits the researcher to validate data and inject vigour and flexibility as expected in differing contexts

Maharasoia *et al.* (2002:147). As a result, qualitative and quantitative approaches are combined to improve the quality of the research study. Creswell (2005:54) argues that research lies somewhere on the continuum from quantitative to qualitative research and research methods overlap (Verma and Mallick 1999:22). Despite the differences between qualitative and quantitative research, the two approaches were used together to validate the findings of this study (McMillan and Schumacher 2001:15). In addition, full exploration of the qualitative-quantitative continuum is always employed to improve the quality of the research study. In a similar trend, Bell (1999:102) asserts that multi-method data collection is an attempt to crosscheck the existence of certain phenomena and the validity of individual accounts. For these reasons, the researcher found it appropriate to use both quantitative and qualitative approaches in this study.

Furthermore, a mixed-method approach permits the combination of qualitative and quantitative techniques within different phases of the research process. Bless and Higson-Smith (2002:86) report that a multi-method approach may minimise the potential research bias, corroborate data and support the validity of the research findings. For these reasons, data was gathered from a number of sources and was subsequently compared and contrasted in order to attempt a full and balanced study (Bell 1999:102). The degree to which the combination of methods differ, depends on the needs of an individual study. Despite the fact that this study is a mixed-method study, quantitative methods are heavily weighted and quantitative data was collected before the qualitative data (Gay and Airasian 2003:190). In this mixed-approach study, the qualitative analysis and interpretation can assist to explain and elaborate on the quantitative results.

A multi-method approach was also chosen because of its potential to enrich, as well as to cross-validate the research findings (Gillham 2002:2; and Preece 1996:42). Multi-methods are important because one approach is not always enough as a research method on its own (Gillham 2002:2; 82). For this reason, two questionnaires, which contained open-ended questions that sought

qualitative data, free responses, were used together with semi-structured face-to-face interviews. Gillham (2002:82) further affirms that semi-structured interviews with a small number of interviewees to convey a picture of real peoples' views that would enrich and cross-validate the research findings, as well as justify the data collected through the questionnaires. An integrated dual approach of quantitative and qualitative methods overcomes naïve empiricism because the questionnaires are rarely adequate as research tools when dealing with a complex real world (Gillham 2002:81).

On the basis of the foregoing exposition of the application of a multi-method approach, and the related issues in this study, semi-structured interviews were employed to improve the quality in this research, to justify the problem as well as to validate data collected through the questionnaires (5.3.2.2; Appendices A and B).

What expires from this discussion is that a multi-method approach to research permits cross-method triangulation, because in triangulation, qualitative as well as quantitative data is collected to answer the research question (Leedy and Ormrod 2005:99). Triangulation permits the use of several data collection and analysis techniques in a study with one strategy dominating as a major or central theme ( McMillan and Schumacher 2001:408; 409). It can be utilised in four ways (Stake 1995:1120). The following views of Stake were applied in this study:

- *Triangulation of sources of data:* In this study, different sources such as books, journals, the internet, papers, government documents and others, were explored to justify the research problem and to validate the research findings (5.10.1).
- *Method triangulation:* The multi-method approach, which has been applied through the combination of a survey study and face-to-face interviews helped to enrich the research results of the study (5.4; 5.5).

- *Triangulation of data collecting tools:* In this type of triangulation, different tools of collecting data were used to validate the research findings. The questionnaires were used as a quantitative tool, while semi-structured interviews were applied as a qualitative instrument in this study.

In this particular study, questionnaires were used together with semi-structured interviews where a small number of interviewees (five instructional leaders) were required to express their opinions on the quality of assessment practices and initiatives of the Lesotho government in improving the quality of higher education in this country. Multiple data sources have thus been employed to corroborate the collected data for a broader understanding of the perspectives on the quality of assessment practices in higher education.

At this point, it is necessary to explain the sampling strategies followed in the study. It should be noted that, despite the fact that a multi-method approach was applied in the study, the quantitative method dominated qualitative methods in the research. Quantitative sampling techniques as well as qualitative sampling techniques were used in the study.

### **5.7 Sampling techniques**

Both quantitative and qualitative sampling techniques were employed to select the samples for the semi-structured interviews and questionnaires that were used as data collecting instruments. Sampling strategies are of paramount importance in a survey. This section provides an exposition of the sampling procedures employed in the study. It is a general principle that a survey uses probability sampling to ensure adequate representativeness of the population (McMillan and Schumacher 2001:305). However, it was not possible to apply the probability sampling strategy with regard to the lecturers and the students in the environment of higher education because of their daily commitments, and most importantly, the selected institutions of higher education constituted a dispersed population (Wiersma 1997:77).

A good sample determines the meaningfulness and generalisability of the research results Gay and Airasian (2003:103). Samples represented the total population of the lecturers and students and the instructional leaders of higher education. Representative fractions of different groups of lecturers and students from different selected institutions were selected. The number of available lecturers for this study was determined and estimated by using the information in documents such as institution calendars and student information booklets.

The target population for this study consisted of the five selected institutions of higher education in Lesotho. These included the lecturers, the students and the instructional leaders from the selected institutions of higher education. The lecturers and the students from the five selected institutions of higher education in Lesotho, with at least two years' experience of assessment practices, was considered as a suitable target group. Probability sampling was impractical because of the complexity of activities in the ever-changing environment of higher education (McMillan and Schumacher 2001:173; Neuman 2003:224). Hence, non-probability sampling techniques were employed in this study. These included cluster sampling and convenience sampling techniques.

#### **5.7.1 Selecting the sample of institutions of higher education**

It was not necessary to select a portion that represents the target population of institutions (a sample) because of the small number of institutions of higher education in Lesotho. Initially the researcher intended to include six public institutions of higher education in Lesotho; however, some of the institutions had to be disregarded. For example, in one institution, the students and the lecturers were never fully representative because of modular programs that run for short periods of time. Secondly, the institutions that are located in the Maluti area, where traveling is not easy, were also not included in the sample. For this reason, this study focused on five institutions of higher education in the Maseru area only. Out of ten, five public institutions of higher education in Lesotho were

included in the sample for this study. This constitutes (50%) representativeness of all the public institutions of higher education in Lesotho. Against the background of the foregoing exposition, cluster sampling was implemented as an appropriate sampling technique for determining the sample of the institutions of higher education in the Maseru area of Lesotho.

Multistage sampling, which is applicable to different regions, was suitable for this study because the institutions of higher education are situated in different locations with homogeneous groups of the target population (Baumgartner and Strong 1994:102). It is often used in the case of dispersed populations, as in the selected institutions of higher education in Lesotho (Neuman 2003:224). Multistage sampling was combined with convenience sampling in this study. For this reason, each of the five selected institutions was treated as a cluster. The researcher first sampled the institutions as clusters and then sampled the students and the lecturers conveniently as subjects in each cluster (Creswell 1994:119). Cluster sampling is cost effectiveness and efficiency in sampling large groups (Creswell 1994:173; Gay and Airasian 2003:178). Moreover, Creswell (1994:174) emphasises that clustering permits the researcher to compare the results of subgroups. The five selected institutions of higher education in Lesotho represent clusters with homogeneous characteristics.

Despite the fact that cluster sampling is not representative of all the participants in a research area, the population of the study was too large for probability sampling in each of the clusters. The total target population for this survey comprised of lecturers and students from five institutions of higher education in the Maseru area and three instructional leaders from the higher education sector. A large sample of the population is better than a small sample since the generalisations made from the results are justified (Gay and Airasian 2003:101, McMillan and Schumacher (2001:177 & Goddard and Melville (2005:35) argue that a sample should be large enough to represent the population. The exposition



of the techniques used in selecting the samples of the lecturers and the students is provided next (cf. 5.7.2 and 5.7.3).

## **5.7.2 Determining sample sizes**

Anderson (1990:202) suggests different sample sizes for different population sizes (Table 5.5). For this reason, Anderson's views were used to determine the sample sizes for the students (5.7.2.2) and the lecturers (5.7.2.1). Student numbers were provided by the department of statistics, while the numbers of the lecturers were obtained from the calendars of the selected institutions. More details on the way in which the sample sizes of the lecturers and the students were determined, are provided next (5.7.2.1 and 5.7.2.2).

### **5.7.2.1 Selecting a sample of lecturers**

It was not practical to manipulate all the lists of the lecturers in institutions of higher education in Lesotho, and the day-to-day activities in the environment of higher education could not permit the researcher to communicate with the lecturers as a group due to the complexity of time tabling in these institutions. For these reasons, non-probability sampling was appropriate for selecting the sample of the lecturers. Convenience sampling was therefore an appropriate sampling technique to collect data from the lecturers from individual institutions in this study (5.7.1).

Determining the sample size is an important step in sampling techniques and a carefully selected sample of 200 participants can represent a million people Oppenheim(1992:43). For this study, the size of the sample of the lecturers was determined from possible theoretical sample sizes and corresponding population sizes (Anderson 1990:202 & Welman and Kruger 1999: 49).). Anderson (1990:202) further suggests that possible theoretical sample sizes and corresponding largest population sizes at 95 per cent confidence level,.

This ensured that sufficient numbers in the sample of lecturers represented the groups of lecturers from the selected institutions, as illustrated in Table 5.6.

**Table 5.6: Proportional representation of the sample of the lecturers**

<b>Institutions</b>	<b>Number of population of lecturers</b>	<b>Representative fraction</b>	<b>Proportional sample size</b>
<b>Institution A</b>	180	0.46	92
<b>Institution B</b>	90	0.23	46
<b>Institution C</b>	59	0.15	30
<b>Institution D</b>	45	0.12	24
<b>Institution E</b>	16	0.04	8
	<b>390</b>	<b>1.00</b>	<b>200</b>

Only the lecturers who were currently in the service were included in the target population. Lecturers who were on study leave or any other forms of leave were not included in the study. Table 5.6 reflects that out of 390 included in the sample, 92 lecturers were sampled from Institution A; 46 from Institution B, 30 from Institution C; 24 from Institution D, and finally, 8 were selected from Institution E.

### **5.7.2.2 Selecting a sample of students**

As a result of some sampling problems (5.7.2.1), convenience sampling was used together with cluster sampling (5.7.2.1) to collect data through the students' questionnaire.

For more than 5000 individuals, a sample size of 400 individuals is appropriate (Gay and Airasian 2003:113). Considering these suggestions, a sample of 600 students from the selected institutions (6.7) was a representative sample for a total number of students between 10 000 and 15 000 in the institutions of higher education in Lesotho.

Having identified and determined the number of clusters (5.7.1), 600 students were divided by the number of clusters, i.e.  $600/5= 120$ . One-hundred-and-twenty participating students were selected to represent all the groups of the students in each cluster. Thus the required numbers of students were assured in the final subgroups of students. The participating students in each cluster were selected conveniently for the reasons stated earlier (5.7.2.1).

### **5.7.2.3 Selecting a sample of instructional leaders**

Purposive sampling was employed to select a sample of three instructional leaders to obtain information about the initiatives of the Lesotho government to improve the quality of higher education and particularly to improve the way in which student achievement is assessed. The lecturers were selected on the basis of their expertise because they are capable of providing relevant information (Leedy and Ormrod 2005:208). A purposive mode of sample selection was utilised to ensure that specific and relevant information could be obtained on the initiatives of the Lesotho government relating to the use of alternative assessment practices in higher education. The initial intention was to select three government officials as representatives of the office of higher education in the Ministry of Education in Lesotho. Because of the lack of access to the office, three instructional leaders were purposively selected as alternative participants. It is the belief of the researcher that the instructional leaders are experts in the field of higher education, as well as in quality issues in practices concerning the assessment of student achievement. Purposive sampling technique was used for its convenience and availability (Creswell 1994:120). The three instructional leaders were also targeted for the purpose of obtaining useful, valid and reliable information about the status of quality of assessment practices and the initiatives of the Lesotho government on quality improvement in assessment practices.

On the basis of the above exposition, purposive sampling was chosen as a more appropriate sampling technique for selecting the interviewees in this study.

Having determined the samples of this study and its sizes, it is necessary to consider the participants of this study.

### 5.7.3 Participants

The participants of this study comprised of the lecturers and the students from the selected institutions of higher education in Lesotho. The participants were grouped as indicated in Table 5.7.

**Table 5.7 Participants of the study**

<b>Participants</b>	<b>Number of the participants</b>
Students	600
Lecturers	200
Instructional leaders	3
<b>Total</b>	<b>803</b>

The second-year students were more appropriate and accessible than third- and fourth-year students, who were often engaged in projects. They were also more appropriate than first-year students who lacked the required experience. The students (Group A) and the lecturers (Group B) were furnished with copies of questionnaires to respond to in their own time. The instructional leaders (Group C) were furnished with copies of the interview protocol to respond to in face-to-face interaction with the researcher.

The objectivity of the researcher is addressed next.

### 5.8 Objectivity of the researcher

Objectivity is a crucial issue in research ethics (5.2). The researcher has a long history of experience in education since she started a career in teaching.

The theme of her script, which was a component of a MEd degree, was: *Adaptation of assessment practices to the modular curriculum at Lesotho College of Education*. The issue in this study is the quality of the assessment practices in higher education in the Maseru area of Lesotho. The study also probes into the extent to which alternative assessment is employed in higher education. The researcher made an effort to adhere to research ethics (5.2) by remaining neutral to avoid bias. For these reasons, the researcher reserved her own beliefs, prejudices and views. As a result, she was able to make professional judgements in analysing and interpreting the data on the basis of her vast experience in education matters.

## **5.9 Presentation and analysis of the empirical data**

The significance of data analysis is to organise large quantities of data into a manageable format such that it is easy to understand (Best and Khan 2003:259; Gillham 2004: 24). Presentation, processing and analysis of the collected data were applied both quantitatively and qualitatively. This was done to inject vigour into the study and to shed more light and understanding on quality in assessment as well as the extent to which alternative assessment is employed in higher education in the Maseru area of Lesotho. The analysis of data culminates in the interpretation of data, which involves explanation of the findings, answering the “why” questions, attaching significance to the particular results, and putting patterns into an analytic framework (Best and Khan 2003:259).

### **5.9.1 Questionnaires**

This section reports on procedures followed in the presentation and analysis of the data collected through the questionnaires and the face-to-face interviews.

Statistical analysis was employed to analyse the data collected through the questionnaires. The quantitative data was classified and presented in text-form, as well as in tables and numbers, to enhance easy analysis and interpretation (Leedy and Ormrod 2005:212). Frequency distribution, percentages, counting of

rows, standard deviation, graphical and other numerical techniques were used (Burns 1999:43;Gillham 2002:51). Both descriptive and inferential statistical techniques helped to organise and summarise data by reducing large masses of data into simple, understandable terms. Inferential statistics enabled the researcher to make informed decisions in interpreting data (Leedy and Ormrod 2005:300).

Data collected through the questionnaires was analysed and processed with the use of Microsoft Excel Software in the Department of Statistics at the University of the Free State.

Qualitative information obtained from open-ended responses for the option 'others' in the questionnaires was captured, organised and categorised into codes, similar to data collected from the interviews (5.12.2).

### **5.9.2 Interviews**

In analysing qualitative data, the presentation, analysis and interpretation of the data are included and also closely interwoven. The most common procedures of data analysis include data perusal and organisation, data reduction and inductive reasoning. These procedures were employed and data was subsequently compared and contrasted.

Transcripts were made from the data collected from the interviews. Cherry (2000:59); and Leedy and Ormrod (2005:158) suggest the following steps, which were followed in analysing the qualitative data collected from the interviews in this study:

- *Data perusal and organisation:* First, the data were perused by reading the data and checking for incomplete, inaccurate and irrelevant data as well as to identify possible categorisation, comparison and interpretation of data. Data based on the opinions of the instructional leaders from the selected institutions

of higher education were scrutinised and classified into themes, which were determined and described by using key words (Cherry 2000:59; Leedy and Ormrod 2005:158). Data collected by means of the questionnaires was categorised on the basis of the objectives of the study. The data collected from the lecturers, the students and the instructional leaders, was compared and interpreted.

- *Data reduction*: The raw data was transformed by selecting and categorising related concepts into themes and sub-themes by using codes (Cherry 2000:59; Leedy and Ormrod 2005:158). Miles and Huberman (1994:10) mention that data reduction also includes the process of the categorisation of data. This implies that data is organised by using key words and themes to break down voluminous data into sub-units that can be easily managed (Appendix G).

- *Inductive reasoning* entails developing generalisations from a limited number of related observations. In this reasoning, data is categorised and relationships among categories are identified (Gay and Airasian 2003:4; Cherry 2000:59; Leedy and Ormrod 2005:158) (cf. Appendix G). In other words, generalisations are made before details are provided. In this study, the opinions of the instructional leaders were categorised and compared to enable generalisations on the basis of their opinions. It should be noted that procedures of data analysis and presentation are interwoven, and as a result some of these procedures were carried out simultaneously in this research.

- *Deductive reasoning*, which started with details of data analysis and ended with generalisations in the findings, conclusions and recommendations (Creswell 2005:600) in Chapter seven (7.3.2; 7.3.3 and 7.3.4).

## **5.10 Conclusion**

The previous chapters investigated relevant literature on the use of alternative assessment and improvement of quality in assessment practices. This chapter reported on the research methodology that was used in this study. Firstly, the study examined the ethical issues of the research. The literature review, its significance, as well as the sub-processes involved in a literature review, were

discussed. The empirical study, as well as the two major paradigms underlying the research, were described and contrasted. The rationale for deciding to use the two paradigms was also explained, and their combined application as a multi-method approach was addressed. The chapter also focused on the kind of tools used, as well as on a description of these tools (5.3.2.1 and 5.3.4.1). The sampling strategies (5.7), as well as the procedures for data collection, analysis and interpretation of empirical data were described (5.11). Finally, the research processes and procedures, such as the request to conduct the study, follow-up activities, reliability and validity, and the objectivity of the researcher were discussed (5.11, 5.11.2, 5.12, 5.13). Survey research, which is the major design of this study, was also explored and linked to the study (1.5).

The next chapter addresses the presentation, analysis and discussion of the data. It must be noted that it is also important to analyse the data collected through the literature review.



### **ANALYSIS, PRESENTATION AND DISCUSSION**

#### **6.1 Introduction**

Chapter one introduced the study by presenting the problem, the purpose and the significance of the study. The details of the research methodology and the procedures that were applied in the study, were also outlined. The chapter unfolded by defining the research boundaries of the study. Chapters two, three and four reported on literature in which the themes: quality in education, quality of assessment practices and the use of alternative assessment in higher education were discussed. Chapter five provided theoretical perspectives on the research methodology and the procedures followed in the study.

This chapter presents, analyses and discusses the results of the study. Statistical analysis was employed to analyse the data collected through the questionnaires as indicated earlier in Chapter five (5.12.1). Information from the data sheet prepared by the Statistics Department (UFS) has contributed to simplify and reduce the task of analysing the quantitative data in the study. The procedures followed in the presentation and analysis of the data collected through the lecturers' questionnaire is discussed next.

#### **6.2 Presentation, analysis and discussion of data (lecturers)**

The purpose of the lecturers' questionnaire was to collect data on the opinions about the status of the quality of assessment practices and the extent to which alternative assessment is used in higher institutions of education in Lesotho (Appendix A). Tables, pictures, and other structures are accompanied by a textual explanation and descriptions (Gay and Airasian 2003:304).

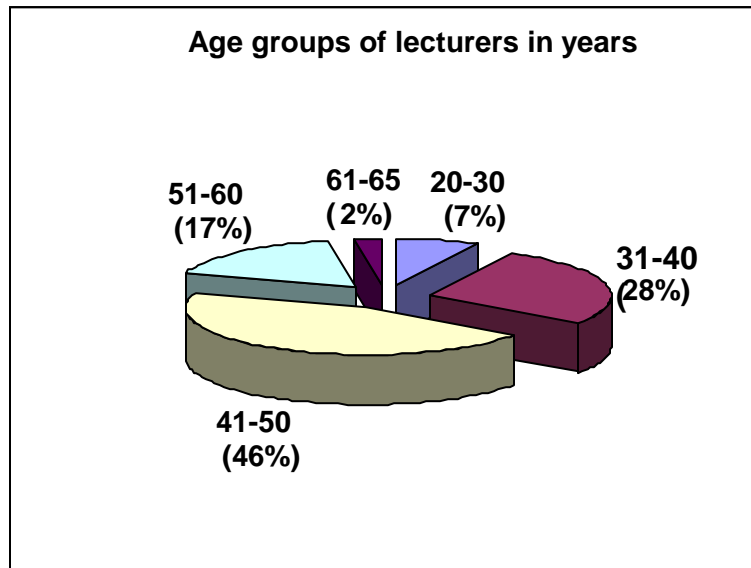
### 6.2.1 Biographic information (Part 1)

Biographic information was sought to induce a feeling of ownership in the participants, and to reveal the caliber of the participants. This included information on age groups, gender, position held, subject area and experience in years.

#### ❖ Age groups (Question 1)

Figure 6.1 presents information about the age groups of the lecturers who participated in the study.

**Figure 6.1: Age groups of lecturers in years**



According to the pie chart in Figure 6.1, large percentages of participants fall within the age ranges 41-50; 31-40 and 51-60 years. A small number of the lecturers who participated in the study fall within the age groups 51-60 years and 20-30 years of age respectively

❖ **Gender (Question 2)**

Both male and female educators participated in the study. These included fifty males (41%) and seventy-one females (59%). More female lecturers than male lecturers participated in the study.

❖ **Positions held by lecturers (Question 3)**

The lecturers who participated in the study hold different positions, ranging from junior lecturers (22%) with a frequency of 26; lecturers (55%) with a frequency of 67; and senior lecturers (20%) with a frequency of 24. Other positions (3%) with a frequency of 4 were not specified by the participants. The results of this question are displayed in Figure 6.2.

**Figure 6.2: Positions of lecturers**

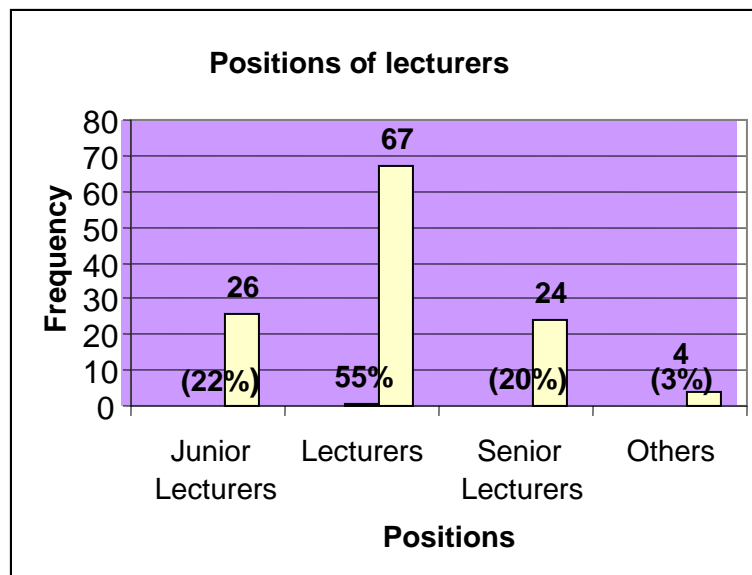


Figure 6.2 shows the frequency and the percentages of the participating lecturers in their different positions at the institutions. As indicated in Figure 6.2, more lecturers participated in the study and this is followed by junior lectures and senior lecturers respectively. A small number of lecturers represent other positions, which were not specified.

#### ❖ **Subject areas of lecturers (Question 4)**

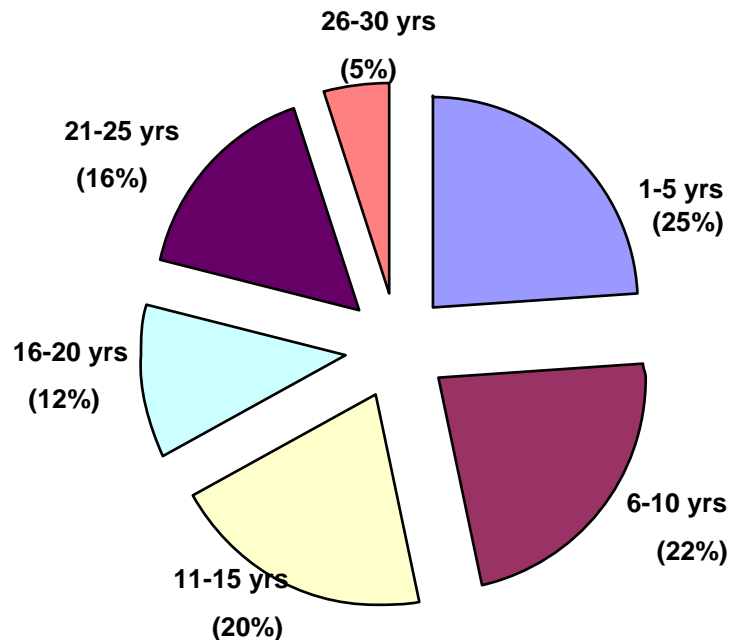
This question was posed to determine the subjects taught by the lecturers who participated in the study and to determine whether lecturers from different subject areas were represented.

More lecturers teach 'other' subject areas which were not specified in the questionnaire. These included subjects such as Teaching Methods, Evaluation and Assessment, African Languages, Commercial Studies and others (51%), with a frequency of 62. New interdisciplinary courses that exist emerged from the data of the investigation. Pure disciplines are used as subject areas (Appendix A). The second largest number of lecturers (23%), with a frequency of 28 teaches Science; and also Sesotho (11.6%), with a frequency of 14. Twelve lecturers (10%) teach Mathematics. The least number of lecturers (4%), with a frequency of 5, teach English. The results in Figure 6.3 further indicate that lecturers from all subject areas were represented.

#### ❖ **Experience (Question 5)**

Teaching experience of the participating lecturers in years was required to determine the educational caliber of the respondents. The following emerged: 01-05 years: 25 per cent (with a frequency 30); 06-10 years: 23 per cent (with a frequency of 23); 11-15 years: 21 per cent (with a frequency of 25); 16-20 years: 12 per cent (with frequency of 15); 21-25 years: 17 per cent (with a frequency of 20); and 26-30 years: 5 per cent (with a frequency of 6). The results are reflected in the pie chart in Figure 6.4.

**Figure 6.4: Experience of lecturers**



The results in Figure 6.4 show that the experience of many lecturers fall within the ranges of one to five years; six to ten years; eleven to fifteen years and twenty-one to twenty-five years of experience. Small numbers of lecturers have sixteen to twenty years and twenty-six to thirty years' experience.

The general picture is that female lecturers represented the largest number of the participants and most of the participating lecturers hold the positions of lectureship. The largest number of the participants teaches emerging subjects while the smallest number teaches English. Moreover, there is overwhelming evidence that the participants are well-experienced.

### **6.2.2 Quality of assessment practices (Part 2)**

The purpose of part two of the lecturers' questionnaire was to determine the lecturers' perceptions on the quality of assessment practices (Appendix A) in higher education in Lesotho. The questionnaire required the lecturers to evaluate the quality of assessment practices by indicating the degree of how "good" or how "poor" they regard the quality of assessment practices in institutions of higher education in Lesotho, using a Likert-scale (Appendix A).

The responses of the participants for “good” and “very good” were combined to just imply “good”, while the responses for “poor” and “very poor” were combined to imply “poor” in order to enhance better understanding and interpretation of the results. Furthermore, the responses for “poor” were represented as negative responses, while the responses for “good” were represented as positive in corresponding tables for the categories A to E. It must be noted that positive responses indicate the number of the participants who are of the opinion that the quality of assessment practices is good. Similarly, negative responses indicate the number of participants who view the quality of assessment practices as not satisfactory. The frequencies and the percentage scores for each quality aspect concerning the improvement of learning are illustrated in tabular form. Negative and positive responses were added separately and the average percentage scores were calculated out of the total responses.

Furthermore, the related questions (Q) were grouped together under appropriate sub-themes. Therefore, quality aspects with regard to policy issues, improvement of learning, content coverage, administrative issues and collaboration issues in assessment of students are categorised as A, B, C, D and E in the mentioned order. The quality aspects in each category are designated a capital letter for the category under which it falls. For example, the quality aspects in category D are designated **D1 to D8** to indicate that they are in category D.

#### **6.2.2.1 The quality of assessment practices with regard to policy issues (Category A)**

The questions in this category (A) sought to establish the quality of assessment practices relating to issues of policy. Information from these questions revealed the quality of assessment practices in relation to the existence of clear policies guiding all the activities of assessment (A1). It also included accessibility of clear policy guidelines (A2); meaningfulness of assessment tasks (A3); relevance of assessment to student problems (A4); provision of feedback within reasonable

time (A5); provision of informative feedback (A6); extent to which adequate feedback is provided (A7); existence of a policy for redemption in assessment (giving students a second chance in case of failure or otherwise) (A8); provision of opportunities for students to make appeals (A9); existence of a clear policy for staff development (A10); and the existence of opportunities for every lecturer for capacity building (A11). This is depicted in Table 6.1. Positive and negative responses, and the percentage of each, are also displayed in Table 6.1.

**Table 6.1: Quality aspects of assessment practices relating to policy issues**

<b>A. Quality aspects with regard to policy issues</b>		<b>Positive responses</b>	<b>Percentage (%)</b>	<b>Negative responses</b>	<b>Percentage (%)</b>
<b>A 1</b>	Existence of a clear policy for all activities of assessment (Q1.1).	90	74		
<b>A 2</b>	Accessibility of clear policy guidelines (Q 1.2).	88	72		
<b>A 3</b>	Meaningfulness of assessment tasks (Q 11.1).	91	75		
<b>A 4</b>	Relevance of assessment to students' problems (Q 11.2).	84	69		
<b>A 5</b>	Provision of feedback within reasonable time (Q 12.1).			63	52
<b>A 6</b>	Provision of informative feedback (Q 12.2).	94	78		
<b>A 7</b>	Extent to which adequate feedback is provided (Q12.3).	81	67		
<b>A 8</b>	Existence of a policy for redemption in assessment (Q14.1).	106	88		
<b>A 9</b>	Provision opportunities for students to make appeals (Q 14.2).	92	76		
<b>A 10</b>	Existence of a clear policy for staff development (Q16.1).			69	57
<b>A 11</b>	Existence of opportunities: capacity building in assessment for every lecturer (Q 16.2).			81	67
<b>Average percentage (%) scores =</b> <b><u>Total number of responses</u></b> <b><u>Number of aspects</u></b>		<b><math>\frac{599}{8} = 75\%</math></b>		<b><math>\frac{157}{3} = 59\%</math></b>	

The eleven quality aspects (**A1** to **A11**) are quality aspects with regard to policy issues. The results in Table 6.1 reflect that the quality of assessment practices with regard to policy issues has strengths and weaknesses. Eight of the eleven quality aspects scored very high percentages of positive responses with an average of 75 per cent (Table 6.1). This indicates clearly that the status of the

quality of assessment practices in institutions of higher education is relatively good, concerning clarity and accessibility of policy guidelines for all activities of assessment; meaningfulness and relevance of assessment to students' problems; provision of informative and adequate feedback; existence of a policy for redemption in assessment; and provision of opportunities for students to make appeals. The positive responses are relatively many.

On the other hand, the results also show that there are weaknesses in the quality of certain aspects of assessment practices that are related to policy issues. An average of 59 per cent of the negative responses is relatively high. The quality of assessment practices in relation to policy issues is not satisfactory, and particularly with regard to quality aspects of the provision of feedback within reasonable time; existence of a clear policy for staff development and opportunities for every lecturer to engage in capacity building. Despite the fact that the majority of participants are of the opinion that the quality of assessment practices is good, there is an indication of conflicting opinions since a relatively higher percentage of participants responded negatively. Many quality aspects have scored very high positive scores, except three aspects, which scored high negative responses (Table 6.1).

The general agreement is that the quality of assessment practices concerning policy issues is good, except the aspects relating to the provision of feedback within reasonable time; existence of a clear policy for staff development; as well as the existence of opportunities for every lecturer to engage in capacity building in assessment.

#### **6.2.2.2 Improvement of the quality of learning (Category B)**

The quality aspects relating to the questions in Table 6.2 have been classified under **Category B**. This is a category of quality aspects that relate to the improvement of the quality of learning. The aspects in this category have been designated **B1** to **B11** as illustrated in Table 6.2. The questions sought by



**Category B** were to establish the status of the quality of assessment practices relating to the improvement of learning in various aspects. They include the match between assessment and program objectives (B1); fitness of assessment to purpose (B2); the consistency of assessment practices (B3); the appropriateness of assessment instruments to what is tested (B4); the fairness of assessment practices concerning communication of assessment expectations to students at the beginning of the program (B5); the match between assessment methods and assessment tasks (B6); consistency of assessment practices with recent development in assessment (B7); focus on skills and their transferability (B8); indication of how well the students achieve the program objectives (B9); and the ability of assessment to encourage active learning (B10) (in the order mentioned in the text and as stated in Table 6.2). The average percentage score of 74 per cent is a high positive score for the quality of assessment practices related to policy issues. There are no negative responses in this category, hence it can be deduced that the quality of assessment practices with regard to the improvement of learning is good.

**Table 6.2: Improvement of the quality of learning**

<b>B. Quality aspects of assessment practices with regard to the improvement of student learning</b>		<b>Positive responses</b>	<b>Percentage (%)</b>
<b>B 1</b>	Assessment practices match program objectives (Q 2.1).	100	82
<b>B 2</b>	Accessibility of clear policy documents to all staff members (Q2.2).	101	84
<b>B 3</b>	Assessment practices are consistent if repeated (Q 3.1).	98	81
<b>B 4</b>	Assessment instruments test what they are supposed to test (Q 3.2).	95	79
<b>B 5</b>	Communication of assessment expectations at the beginning of the course or a program (Q 4.1).	71	59
<b>B 6</b>	Methods of assessment match tasks (Q 4.2).	97	80
<b>B 7</b>	Assessment practices are consistent with recent developments in assessment (Q7.1).	64	53
<b>B 8</b>	Assessment focuses on skills and transferability (Q 8.1).	87	72
<b>B 9</b>	Assessment results indicate how well students have achieved program objectives (Q 8.2).	89	74
<b>B 10</b>	Assessment encourages active learning (Q 9.2).	88	73
<b>Average percentage (%) scores = <math>\frac{\text{Total number of responses}}{\text{Number of aspects}}</math></b>		<b><math>\frac{737}{10} = 74\%</math></b>	

Table 6.2 indicates that the quality of assessment practices with regard to improvement of the quality of learning seems to be good. There are no negative responses, and the average of about 74 per cent for the positive responses for all the quality aspects in respect of improvement of learning is relatively high. These aspects include a match between assessment objectives and program objectives; consistency of assessment practices if repeated; ability of assessment instruments to test what they are supposed to test; communication of assessment expectations at the beginning of the course or a program; match between methods of assessment and assessment tasks; focus of assessment on skills and their transferability; ability of assessment results as indicated how well students achieved the program objectives, as well as the ability of the assessment to encourage active learning. The percentage scores range between 53 per cent and 89 per cent and this exhibits quite a high quality. Furthermore, there are no negative responses with regard to the quality of assessment practices and the improvement of student learning. It can be deduced from the information in Table 6.2 that the quality of assessment practices with regard to improvement of learning is relatively good.

### **6.2.2.3 Quality of content coverage (Category C)**

**C1** to **C5** represent the quality aspects with regard to the quality of content coverage in assessing students. The quality aspects are stated below:

Quality of assessment practices concerning the aspects of sufficient content coverage (C1); representativeness of important components of the curriculum in assessment (C2); representativeness of current subject perspectives in assessment (C3); focus of assessment on skills and their transferability (C4); and the coverage of higher order cognitive skills in assessment (C5) (as indicated in Appendix A and Table 6.3).

**Table 6.3: Quality of content coverage**

<b>C. Quality aspects with regard to the quality of content coverage</b>		<b>Positive responses</b>	<b>Percentage (%)</b>
<b>C1</b>	Sufficient content coverage (Q 6.2).	109	90
<b>C2</b>	Representativeness of important components of the curriculum in assessment (Q 6.1).	96	69
<b>C3</b>	Representativeness of current subject perspectives (Q7.2).	74	61
<b>C4</b>	Focus of assessment on skills and their transferability (Q 8.2).	87	72
<b>C5</b>	Coverage of higher order cognitive skills in assessment (Q 9.1).	107	87
<b>Average percentage (%) scores =</b> $\frac{\text{Total number of responses}}{\text{Number of aspects}}$		<b><math>\frac{379}{5} = 76\%</math></b>	

The information in Table 6.3 points out that the quality of assessment practices with regard to the quality of content coverage is good, and there are no negative responses. The average percentage score of 76 per cent for all the positive responses is comparatively high. All the quality aspects in respect of the quality of content coverage scored above 60 per cent. It can be inferred that the quality of assessment practices with regard to the quality of content coverage in the assessment of students in higher education institutions in Lesotho is good.

#### **6.2.2.4 Administrative issues (Category D)**

**D1** to **D8** represent the quality aspects related to administrative issues in Category D (Table 6.4). The questions in Category D were aimed at revealing the quality of assessment practices in respect of administrative issues. These quality aspects included the effective use of assessment to make important decisions (D1); manageability of the assessment burden by the students (D2); manageability of assessment within instructional time (D3); co-ordination of assessment activities to enhance practicality (D4); equal assessment opportunities to all lecturers (D5); equal access to assessment information (D6); regular review of assessment of practices by individual departments (D7); and

systematic review of assessment practices by individual departments (D8). The responses are displayed in Table 6.4.

**Table 6.4: Quality aspects with regard to administrative issues**

<b>D. Quality aspects with regard to administrative issues</b>		<b>Positive responses</b>	<b>Percentage (%)</b>	<b>Negative responses</b>	<b>Percentage (%)</b>
<b>D 1</b>	Effective use of assessment to make important decisions (Q 5.1).	103	85		
<b>D 2</b>	Manageability of assessment burden by the students (Q11 1.).	82	68		
<b>D 3</b>	Manageability of assessment within instructional time (Q10.2).	80	65		
<b>D 4</b>	Co-ordination of assessment activities to enhance practicality (Q10.3).	77	64		
<b>D 5</b>	Equal assessment opportunities to all lecturers.	91	75		
<b>D 6</b>	Equal access to assessment information (Q 13.1).	92	76		
<b>D 7</b>	Regular review of assessment of practices by individual departments (Q 17.1).			82	68
<b>D 8</b>	Systematic review of assessment practices by individual departments (Q 17.2).			83	69
<b>Average percentage (%) scores =</b> <b><math>\frac{\text{Total number of responses}}{\text{Number of aspects}}</math></b>		<b><math>\frac{433}{6} = 72\%</math></b>		<b><math>\frac{165}{2} = 83\%</math></b>	

According to the outcomes in Table 6.4, the average percentage score of 72 per cent of positive responses for the quality of assessment practices relating to administrative issues represents a very high score for good quality. This is an indication that the quality of assessment practices is good in the context of the effective use of assessment to make important decisions; manageable burden of assessment to students and within instructional time; coordination of assessment activities to enhance practicality; and equal assessment opportunities and access to assessment information. The weakness of the quality of assessment practices in respect of administrative issues seems to be the non-existence of regular and systematic review of assessment at a departmental level. The average percentage score of 83 per cent of negative responses is relatively high and it reflects the unsatisfactory quality of assessment practices relating to regular review of assessment of practices by individual departments, as well as

systematic review. It can be inferred that regular as well as systematic review of assessment practices is relatively minimal.

### 6.2.2.5 Collaboration in assessment (Category E)

The purpose of the three questions (**E 1 to E 3**) for Category E was to investigate the quality of assessment practices relating to collaboration in assessment of students in the higher education system of Lesotho (Appendix A). E1; E2 and E3 represent the quality aspects for Questions 15.1; 15.2 and 15.3, as indicated in Table 6.5. Question 15.1 specifically focused on the quality aspect of shared decisions by the lecturers and the students (E1); Question 15.2 addressed the aspect of shared decision-making by parents and lecturers (E2); and finally, Question 15.3 probed into the aspect of shared decision-making by the lecturers (E3). The quality aspects concerning the three questions have been classified as Category E, and there are only three quality aspects in this category (Table 6.5):

**Table 6.5: Quality aspects with regard to collaboration**

<b>E. Quality aspects of assessment practices with regard to collaboration</b>		<b>Negative responses</b>	<b>Percentage (%)</b>
<b>E1</b>	Shared decisions by the lecturers and the students (Q15.1).	55	48
<b>E2</b>	Shared decision-making by the lecturers (Q15.2).	95	87
<b>E3</b>	Shared decision-making by the lecturers (Q15.3).	84	69
<b>Average percentage (%) scores = <math>\frac{\text{Total number of responses}}{\text{Number of aspects}}</math></b>		<b><math>\frac{204}{3} = 68\%</math></b>	

The results in Table 6.5 indicate that the quality of assessment practices with regard to collaboration in the assessment of students in institutions of higher education in Lesotho, scored very high negative responses. The percentages for

negative responses are relatively high with regard to the aspects of shared decisions by the lecturers and the students (69%); and shared decision-making by parents and lecturers (87%). This is evidence that collaboration is limited in the assessment of students in institutions of higher education in Lesotho.

### **6.3 Use of alternative assessment (Part 3)**

The purpose of **Part 3** of the lecturers' questionnaire was to investigate the extent to which the lecturers use alternative assessment (Appendix A). The lecturers were requested to rate the extent to which they use alternative assessment tasks and types by using a Likert-scale (Appendix A). Similar to 6.2.2 the levels on the Likert-scale were described as follows: "very frequently" and "frequently" have been combined to represent positive responses. While "occasionally", "rarely", and "never" represent negative responses. The related questions were grouped together under two appropriate categories of "alternative assessment tasks" and "types of alternative assessment" (Appendix A). The categories of the alternative assessment tasks and types were clearly demarcated, hence the researcher found it unnecessary to use different designations for these categories. It must be noted that alternative tasks refer to the assigned work for the learners, while the types of alternative assessment entail the techniques of presenting the tasks to the learners.

#### **6.3.1 Implementation of alternative assessment tasks**

The purpose of subsection I of Part 3 of the lecturers' questionnaire was to investigate the extent to which alternative assessment tasks are used in the higher education system in Lesotho. The lecturers were requested to indicate how often they use the described alternative assessment tasks (Appendix A). Only the percentage scores for the outcomes of Questions 18.1 to 18.5 are shown in Table 6.6.

**Table 6.6: Implementation of alternative assessment tasks**

Use of alternative assessments tasks (Questions 18.1 to 18.5)		Very frequently	Frequently	Occasionally	Rarely	Never
		5	4	3	2	1
		Positive responses (%)		Negative responses (%)		
18.1	Clear policy guidelines for the use of alternative assessment.	8	11	21	30	22
18.2	Use of authentic (real) assessment.	8	10	27	36	19
18.3	Use of extended essay.	8	13	21	28	30
18.4	Use of performance assessment focusing on student actions.	5	16	4	23	17
18.5	Use of performance assessment focusing on student products.	6	19	36	24	15
<b>Average percentage (%) scores = <u>Total number of responses</u> Number of aspects</b>		<b><math>\frac{104}{5} = 21\%</math></b>		<b><math>\frac{353}{5} = 71\%</math></b>		

**Question 18.1: Clear policy guidelines for the use of alternative assessment**

The views of the lecturers on the existence of clear policy guidelines relating to the use of alternative assessment do not differ much. Of one hundred-and-twenty lecturers, 21 per cent think that the existence of clear policy guidelines is occasional, while 30 per cent of the lecturers think that this is rare. A considerable number of lecturers (22%) are of the opinion that the existence of clear policy guidelines for the use of alternative assessment do not exist in the higher education system. Very small groups of lecturers think that policy guidelines exist frequently (11%) and very frequently (8%). These results point to the policy gap that exists in respect of the implementation of alternative assessment in institutions of higher education in Lesotho.

**Question 18.2: Use of authentic (real) assessment tasks**

The largest number of the lecturers (34%) is of the opinion that authentic assessment is rarely used in the higher education system of Lesotho. Relatively

larger groups of lecturers are of the view that authentic assessment is occasionally (26%) and never (18%) used. The smallest groups of the lecturers indicate that authentic assessment is frequently (10%) and very frequently (7%) used. It is clear that authentic assessment tasks are rarely used.

### **Question 18.3: Use of alternative assessment tasks**

The use of alternative assessment tasks scored the highest number of negative responses. The indication is that alternative assessment tasks are rarely used. Most of the lecturers (30%) never use alternative assessment. A relatively bigger number of the lecturers (28%) indicate that the use of alternative assessment is rare, while 21 per cent of the lecturers use such tasks occasionally. Very small groups of the lecturers use alternative assessment tasks frequently (13%) and very frequently (8%). It is clear that the use of alternative assessment scored very low positive responses.

### **Question 18.4: Use of performance assessment focusing on student actions**

The largest number of the lecturers (40%) occasionally use alternative assessment tasks focusing on action. A relatively larger number of lecturers (23%) rarely use this type of assessment, while a group of 17 per cent never uses these tasks. Small groups of lecturers use alternative assessment frequently (16%) and very frequently (5%).

### **Question 18.5: Use of performance assessment focusing on assessment of a product**

Performance assessment focusing on student products are used occasionally (36%). The second largest group of lecturers (24%) indicated that they use this type of assessment rarely. Considerable numbers of lecturers (19%) employ performance assessment focusing on student products, while eighteen lecturers (15%) never use this type of assessment task. A relatively small group of lecturers (6%) indicated that this type of assessment task is used very frequently.



Generally, all the alternative assessment tasks scored more negative responses than positive responses. Despite the conflicting opinions, the following can be inferred: Existence of clear policy guidelines and the use of performance assessment focusing on student action, as well as authentic assessments is rare. Use of performance assessment focusing on student product is occasional and finally, extended essays are never used. The limited use of alternative assessment tasks confirms the problem of the study.

### **6.3.2 Implementation of alternative assessment techniques**

Subsection II of Part 3 of the lecturers' questionnaire investigated the extent to which alternative assessment is used in higher education by looking specifically into the use of different types of alternative assessment tasks. Questions 18.6 to 18.13 addressed the extent to which alternative assessment techniques are used, by requesting the respondents to indicate on a Likert-scale how often they use the provided types of techniques of alternative assessment (Appendix A). Table 6.7 presents the results for this category.

**Table 6.7: Use of alternative assessment techniques**

Use of alternative assessment techniques (Questions 18.6 to 18.13)		Very frequently	Frequently	Occasionally	Rarely	Never
		5	4	3	2	1
		Positive responses (%)		Negative responses (%)		
18.6	Use of students' own experiments	7	19	26	23	25
18.7	Use of student projects	7	26	48	11	8
18.8	Use of student portfolios	5	12	22	17	45
18.9	Use of student products	2	27	35	22	16
18.10	Assessment of a students performing an action	3	26	33	25	14
18.11	Assessment of demonstrations (exhibitions)	11	19	24	27	19
18.12	Assessment of field work	11	17	38	16	19
18.13	The assessment of extended essays	22	32	23	10	12
Average percentage (%) scores = <u>Total number of responses</u> Number of aspects		$\frac{246}{8} = 31\%$		$\frac{558}{8} = 70\%$		

**Question 18.6: Student's own experiments**

Only seven per cent (7%) of lecturers use assessment of student's own experiments very frequently, while 19 per cent use it frequently; 26 per cent use it occasionally, and 23 per cent use it rarely. Finally, 25 per cent of lecturers never use student experiments. It is clear that the use of assessment of student experiments is very limited and if used, it is occasional.

**Question 18.7: Student projects**

These type of assessment is used very frequently by lecturers (7%); 26 per cent of lecturers use them frequently and 48 per cent occasionally. Furthermore, 11 per cent use student projects rarely and 8 per cent never use this form of assessment. The inference can be made from this data that the use of project assessment is only occasional in institutions in Lesotho.

**Question 18.8: Assessment of student portfolios**

The largest percentage of the lecturers (45%) never use portfolio assessment, whereas 22 per cent indicated that they use it occasionally. A relatively larger percentage (17%) rarely uses this type of alternative assessment, while 12 per cent of the lecturers use portfolio assessment frequently, and 5 per cent very frequently. This is an indication of the limited use of portfolio assessment in institutions of higher education.

**Question 18.9: Assessment of student products**

The greatest number of lecturers (35%) use product assessment occasionally, while 27 per cent use it frequently; 22 per cent use it rarely, and smaller groups of lecturers never use it (16%) and use it very frequently (2%). It can be concluded that assessment of a product is also occasional.

**Question 18.10: Assessment of a student performing an action**

Most of the lecturers (33%) employ this type of alternative assessment occasionally, while 26 per cent use the assessment of student actions frequently and 25 per cent rarely. A group of 14 per cent of the lecturers never employ this type of alternative assessment, while only 3 per cent indicated that they use it very frequently. It is therefore evident that performance assessment is also only occasionally implemented.

**Question 18.11: Demonstrations (exhibitions)**

The highest percentage (27%) of lecturers rarely employ demonstration assessment, while 24 per cent of the respondents employ it occasionally. Two smaller groups of lecturers (each constituting 19%) frequently and never use this type of alternative assessment. Finally, only 11 per cent use it very frequently. It is concluded that the use of demonstration assessment is rare in institutions of higher education in Lesotho.

**Question 18.12: Assessment of fieldwork**

According to the results in Table 6.7, the largest number of lecturers indicated that they use fieldwork occasionally (38%), while 19 per cent never does. Relatively larger groups of lecturers (17% and 16% respectively) use assessment of fieldwork frequently and rarely. Finally, the smallest number of the lecturers (11%) indicated that they use fieldwork assessment very frequently. On the basis of this data, it can be concluded that the use of fieldwork assessment is only occasional.

**Question 18.13: Assessment of extended essays**

Extended essays as assessment techniques are very frequently (32%) and occasionally (23%) employed by the lecturers. A relatively large percentage of lecturers (22%) use extended essays frequently, whereas 12 per cent never use them, and 10 per cent rarely employ them. It can be inferred that this technique is frequently utilised. This is contrary to the information in 6.3.1, where it is indicated that the extended essay as an assessment task is never used.

Without condoning the varying views on the utilisation of alternative assessment techniques, it can be concluded that the utilisation of assessment techniques focusing on student experiments; student projects; assessment of products and assessment of performance of actions, as well as fieldwork assessment techniques seem to be only occasional. Portfolio assessment is never used, while assessment of demonstration (exhibitions) is rare. Extended essay assessment is frequently used, and it seems to be the most commonly used alternative assessment technique in institutions of higher education in Lesotho.

The overall evidence of the limited use of alternative assessment is exhibited by the low scores of the responses. The use of portfolio assessment is conspicuously scarce. This necessitates the need for systematic policy-driven use of alternative assessment.

### 6.3.3 Comparison of the use of alternative assessment types and tasks (Lecturers)

Pearson's correlation coefficient (correlation) is a number between +1 and -1. It measures the strength of the relationship between two variables (McBurney 1990:419). The purpose of correlation analysis was to establish the possible relationship between the use of assessment tasks (Q18.1 to 18.5) and the use of assessment techniques (Q18.6 to 18.13), as shown in the correlation table in Appendix H. A negative small value implies a very weak association between the uses of the two types of assessment. Table 6.8 was adapted from the table in Appendix H.

**Table 6.8: Correlation between tasks and techniques**

		TASKS (Q18.1-18.5)				
		18. 1	18. 2	18. 3	18.4	18.5
TECHNIQUES (Q 18.6 -18.13)	18.6	.529	.513	.406	.386	.422
	18.7	.047	.089	.114	.233	.284
	18.8	.444	.480	.319	.260	.275
	18.9	.290	.333	.215	.495	.474
	18.10	.293	.346	.095	.457	.362
	18.11	.324	.412	.345	.387	.333
	18.12	.369	.389	.284	.373	.325
	18.13	.190	.059	-0.13	.178	.063

Adapted from data sheet prepared by the Statistics Department UFS (Appendix H)

Table 6.8 shows the correlation between the use of alternative assessment tasks and techniques. The following low correlation coefficients can be observed between some assessment tasks and techniques:

**.013 between extended essay tasks (Q18.3) and the use of the extended essay technique (Q18.13).** This correlation indicates a very weak association between these two variables. This is contrary to expectations: a strong association would be expected between the two variables since the technique and the task are closely related. The technique is used to present the task.

**.047 between existence of policy (Q18.1) and student experiments (Q18.2).**

The weak association exists between these two variables. This is contrary to expectations because every assessment activity should be policy driven, thus there must be a stronger association between the policy and the use of student experiments.

**.063 between extended essays (Q18.13) and product assessment (Q18.5.)**

The low value of correlation indicates a weak association between these variables. It can be inferred that since product assessment is more of a performance assessment, while extended essay assessment is more of the paper and pencil type; the small value of coefficient correlation is expected between the two variables. The same exposition applies to the correlation value of **.059 between extended essays (Q18.13) and student experiments (Q18.2)** because in the assessment of experiments students perform actions.

Generally, relatively small values of correlation coefficients exhibit very weak relationships between the variables.

Furthermore, according to Table 6.8 higher correlation values are observed in the following:

**.529 between the use of students' own experiments as an assessment technique (Q18.6) and clear policy guidelines for the use of alternative assessment (Q18.1).** This correlation value shows a relatively closer relationship and it can be deduced that according to the policy, students' own experiments are also mostly implemented assessment practices (Table 6.8) in institutions of higher education in Lesotho. This finding may be greatly influenced by the fact that almost all institutions offer practical training and science inclined courses.

**.513 between the use of students' own experiments as a technique (Q 18.6) and the use of authentic (real) assessment tasks (Q18.2).** The relatively larger value indicate that students' experiments are mostly used as authentic assessment (Table 6.8). It may be argued that the greater association between use of students' experiments and use of authentic assessments stems from the fact that students experiments are indeed authentic in nature as reality is involved in experiments.

**.495 between the use of students' products as a technique (Q18.9) and the task of using performance assessment focusing on student action as tasks (Q18.4).** This is a relatively closer association between the two variables and it can be concluded that since product and action assessments are both performance assessments, the extent of their use should be almost equal or related (Table 6.8).

**.480 between the use of student portfolios as a technique (Q18.8) and the use of authentic (real) assessment tasks (Q18.2).** It can be inferred that the extent of the use of both portfolio assessment and authentic assessment indicates a close association (Table 6.8). Portfolio assessment exhibits a greater degree of authenticity.

**.474 between the use of student products as a technique (Q18.9) and the use of performance assessment focusing on assessment of a product as a task (Q18.5 ); and .457 between the use of the assessment technique where a student performs an action (Q18.10); as well as the use of assessment tasks where the student performs an action (Q18.4).** In line with expectations, the tasks in which students perform an action and create a product respectively, exhibit a relatively closer association to the techniques. All involve assessment in real contexts

What emerges from the correlation analysis in Table 6.8 is that there is a very weak association between the uses of most of the alternative assessment tasks and alternative assessment techniques. Most of the correlation values are less than +1 and greater than +0.1. This indicates a minimal relationship between the use of alternative assessment tasks and alternative assessment techniques. The correlation range is between -0.13 and .529.

The lecturers' questionnaire has uncovered that the quality of assessment practices is good in respect of policy issues. However, the following aspects need to be improved: provision of feedback within reasonable time; existence of a clear policy for staff development, except that there should be equity opportunities for capacity building in assessment; improvement of the quality of learning and content coverage in assessment; as well as administrative issues, except the aspects of regular systematic reviews of assessment practices by individual departments. The weakness in the quality of assessment practices is mostly exhibited by limited collaboration issues of the assessment practices.

There is clear evidence of a policy gap in respect of the use of alternative assessment in institutions of higher education in Lesotho. Common alternative assessment tasks include the use of performance assessment focusing on student products, despite the fact that there is a gap in the use of authentic (real) assessments. The most commonly used alternative assessment techniques include extended essays and students' projects, while student portfolios are only used to a limited extent. The correlation analysis further provides clear evidence that the use of alternative tasks and the use of alternative techniques do not influence each other. Where there is any association, it is very limited.

Data collected from the students' questionnaire are analysed and discussed next.

#### **6.4 Presentation, analysis and discussions of the data (students)**

The purpose of the student questionnaire was to collect data to investigate the way in which the students experience the quality of assessment practices and



the extent to which alternative assessment is employed to assess students in institutions of higher education in Lesotho (Appendix B). Similar procedures used for analysing the data from the lecturers will be followed in presenting and analysing the data from the students.

#### 6.4.1 Biographic information (Part 1)

Biographic information of students included information on the name of the student's institution, gender and subject area of the student. The aim the of biographic information is to know more about the students as participants of the study, and to arouse their interest in the study.

- **The names of the students' institutions**

Although the students were requested to name their institutions, for the ethical purpose of confidentiality the actual names of the institutions were not used. The institutions were named **A, B, C, D and E**. Despite the fact that the sample size of the students for each institution was determined as 120, not all the students in the sample responded (Table 5.3).

- **The gender of the students who participated in the study**

Of all the 357 students who responded to the questionnaires, 133 were males, while 224 were females, as indicated in Figure 6.5.

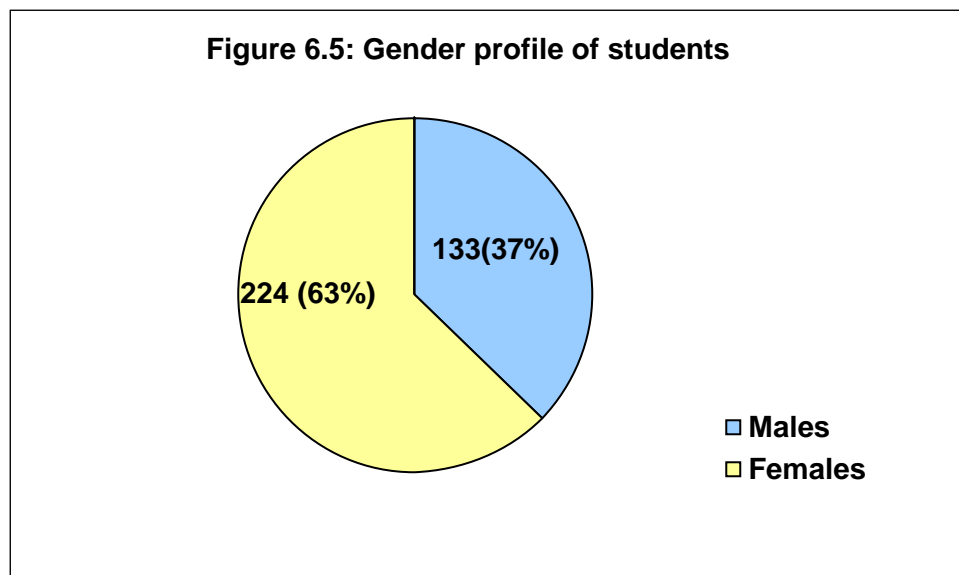


Figure 6.5 shows that of all the students who participated in the study, the 133 males constitute 37 per cent, while the 224 females constituted 63 per cent of the participants.

- **Subject areas of study for students who participated**

The students who participated, are enrolled in different subject areas. As a result of the diversity in nomenclature, the listing of the subject areas became so diverse that it was not easy to analyse the data in terms of subject areas. It was not possible to design definite groupings to represent almost all the subjects offered by the specific institution. Some subject areas included Bachelor of Commercial Studies, Bachelor of Science Education, Bachelor of Education, African Languages, Business Studies, Business Education, Religious Education and pure subject disciplines such as Sesotho, History, Social studies and others.

#### **6.4.2 Quality of assessment practices (students)**

The purpose of Part B was to determine the way in which students experienced the quality of assessment in institutions of higher education in Lesotho. The students were requested to use a four-point Likert-scale to rate the quality of assessment practices in their institutions (Appendix B).

Similar to 6.2.2 and 6.3 the responses of “strongly agree” and “agree” were considered as “agree”, while the responses for “disagree” and “strongly disagree” were presented as “disagree”. The aspects were grouped in the following categories: Category F: Quality aspects with regard to administrative issues, Category G: Quality aspects with regard to improvement of students’ learning; and category H: Quality aspects of assessment practices with regard to the practicality of student assessment. Similar to 6.2.2, the relevant designations of the aspects under each category were used.

##### **6.4.2.1 Perceptions (Category F)**

The questions in this category sought to reveal the quality of assessment practices with regard to administrative issues. These aspects are designated F1-

F5 in the order stated in the text and in Table 6.8. The following responses were recorded:

- Communication of specifications and expectations of assessment of students at the beginning of the course (F1): 246 responses (69%);
- clarity of assessment guidelines and expectations (F2): 227 responses (64%);
- redemption and procedures for appeal processes in assessment (F3): 220 (62%);
- provision of a second chance for reassessment in the case of failure (F4): 266 responses (75%); and
- a conducive environment for student assessment (F5): 210 responses (59%).

**Table 6.9: Quality aspects of assessment practices with regard to administrative issues**

<b>F. Students' experiences with regard to the quality of administrative issues</b>		<b>Positive responses</b>	<b>Percentage (%)</b>
<b>F1</b>	Communication of specifications and expectations of assessment to students at the beginning of the course (Q1.7).	246	69
<b>F2</b>	Clarity of assessment guidelines and expectations (Q4.18).	227	64
<b>F3</b>	Redemption and procedures for appeal processes in assessment (Q4.19).	220	62
<b>F4</b>	Provision of a second chance for re-assessment in the case of failure (Q4.20).	266	75
<b>F5</b>	Conducive environment for student assessment.	210	59
<b>Average percentage (%) scores = <math>\frac{\text{Total number of responses}}{\text{Number of aspects}}</math></b>		<b>599</b>	<b>75%</b>
		<b>8</b>	

The information presented in Table 6.9 shows clearly that the students in institutions of higher education in Lesotho are of the opinion that the quality of assessment practices with regard to administrative issues is good. All the scores of the quality aspects in the context of administration are positive and they range

between 57 per cent and 75 per cent, with an average percentage of 75 per cent. This indicates a relatively high quality. The above provides clear evidence that the quality of assessment practices in respect of administrative issues is good in institutions of higher education in Lesotho.

#### 6.4.2.2 The improvement of the quality of learning: Students (Category G)

This section addresses the analysis of the results on the quality of assessment practices with regard to the improvement of learning as experienced by the students (Table 6.9).

**Table 6.10: Improvement of the quality of learning (students)**

<b>G. Improvement of the quality of learning</b>		<b>Positive</b>	<b>Percentag</b>
		<b>(n)</b>	<b>(%)</b>
<b>G1</b>	Motivation of learning by assessment (Q4.1).	280	79
<b>G2</b>	Integration of assessment to instruction (Q4.2).	269	75
<b>G3</b>	The link between assessment and learning objectives (Q4.4).	291	82
<b>G4</b>	Promotion of self-reflection (Q4.6).	269	75
<b>G5</b>	Improvement of student progress (Q4.7).	301	84
<b>G6</b>	Deeper understanding of content (Q4.8).	268	75
<b>G7</b>	Encouraging active learning (Q4.9).	275	77
<b>G8</b>	G8 Informative feedback (Q4.10).	240	67
<b>G9</b>	Prompt feedback (Q4.11).	204	57
<b>G10</b>	Identification of students' strengths (Q4.12.)	246	69
<b>G11</b>	Identification of student's weaknesses (Q4.13).	223	63
<b>G12</b>	Provision of challenging cognitive abilities through assessment (Q4.16).	272	76
<b>Average percentage (%) scores = <math>\frac{\text{Total number of responses}}{\text{Number of aspects}}</math></b>		<b>879</b>	<b>73%</b>
		<b>12</b>	

The questions in category G sought to determine how the students experience the quality of assessment practices with regard to the improvement of the quality of learning, as stated in Table 6.10. The questions are designated G1-G12 as shown in Table 6.9. All the quality aspects in relation to the improvement of the quality of learning scored very high positive responses, ranging from 57 per cent to 84 per cent responses, with an average of 73 per cent. It is evident that the

quality of assessment practices with regard to improvement of learning in institutions of higher education in Lesotho is good.

#### 6.4.2.3 Practicality of assessment (Category H)

Data concerning the practicality of assessment practices is examined and discussed in this section. The quality aspects in category H are designated H1 to H5 (Table 6.10)

**Table 6.11: Practicality of assessment practices**

<b>H Practicality of assessment practices (Category H)</b>		<b>Positive responses</b>	<b>Percentage (%)</b>
<b>H1</b>	Fairness of assessment (Q4.3).	249	70
<b>H2</b>	Manageable load of assessment (Q4.5).	248	69
<b>H3</b>	Ability of students to work in a group (Q4.14).	280	78
<b>H4</b>	Ability of students to work independently (Q4.15).	243	68
<b>H5</b>	Conducive environment for assessment (Q4.21).	210	59
<b>Average percentage (%) scores =</b> $\frac{\text{Total number of responses}}{\text{Number of aspects}}$		$\frac{344}{5} = 69\%$	

The main focus of the questions in Category H (Table 6.11) was to establish how the students experience the quality of assessment practices related to practicality. The aspects and their scores are as follows:

- Fairness of assessment: 249 (70%);
- manageable load of assessment: 248 (69%);
- ability to work in a group: 280 (78%);
- ability to work independently: 243 (68%); and

- environment conducive to assessment: 210 (59%).

The results in Table 6.11 indicate that the quality of assessment practices relating to practicality of assessment is good. All the quality aspects in this category scored very high positive responses. The scores range between 59 per cent and 78 per cent, and the average percentage score is 69 per cent. It can be concluded that the quality of assessment practices in respect of the practicality of assessment is good.

#### **6.4.2.4 The use of alternative assessment (students)**

The purpose of Part C was to determine the extent to which students are assessed, using the provided types of alternative assessment in the higher education system of Lesotho. A four-point Likert-scale was also used for the results presented in this section (Appendix B and Table 6.12). Questions 5.1 to 5.9 focused specifically on the use of alternative types of assessment. The types of alternative assessment include students' own experiments; student projects; student portfolios; student performance of an action; demonstrations or exhibitions; fieldwork assessment; extended essays; and paper and pencil assessment in the higher education system of Lesotho.

**Table 6.12: Use of types of alternative assessment (students)**

Use of types of alternative assessment (Questions 5.1 to 5.9)		Always	Most of the time	Sometimes	Never
		4	3	2	1
		Positive responses (%)		Negative responses (%)	
Q5.1	Student's own experiments.	15	25	36	25
Q5.2	Student projects.	22	32	28	18
Q5.3	Student portfolios.	10	28	30	22
Q5.4	Student products.	16	27	28	30
Q5.5	Assessment of a student performing an action.	18	23	25	33
Q5.6	Demonstrations or exhibitions.	18	32	25	25
Q5.7	Fieldwork assessment.	20	31	29	20
Q5.8	Extended essays.	22	37	27	14
Q5.9	Paper and pencil assessments.	48	32	9	11
<b>Average percentage (%) scores =</b> <b><math>\frac{\text{Total number of responses}}{\text{Number of aspects}}</math></b>		<b><math>\frac{456}{9} = 51\%</math></b>		<b><math>\frac{435}{9} = 48\%</math></b>	

The information in Table 6.12 indicates that the quality of assessment practices relating to the use of alternative assessment is good. It is, however, also indicated that in the use of student portfolios and student products the quality is very limited. Both these questions scored the highest numbers of negative responses, whereas the use of paper and pencil assessment scored the highest positive responses. The majority of students (48%) indicated that they are always assessed through paper and pencil assessments, and this obtained the largest number of positive responses. It must be noted that the research problem of the study, which points to an overdependence on paper and pencil assessment and the limited use of alternative assessment is confirmed by the above results of the study (1.3). Furthermore, the following can be inferred:

- ❖ Assessment of students' projects, demonstrations or exhibitions, fieldwork assessment and assessment of extended essays are mostly used.
- ❖ Assessment of student's portfolios and students' own experiments are sometimes used.
- ❖ The use of product assessment and assessment of students performing actions is limited since most of the participants are of the view that these types of alternative assessment are never used.
- ❖ Paper and pencil assessments are the most commonly used type of alternative assessment.

The general conclusion is that paper and pencil assessments still dominate the use of other assessment techniques, and this confirms the problem of the research. The other types of assessment techniques are used minimally. These include assessment of student products, assessment of a student performing an action, portfolios, and others.

### **6.5 Comparison of the use of alternative assessment and paper and pencil assessment**

Similar to 6.3.3, information from Pearson's correlation table, provided by the Department of Statistics at the UFS, was extracted and used to analyse the data collected on the implementation of alternative assessment (Questions 5.1 to 5.9). The purpose of the correlation analysis was to compare the extent to which paper and pencil assessments are used with the use of alternative assessment, as indicated in Table 6.11. The correlation analysis further assisted to establish the extent to which the use of paper and pencil assessment is associated with the use of alternative assessment. Table 6.11 was extracted from the correlation table in Appendix I, in which various assessments were correlated.



**Table 6.13: Paper and pencil assessments and alternative assessment (students)**

Alternative assessment (Q5.1 to Q5.9)		Paper and pencil assessment (Q5.9)
Q5.1	Student's own experiments	.058
Q5.2	Student projects	.119
Q5.3	Student portfolios	-.013
Q5.4	Student products	.078
Q5.5	Students performing an action	.052
Q5.6	Demonstrations or exhibitions	.185
Q5.7	Fieldwork assessment	.185
Q5.8	Extended essays	.281
Q5.9	Paper and pencil assessment	1

The results in Table 6.13 show that the correlation between the use of alternative assessment and the use of paper and pencil assessments is very low, showing very weak association. Most of the correlations are very weak positive correlations, with the exception of the correlation value between the use of portfolio assessment (Q5.3) and paper and pencil assessment (Q5.9), which is very weak and negative (-.013). A negative small value implies a very weak association between the uses of paper and pencil assessments and portfolio assessments. In general, the correlation values between the use of paper and pencil assessments and the use of all other alternative assessment practices are very low; ranging between -.013 and .400.

What expires from the correlation analysis in Table 6.13 is that the use of paper and pencil assessments does not relate to the use of any of the alternative assessment practices. Most of the correlation values are less than +1 and greater than +0.1. This shows that there is a minimal relationship between the use of paper and pencil assessments and alternative assessment.

Generally, the students' questionnaire has uncovered that the quality of assessment is good in the following:

- Similar to the views of the lecturers, the students believe that the quality of assessment practices is good with regard to administrative issues and improvement of the quality of learning.
- Assessment of students is practical, meaning that it is sensible, realistic and valuable to the students.

Correlation analysis indicates that there is a limited relationship between paper and pencil assessments and alternative assessment practices (Table 6.13). The implication is that the use of paper and pencil assessments does not influence the use of any type of alternative assessment, and vice versa.

Qualitative data is presented and analysed next.

## **6.6 Presentation and analysis of qualitative data (interviews)**

Data in this section was collected by means of face-to-face interviews for their advantages (5.5.1).

The interview protocol contained three major questions. Before the interviews could start, the necessary introductions were made and requests were made to the interviewees to tape-record the interview process. The data collected from the interviews was subsequently transcribed. In analysing the qualitative data, the analysis and interpretation of data are closely interwoven and the data collection process may also be included. The most common procedures used in this study to analyse the collected data include data perusal and organisation, inductive and deductive reasoning (5.12.2). These procedures were employed and subsequently the data was categorised, compared and contrasted.

What emerges from the theoretical perspectives of the research methodology (5.12.2) is that the sub-processes of data analysis and presentation are interwoven, and as a result some of these processes were carried out simultaneously to analyse the qualitative data. The next section presents and analyses the data collected from the interviews.

### **6.6.1 Analysis of the interviews**

Since the study is predominantly quantitative in nature, with a small qualitative injection, the collected quantitative data was complimented with a small number of interviews to improve the validity on the results of the study (Babbie and Mouton 2001:369). The initial intention of the study was to conduct face-to-face interviews with five instructional leaders (one from each of the five selected institutions). Finally, only one instructional leader from each of three of the five selected institutions, was interviewed. The questions and sub-questions of the interview enabled the researcher to categorise the collected data into themes and sub-themes (6.5.3.1 to 6.5.3.2). The responses to the major questions of the face-to-face interviews and the subsequent sub-questions are presented in this section.

### **6.6.2 Interview questions**

As stated earlier, the study initially targeted to interview five instructional leaders. However, access to interview two leaders from the other two institutions was very difficult, due to a lack of co-operation.

Information was sought to answer the following major questions and sub-questions:

**Question one: What are opinions of the selected instructional leaders on the quality of assessment practices in the higher education system of Lesotho?**

- 1). Do any policy guidelines exist with regard to the use of alternative assessment?
- 2). What is your opinion on the quality of assessment practices?
- 3). What do you see as major quality aspects of assessment practices?

- 4). What do you see as major weaknesses of assessment practices?
- 5). What quality improvements would you recommend regarding assessment practices?

The major theme of this question enabled the researcher to further break it down into sub-themes for each of the five sub-questions as follows:

- Existence of a policy on the use of alternative assessment.
- Quality of assessment practices.
- Major quality aspects of assessment practices.
- Major weaknesses of assessment practices.
- Suggested quality improvements of assessment practices.

In the analysis of the data collected from the interviews, the following procedures will be followed:

- Presentation of the theme or sub-theme.
- Presentation of the question.
- Purpose of the question.
- Presentation of the responses of the participants in tabular form.
- Interpretation and discussions.
- Comments and/or recommendations.

Having presented all the questions and sub-questions, it is necessary to follow the procedures mentioned above question by question to enhance the logical presentation of the data.

The data for the first sub-themes, as part of the major theme on the views of the instructional leader, are presented, analysed and discussed next.

### 6.6.3 Views of instructional leaders on the quality of assessment practices

This section presents the opinions of the selected instructional leaders on the quality of assessment practices in institutions of higher education in Lesotho, on each of the sub-themes or sub-questions as outlined in 6.6.2, in response to Question one of the interview protocol. Each sub-theme or sub-question is presented and discussed.

The purpose of Question one was to determine the status quo of the quality of assessment practices in institutions of higher education in Lesotho, relating to each of the five sub-questions and questions.

- **Existence of a policy with regard to the use of alternative assessment**

**Question: Do any policy guidelines exist with regard to the use of alternative assessment?**

The researcher is of the opinion that policy guidelines are important to ensure that appropriate measures are employed and the right direction of action is followed. Shaw (1995:2) emphasises the need of policy guidelines to provide the right direction and to ensure that assessment practices conform to changing situations and the needs of the students, employers and other stakeholders.

The purpose of the first sub-question was to determine the existence of policy guidelines with regard to the use of alternative assessment in institutions of higher education in Lesotho. The responses are displayed in tabular form (Table 6.12) below.

**Table 6.14: Existence of policy guidelines**

<b>Existence of policy guidelines relating to the use of alternative assessment</b>		
<b>Participant 1</b>	<b>Participant 2</b>	<b>Participant 3</b>
"I am not aware if there is any."	"There is none to my knowledge."	"No! No! Not there."

The responses of the instructional leaders show clearly that there are no policy guidelines relating to the use of alternative assessment. What can be inferred from the responses, is that no policy guidelines exist with regard to the use of alternative assessment in institutions of higher education in Lesotho. One can assume that not being aware of any policy guidelines on the use of alternative assessment, clearly implies non-existence of such a policy. Furthermore, this policy gap clearly indicates that there is no central system monitoring the quality of assessment practices. The implication is that the responsibility of improving and maintaining the quality of assessment practices is in the hands of individual institutions. There is a need for a centrally coordinated policy and a well-established quality assurance system, more particularly with regard to the use of alternative assessment practices. Closely related to the existence (or non-existence) of a policy is the question of the status of the quality of assessment practices, which is addressed in the following paragraphs.

- **Quality of assessment practices**

The varying opinions of the participants in the study underline the controversial nature of the quality of assessment practices in institutions of higher education in Lesotho. The results of the research pertaining to the quality of assessment practices, are discussed in the following section:

**Question: What is your opinion on the quality of assessment practices?**

The status of the quality of assessment practices in institutions of higher education is one of the major themes of this study. In the researcher's point of view, only assessment practices of acceptable quality and/or standards can provide valid evidence of the capability of the students to compete efficiently in the world of work.

This sub-question was aimed at determining the status quo of the quality of assessment practices. The instructional leaders were required to express their

views on the quality of assessment practices in their institutions. The responses are depicted in Table 6.15.

**Table 6.15: Quality of assessment practices**

<b>Quality of assessment practices (QAP)</b>		
<b>Participant 1</b>	<b>Participant 2</b>	<b>Participant 3</b>
“Quality of tests and examinations vary with individuals. Some lecturers set very good examinations, while some set faulty examinations.....There is a concern from the external examiners about the quality of some of the examination papers.”	“The quality is good but examinations need to be supplemented with practical assessment to cater for students’ differences. Group projects are possible because students are too many”.	Not very good, in many cases lecturers use past papers continuously, it is content-based and the curriculum is exam-based .There is always a race to catch up with the syllabus.

Table 6.15 Indicates that there are contradictions and similarities of opinions about the status of the quality of assessment practices.

What emerges from the presented data in Table 6.15 is that there are various views with regard to the quality of assessment practices, and more particularly relating to the construction of tests and examinations. It seems that there is no consistency in the quality of assessment practices regarding tests and examinations. This clearly indicates the need for staff development on the construction of high quality assessment practices. Regular staff development is necessary to equip the lecturers with the required skills and knowledge to assess the students. The researcher is of the opinion that consistency is one of the best indicators of high quality, and should thus be maintained. Bowering-Carr and West-Burnham (1993:25) point to the importance of consistency across all the faculties to improve the quality of assessment practices, as well as team spirit (2.7.1). The participants in the study also revealed that, according to the external examiners’ reports, there is a concern about the quality of examinations.

It is evident from the participants’ responses, that there are conflicting opinions about the quality of assessment practices; some participants are of the opinion

that the assessment practices in institutions of higher education in Lesotho are somehow good, while some think that they are not very good. It is further stated that examinations are largely content-based and the curriculum is examination-based. Furthermore, it was alleged that some of the lecturers always rush when teaching to cover the syllabus, while some continuously depend on the use of past examination papers. The implication is that assessment directs the curriculum and instruction, and as a result, learning becomes superficial. This is in agreement with Greaney (1992:9) and Mitchell (in Hart 1994:7) who emphasise the academic destruction of paper and pencil assessment (4.2.6). It is recommended that examinations be supplemented with more practical assessment methods to cater for the students' differences. The implication may be that some students perform well in practical assessment while others perform well in examinations.

A strong wish to employ alternative assessment was also expressed, but it was pointed out that large student numbers and a lack of adequate resources only allow for group projects rather than individual projects. This finding coincides well with the literature review on the effects of massification on the quality of higher education. Lemmer (1999:185) is of the view that massification may lower the standards of academic results (2.3.6). This indicates that the quality of assessment practices remains a debatable issue in institutions of higher education. The responses of the qualitative investigation further reveal the need for a well-established quality assurance system in the assessment of students' achievements in higher education in Lesotho.

- **Major quality aspects of assessment practices**

This subsection presents the responses on the major quality aspects of assessment practices in institutions of higher education in Lesotho.

**Question: What do you see as major quality aspects of assessment practices?**



Aspects of quality are very useful in the assessment of the quality of a phenomenon. They may be used as assessment criteria to inform judgement and as policy guidelines. These aspects are closely related to client satisfaction and requirements and thus reveal the extent to which stakeholders, such as instructional leaders, are satisfied with the quality of assessment practices in institutions of higher education in Lesotho. This question was asked with the intention of identifying the quality attributes of assessment practices in the above-mentioned institutions. Table 6.16 displays the responses of the participants with regard to the question.

**Table 6.16: Major quality aspects of assessment practices**

<b>Major quality aspect(s) (MQA)</b>		
<b>Participant 1</b>	<b>Participant 2</b>	<b>Participant 3</b>
“In our institution, we have started internal moderation of tests and examinations. Lecturers are also encouraged to use alternative assessments by the management. Some lecturers follow the advice and use assessments such as oral presentation and oral examinations. I myself use class presentations.”	“Somehow good up to a certain degree, the assessment of students prepares them for work And students learn more on the work.”	“Our assessment encourages practical work because it incorporates assessment of practical work.”

The responses of the participants reveal that the primary quality aspects of assessment practices in institutions of higher education include the following:

- ❖ Internal moderation of tests and examinations is highly commended by the researcher. Jonathan (2000:45, 48) comments that moderation is the commonly used quality assurance mechanism in institutions of higher education with the purpose of re-examining the assessment and the assessed work of the students (3.8.4).
- ❖ Although alternative assessment is generally used on an *ad hoc* basis, the use of alternative assessment practices such as oral presentations, oral examinations, class presentations and assessment of practical work are

highly commended. However, appropriate policy guidelines are necessary to adopt a course action for the implementation of alternative assessment in institutions of higher education in Lesotho.

- ❖ Ability of assessment practices to prepare students for the world of work and to enable them to adapt and learn on the job as new changes appear. According to the Ministry of Education Strategic Plan (2004-2015) the mission statement of one of the selected institutions of higher education in Lesotho is to equip the graduates with skills that will make them more adaptive in life (Ministry of Education Strategic Plan 2004-2015).
- ❖ Assessment incorporates assessment of practical work. This quality aspect is supported by Kellaghan and Greaney (1992:65), when they suggest that the quality of examination systems may be improved by including the use of other methods of assessment such as practical examinations (4.1).

According to the responses of the participants on the quality aspects of assessment practices, it can be proposed that the existing policy gap relating to the use of alternative assessment be closed through the formulation of appropriate policy guidelines to direct the systematic utilisation of alternative assessment.

- **Major weaknesses of assessment practices**

The major weaknesses of assessment practices in institutions of higher education in Lesotho are identified and presented next.

**Question: What do you see as major weaknesses of assessment practices?**

Identification of weaknesses or problems is beneficial to quality improvement processes. Juran in Arcaro (1995:17) advise that problems are friends, since

identification of problems triggers response mechanisms to find solutions and preventative measures with the sole purpose of improving quality in education (2.6.7). In line with this notion, the above question intended to identify the major weaknesses of the assessment practices in institutions of higher education in Lesotho. Table 6.17 illustrates the responses of the participants.

**Table 6.17: Major weaknesses of assessment practices**

Major weaknesses(MW)		
Participant 1	Participant 2	Participant 3
“There is limited supervision of all the activities of preparing for examinations such as construction of questions. Lack of policy is also one of the weaknesses of assessments.”	“Assessment is theory–based, it is not sufficient due to high student-lecturer ratio. The student numbers are just too high. “There are not enough resources.”	“There are financial constraints for students’ projects; we end up depending only on simple plot projects for growing vegetables. There is always not enough money to buy plant hormones and other necessary chemicals.”

What emerges from the responses of the participants in Table 6.17 is that the major weaknesses of assessment practices are inter alia:

- ❖ Lack of policy with regard to the use of alternative assessment practices. Kruger and Van Schalkwyk (1997:49) emphasise that the role of a policy is to provide guidelines for every activity and behaviour (231).
- ❖ Theory-based assessment or content-based assessment refer to the criticised content-driven pencil and paper assessments or traditional methods of assessment (5.1).
- ❖ Insufficient assessment of students due to the high student-lecturer ratio. *Evidence to Enquiry into HE* ([http://www.qaa.ac.uk./about\\_quad/evidence.hum](http://www.qaa.ac.uk./about_quad/evidence.hum)) points to the negative impact of the massification of higher education on assessment and the way in which this results in superficial assessment and other instructional activities (1.1.2.4)

- ❖ Financial constraints that restrict the availability of adequate resources for the use of alternative assessment practices. Biggs (1999:preface) warns that the cost of higher education is increasing alarmingly and that the current pressure in assessment and learning is to find more cost-effective ways of assessment in higher education, while still maintaining standards (3.5.11).

- **Suggested quality improvements of assessment practices**

**Question: What quality improvement measures would you recommend regarding assessment practices?**

The purpose of this question was to probe into the suggestions of the selected instructional leaders on possible ways of improving the quality of assessment practices in institutions of higher education in Lesotho. This information may become extremely important in the formulation of policy guidelines and criteria for the quality of assessment practices in institutions of higher education in Lesotho. Table 6.18 presents the responses of the participants.

**Table 6.18: Suggested quality improvements**

<b>Suggested quality improvements (SQI)</b>		
<b>Participant 1</b>	<b>Participant 2</b>	<b>Participant 3</b>
“Policy should be formulated and implemented. To make checks to ensure that the policy is implemented at departmental level. The heads of department to make the checks and also ensure that internal moderation is executed.”	More practical aspect is necessary in assessing the students. More manpower such as subject tutor and assessors. Learning resources are also necessary. Students to be attached. Establishment of quality assurance department. Module system to alleviate the problem of large numbers. Module system is suitable for large and small numbers of students and it enhances focus and depth.”	Need for financial support for students’ projects so that chemicals such as hormones, pesticides and other equipment may be bought. Need to budget for students’ projects.

The views of the participants differ on the way in which the quality of assessment practices may be improved. However, the following suggestions emerged as recommendations for the improvement of the quality of assessment practices:

- ❖ Formulation and implementation of a policy for quality improvement and enhancement in assessment practices.
- ❖ Instructional leaders at department level should take initiatives to ensure that appropriate strategies are followed in executing internal moderation of assessment practices.
- ❖ Increased utilisation of practical assessment and an adequate supply of instructional resources, as well as human resource, are necessary.
- ❖ Students should be attached to workplaces; this also suggests the formulation of appropriate follow-up activities to assist in the production and development of adaptive graduates of higher education.
- ❖ Quality assurance system in assessment practices. This can ensure that the product (graduates) of higher education satisfies all the stakeholders.
- ❖ Adoption of modular programs may assist to alleviate the problem of superficial instruction and assessment, which results from increasing large numbers of students. The viewpoint is that the modular approach enhances focus and depth in instruction.
- ❖ Viable financial support and the need to stick to the budgets are necessary to supply the appropriate resources on a continuous basis.
- ❖ Consensus of all the stakeholders on the quality criteria of assessment is imperative.

#### **6.6.4 Lesotho government initiatives to improve the quality of assessment practices**

Biggs (1999: Preface) points out that governments and funding bodies are demanding sound quality assurance systems for all the processes and activities (3.5.11). The researcher is of the view that the government of Lesotho, through the Ministry of Education (MOET): Higher Education Sector, has an important

role to play in improving and maintaining the quality of assessment practices to facilitate continuous quality improvement accountability.

**Question: What are the Lesotho government’s initiatives to improve the quality of assessment practices?**

The purpose of this question was to determine the Lesotho government’s initiatives to improve the quality of assessment of student achievements in institutions of higher education in Lesotho.

**Table 6.19: Initiatives to improve the quality of assessment practices**

Initiatives to improve the quality of assessment practices		
Participant 1	Participant 2	Participant 3
“There is not much government involvement in assessment of students. I am not sure whether the strategic plan for higher education has been implemented yet.”	“There is no ownership, no accountability and they do not show much commitment; it is like the product is not theirs.” There is also lack of monitoring system, they need to establish department of quality assurance.”	“There is very little involvement of the government in assessment of students. The government involvement is limited to other administration issues only.”

What emerges from these responses of the participants in Table 6.14 is that there is a general agreement that involvement of the Lesotho government in matters concerning assessment of students is very limited. The ownership, accountability and commitment of the government are not clearly demarcated and exhibited; moreover, it is not clear if any monitoring system with regard to assessment of student achievement exists. According to the responses of the research it seems that it is also not clear if the good intentions of the Ministry of Education outlined in the strategic plan (2004-2005) have been implemented. This suggests a dire need to establish quality assurance systems, both at institutional and national level. Close monitoring of assessment practices through sound government controlled quality assurance strategies are necessary to improve and maintain quality in higher education. Lello (1993:43) points to the importance of accountability (2.3.2). He emphasises that accountability has

become the heart of reform and control for the role it plays in improving and maintaining the quality of education. Scott (1994:48) confirms that accountability is closely related to quality control in education systems (2.3.2). The vital role that the Lesotho government should play in quality assurance initiatives in the higher education system, is emphasised.

Without condoning the conflicting views of the participants in the study, both the theoretical perspectives and the empirical investigation in this study show similarities between the viewpoints. According to theoretical perspectives it is very expensive to implement alternative assessment strategies to assess students (2.6.4, 2.6.6.2, 2.7.7, 3.1, 4.2 & 4.2.2). This is confirmed by the empirical data (6.6.3). The successful implementation of alternative assessment depends greatly on adequate resources as well as necessary expertise in assessment of student achievements. Lesotho is a third world country hence the use of alternative assessment is a controversy in the existing socio-economic status of the country. Cost effective ways that can enhance incorporation of alternative assessment strategies is a challenge for institutions of higher education in Lesotho. The question of how to implement alternative assessment strategies successfully within the socio-economic context of Lesotho remains to be answered.

The other controversy is how to assess masses of students with limited resources in (1.2.3.4, 3.5.8, 6.6.3). There is also congruence of theoretical data and empirical data with regard to the impact of mass education on the quality of assessment in higher education systems world wide. The problem seems to be even more challenging with implementation of alternative assessment strategies in Lesotho.

The global problem of over dependence on the use of paper and pencil assessment in most of the institutions of higher education in third world countries and other environments where facilities are limited is also corroborated by both

empirical and theoretical data (2.6.4 & 6.4.2.4). The findings of this study confirm this recurring problem in institutions of higher education in Lesotho (6.4.2.4).

The most intriguing issue is the confirmation of the notion that quality is perceived differently in different contexts. Despite very limited use of alternative assessment, empirical data indicates that the quality of assessment practices in Lesotho is generally good while according to international perspective this may be debatable. Globalisation demands high standards of assessment practices and there is an increasing call to move more towards alternative assessments..

However, despite conflicting views the quality of assessment practices is The quality of assessment practices is relatively satisfactory despite the existing gap in the use of alternative assessment. Ways for the continuous improvement and maintenance of the quality of assessment practices should be found so that the deficiencies in the quality of assessment practices are addressed. The government of Lesotho, through the Ministry of Education (Higher Education Sector), should introduce a framework and networking strategies for a quality assurance system in higher education in this country.

## **6.7 Conclusion**

This chapter presented, analysed, interpreted and discussed the data from the lecturers' questionnaire, the students' questionnaire and the face-face interviews conducted with three instructional leaders from three of the selected institutions of higher education in Lesotho. Quantitative means of analysing the data, as well as qualitative means were applied. The results of the theoretical research were also analysed and discussed. Data collected through the questionnaires and the interviews were organised and categorised under relevant themes and/or the objectives of the study. Finally, interpretations and deductions were made on the basis of presented data.



The next chapter presents a summary, conclusions and recommendations made on the basis of the findings of the theoretical research, as well as the empirical research.

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS OF THE STUDY**

#### **7.1 Introduction**

A presentation of the conclusions on the findings of the study involves the background, the questions, the way in which the findings were investigated, the obtained results, and the explanation of the results (Gillham 2002:86). This chapter thus seeks to present and discuss the summary, conclusions, recommendations and the limitations of the study (Gillham 2002:86). The chapter is also about the evaluation of the research process (1.7.4; 5.10). In research the last chapter is necessary to state the conclusions, based on the findings of the study and to consider whether the questions of the research (5.10) have been answered (Creswell1994:149; Leedy and Ormrod 2005:158). For this study, the findings, deductions and inferences, including the recommendations and conclusions were made on the basis of the collected data (resultson the investigation of the quality of assessment practices and the use of alternative assessment in the higher education system in Lesotho (Chapters 6 and 7).

In the following section presents a summary of the investigation on the quality of assessment practices and the extent to which alternative assessment is utilised in institutions of higher education in Lesotho.

##### **7.1.1 Problem of the study**

Restatement of the problem is a vital issue in evaluating the research to determine whether the questions of the research have been answered (Gay and Airasian 2003:532). Despite the international call to move away from traditional ways of assessing student achievement, an excessive and continuing overdependence of assessment practices on paper and pencil tests and

examinations, persists in institutions of higher education in Lesotho. Assessment practices in higher learning are often limited to paper and pencil tests, as a result, traditional assessment dominates other techniques and approaches to assessment, and little recognition is given to the use of alternative assessment practices. This is reflected when the weight of assigned tasks and coursework is often less than that of examination.

### **7.1.2 Research questions**

Literature review, questionnaires and face-to-face interviews were employed to seek answers to the questions of the study. The following major questions emerged from the stated problem and guided this study to answer the research question. The major questions inquired into the following:

- Theoretical perspectives on quality in education (Chapter 2), assessment of student achievement (Chapter 3), and the use of alternative assessment (Chapter 4).
- The existence of clear policy guidelines on the assessment of student achievement (1).
- The lecturers' and students' perceptions on the quality of the practices of the assessment of student achievement in higher education in Lesotho ( Appendices A and B).
- The extent to which alternative assessment practices are utilised in the assessment of student achievement in institutions of higher education in Lesotho (1; Appendices A and B).
- Lesotho government's initiatives to improve the quality of assessment of student achievement in higher education in Lesotho (Appendices C and G).
- Possibilities for improvement of assessment practices and the use of alternative assessment in the higher education system in Lesotho (1)

### **7.1.3 Purpose of the study**

Given this background of the problem of the study, the research aimed at investigating the quality of assessment practices and the extent to which alternative assessment practices are utilised in the assessment of student achievement. The study also probed into possible quality improvements of current assessment practices in higher education institutions in Lesotho.

To achieve this purpose, the following objectives directed the study:

- Search of relevant theoretical perspectives on quality issues in education, with specific focus on the quality of practices of assessment and the use of alternative assessment in higher education.
- Investigating the existence of clear policy guidelines on the assessment of student achievement in higher education in Lesotho.
- Conducting research to determine lecturers' perceptions on the quality of assessment practices, the experience of students on the quality of assessment practices, as well as the extent to which alternative assessment practices are utilised in higher education in Lesotho.
- Determination of the initiatives of the Lesotho government to improve the quality of the assessment of student achievement in higher education in Lesotho.
- Making recommendations on the basis of the findings of the study to determine how the quality of assessment practices can be improved, as well as the way in which the best alternative assessment practices may be used in the context of the institutions of higher education in Lesotho.

### **7.1.4 Research methods used in the study**

A literature search was conducted to provide the background to the study. A multi-method approach, which is largely quantitative with an injection of qualitative methods, was used to improve the quality of the study (Chapter 5). An empirical investigation; questionnaires for students and lecturers were used to

collect data on the quality of assessment practices and the extent to which alternative assessment is used in institutions of higher education in Lesotho. Finally, face-to-face interviews were used to obtain first-hand information on the initiatives of the Lesotho government to improve the quality of assessment practices in institutions of higher education in this country.

### **7.1.5 Limitations of the study**

Limitations are conditions beyond the control of the researcher that may restrict the conclusions of the study and their application to other situations (Best and Kahn 2003:37). Several limitations were acknowledged and identified as potential weaknesses of the study (Creswell1994:113). The weaknesses of this study emerge from the following aspects:

- The study is limited to higher education in Lesotho only. This education sector comprises of post secondary education (tertiary education), which includes colleges and one university. Only five institutions of higher education in Lesotho were involved in the study. Institutions A, B, D and E are all found in Maseru city, except Institution C, which is situated about thirty kilometers north-west of Maseru. All these may have a negative impact on the generalisability of the results.
- Convenience sampling and cluster sampling are not representative of all the participants in the research area. The students and the lecturers in higher education institutions of Lesotho as the populations under study were too large for proportional sampling techniques. Cluster sampling also encounters errors at every sampling stage. Each of the selected institutions of higher education had unique problems such as time tabling problems, teaching practice, semesterisation and student riots. Some lecturers in other institutions were engaged in teaching practice when the data for this study was collected. The administering and collection of the questionnaires had to be re-scheduled.

- Data collection was carried out when some students were preparing for the end of year/semester examinations. This may have resulted in a situation where the students responded to the questionnaire whilst they were not relaxed. As a result, extended time was given for students to complete the questionnaire. This delayed the process of data collection and processing. It took about six months to collect the quantitative data of this study.
- Some lecturers were not quite conversant with the technical language on alternative assessment and some related issues, and as a result they did not participate as a result the external coder for qualitative data could not be found. This also delayed the process of data collection and processing.
- The initial intention was to interview education officers in the tertiary sector of the Ministry of Education. However, due to failure to obtain access to the officers the researcher had to change the intention and interviewed instructional leaders from the selected institutions (deans and heads of departments). This delayed the processes of data collection and analysis.
- Part-time study exposed the researcher to adverse situations such as insufficient resources, including the lack of electricity. This added to the obstacles that restricted the timely completion of the study as planned and the failure to access services of external decoder for qualitative data.
- There are growing interest in research into the quality of assessment of students' achievements in higher education and the increasing shift towards information age globally. As a result, the time lag during the process of data collection for this study caused by the re-scheduling of the process extension of time for students also added to the major weaknesses of this study with regard to limited reference to recent texts and insight into current opinions and issues of assessment in institutions of higher education.

The general opinion is that no study is without problems and weaknesses. What is necessary is to acknowledge these weaknesses in respect of the

generalisability of the results of the study. Having presented the limitations of this study, it is also imperative to summarise all the discussions in this thesis in the next section.

## **7.2 Conclusions of the study**

The conclusions of this study are presented on the basis of the theoretical and empirical findings. It must be noted that since the conclusions are made against the background of the findings of this study, the two aspects merge in some sections of Chapters 6 and 7.

### **7.2.1 Conclusions based on the findings of the literature research**

The aim of the literature study in this research was to highlight theoretical perspectives on quality in education, and more specifically to focus on the quality of assessment practices, as well as the use of alternative assessment in the higher education system of Lesotho.

#### **7.2.1.1 Conclusions on quality in educational systems and processes (Chapter 2)**

The literature research on quality in educational systems and processes (Chapter 2) reveals the following:

- The problem of the poor quality of higher education and its activities and processes, such as the assessment of student achievement, is a global phenomenon. Institutions are accountable to a variety of stakeholders (2.3), who always demand high quality in education.
- History shows that the idea of quality was adopted from industry and commerce and that it is widely applied in education systems and processes (2.4). The definition of quality is multi-dimensional, however; the core definition is fitness for purpose (2.2.) and it changes with context, purpose, students' needs and stakeholder perception (2.2)
- There are always driving forces that are involved in a move towards quality enhancement, improvement, maintenance and assurance (2.3).

- Quality theories that guide the implementation of quality assurance systems, with the purpose of maintaining and continuously improving quality in a systematic way, exist as indicated in Chapter two (2.5.3.1). The literature also indicates that some of the ideas emanating from these theories, were integrated to develop the theory of total quality (2.5.3.1).
- Total quality implies that the implementation of a quality assurance system should be an institution-wide process (2.5.5.5). Quality hallmarks in implementing a quality assurance system should be considered (2.2.7). However, there are always problems or stumbling blocks in the implementation of quality assurance systems (2.6.7). These systems have both advantages and disadvantages (2.6.8).

#### **7.2.1.2 Conclusions on the quality of assessment practices in higher education (Chapter 3)**

Based on the literature review of the quality of assessment practices in higher education (Chapter 3), the following findings can be identified:

- Assessment should be a systematic process of collecting information, making inferences about the learning and development of students, and using the collected information to increase student learning and development. The purposes and uses of assessment are closely related (3.3.2). For example, the data collected on assessment with the purpose of selecting students for a new program, may be used to select the students for the particular program.
- Assessment practices are currently undergoing a paradigm shift (Tables 3.1 and 3.2). As such, assessment practices have become more formative than summative, more judgemental rather than statistical, more holistic rather than incremental, and building more on strengths rather than identifying weaknesses (3.4). This implies that assessment practices should be reviewed regularly and systematically to match emerging issues and changing contexts in higher education.



- Challenging and problematic issues in the assessment of student achievement in higher education include a mission statement, a vision for the future, standards, transformation, and others (3.5).
- Principles that guide the improvement and enhancement of the quality of assessment practices in higher education apply (3.6). These include a policy in the planning and design of assessment practices, matching assessment practices to educational objectives, integrating assessment with instruction, appropriateness of assessment methods and techniques.
- The multidimensional nature of the definition of quality is a taunting challenge. However, in the context of assessment practices, fitness of the purpose of assessment practices is a core quality aspect. This entails fulfillment of students' requirements, expectations, and needs and/ or desires (3.7.1).
- Indicators of the quality of assessment practices include coherence across the department or faculty, employing a range of techniques, being subject to quality assurance procedures, policy guidelines and comparison or benchmarking (3.7.2).
- Quality assurance practices in assessment are procedural and they include defining quality assurance in assessment practices; policy formulation and planning; specification of standards and expectations; moderation in assessment practices; validation of assessment practices; and accreditation (3.8).

#### **7.2.1.3 Conclusions on the use of alternative assessment in higher education (Chapter 4)**

- Alternative assessment entails a range of assessment methods and techniques designed to take the place of, or to supplement standardised traditional tests in which students actually perform, demonstrate, construct

- and develop a product or a solution to a problem under defined conditions and standards in a real situation (4.3).
- Alternative assessment practices are characterised by meaningful and challenging assessment tasks; students performing; creating; producing, or doing something that requires higher-level thinking or problem solving skills; tasks that are set in a real context, focusing on complex processes and behaviour; criteria and standards for performance that are public and known in advance; multiple approaches to problem solutions; and others (4.3.3).
  - The drive for the use of alternative assessment arises from calls for accountability; current instructional and assessment theories such as constructivism; multiple approach assessment, workforce demands, the demands from industry and business and the need for contextualisation of assessment (4.3.3). Different types of alternative assessment practices include project assessment; on-demand tasks; demonstrations and exhibitions; oral presentations; portfolio assessment; and others (4.3.4).
  - Alternative assessment practices have some advantages, such as socially situated assessment in which knowledge is constructed socially by social working groups; the development of self-reflection skills by which individual students judge their own work; bringing authenticity to the classroom since alternative assessment presents students with tasks that simulate real world challenges and problems (4.3.6).
  - The disadvantages of alternative assessment include inadequate resources; low reliability, which always results from inconsistency in scoring; a limited number of tasks that are recurrently prepared; and others (4.3.7).
  - High quality alternative assessment practices are guided by principles such as performance tasks that yield multiple solutions; predetermined criteria that are liable to criticism and some degree of uncertainty so that not everything about the task is known (4.3.8).

- Use of a portfolio may improve and enhance the quality of the assessment of student achievement (4.3.9). The benefits of using portfolio assessment include individual development and improvement of the quality of instruction as well as enhanced curriculum fidelity (4.3.10).
- Alternative assessment practices synchronise very well with current innovative theories, such as constructivism (4.3.10.1), the theory of learning styles (4.3.10.2), and Howard Gardner’s theory of multiple intelligences (4.3.10.3).

## **7.2.2 Conclusions on the findings of the empirical research**

This section provides conclusions on the findings from the empirical research. The study investigated the quality of assessment practices, the extent to which alternative assessment is used in institutions of higher education in Lesotho, as well as the initiatives of the Lesotho government to improve the quality of these practices. The findings from the empirical research entail the findings from the lecturers’ and the students’ questionnaires, as well as the interviews of the three instructional leaders from the higher education sector.

### **7.2.2.1 Conclusions on the findings of the lecturers’ questionnaire**

The conclusions on the findings from the lecturers’ questionnaires are presented below.

#### **A. Quality of assessment practices in institutions of higher education in Lesotho**

- **The quality of assessment practices relating to policy issues is positive**  
This is reflected by aspects such as clear policy guidelines for all the activities of the assessment of student achievement; meaningfulness of assessment tasks; relevance of assessment to the day-to-day problems of students; provision of informative feedback; extent to which adequate feedback is provided; provision of opportunities for students to make appeals; and the

existence of opportunities for every lecturer to build capacity. James (1995:45) points to the importance of the clear vision of an assessment policy as a top priority in high quality assessment practices. However, the quality of assessment practices in respect of the provision of feedback within reasonable time; and the existence of a clear policy for staff development, is not satisfactory. Sound ways should be found to close the gap with regard to the provision of feedback within reasonable time and the formulation of policy guidelines for staff development in the assessment of students. This is in agreement with the opinion of Ashcroft (1995:118) who asserts that timeliness in providing feedback to student is crucial for development and self-improvement. Moreover, Ashcroft (1995:119) warns that staff development is necessary to improve the reliability and the validity of assessment practices.

- **The quality of assessment practices with regard to the improvement of learning** is satisfactory in all the provided quality aspects. These include the following: The match between student assessment and the program objectives; fitness of assessment practices to the purpose; the consistency of assessment practices if repeated and the appropriateness of assessment instruments to what is tested; the fairness of assessment practices with regard to communication of expectations of assessment to students at the beginning of the program; the match between assessment methods and assessment tasks; consistency of assessment practices with recent developments in assessment; the focus of assessment on skills and their transferability; the achievement of program objectives; as well as the capability of the assessment to encourage active learning. The implication is that best practices must be sought and found to maintain and enhance this standard for continuous quality improvement.
  
- **The quality of assessment practices with regard to the quality of content coverage** is quite good, and includes the following aspects: Sufficient content coverage; representativeness of important components of curriculum in

assessment; representativeness of current subject perspectives; focus of assessment on skills and their transferability; and coverage of high-order cognitive skills in assessment. Systematic and ongoing capacity-building, supported by sound policy guidelines in relation to staff development may greatly enhance and maintain the quality of assessment practices in this context.

- **The quality of assessment practices with regard to administrative issues is satisfactory**

Quality aspects relating to administrative issues include the effective use of assessment to make important decisions; manageability of assessment within instructional time; manageability of the assessment burden by the students; coordination of assessment activities to enhance practicality; equal assessment opportunities to all students; as well as regular and systematic review of assessment practices by individual departments. The status of the quality of assessment practices necessitates a strong support of clear policy formulation and implementation to maintain standards.

- **The quality of assessment practices with regard to issues of collaboration** in assessment is minimal in institutions of higher education in Lesotho. This is exhibited in the following aspects: shared decisions by lecturers and students; shared decision-making by parents and lecturers and finally, shared decision-making by the lecturers. There is an inevitable gap in collaboration in assessment practices. This may lead to unsystematic and uncoordinated assessment practices.

#### **A. The use of alternative assessment in institutions of higher education in Lesotho**

Two categories of aspects were investigated to determine the use of alternative assessment, which included the use of alternative assessment tasks and the use of types of alternative assessment.

- **The extent to which alternative assessment tasks are used in institutions of higher education in Lesotho.**

The following were found in the research:

Policy guidelines for the use of alternative assessment exist occasionally; the use of performance assessment focusing on the assessment of student actions, as well as the use of performance assessment focusing on assessment of products, are used occasionally in institutions of higher education in Lesotho. There is clear evidence of the limited use of alternative assessment tasks. The use of these tasks may greatly contribute towards the enhancement and the maintenance of the quality of assessment practices in institutions of higher education in Lesotho. Particular emphasis may be placed on integration of assessment and instruction.

- **The extent to which alternative assessment types are used**

The assessment of students' own experiments, projects, products, as well as when performing actions and fieldwork are only used occasionally in institutions of higher education in Lesotho. The assessment of extended essays is mostly used. The assessment of students' demonstrations (exhibitions) is also rarely used, while the use of students' portfolios is limited in institutions of higher education in Lesotho. It is clear that the use of alternative assessment practices in institutions of higher education in Lesotho is marginal.

What expires from the lecturers' questionnaire is that best practices to maintain and enhance the quality of assessment practices in relation to issues of policy formulation and implementation; improvement of learning; content coverage; administrative issues; and achievement in assessment of students must be found. However, there is an inevitable gap in the policy regarding the use of alternative assessment and collaborative decision-making in assessment of student achievement, and these need to be

improved. The need to use varied methods and strategies of assessment is further suggested.

The problem of the limited use of alternative assessment and the overuse of traditional assessment has further been uncovered. In line with this, it has transpired, as mentioned above, that extended essay assessment is mostly used, while portfolio and performance assessment are applied minimally.

### **7.2.3 Conclusions on the findings of the students' questionnaire**

The conclusions based on the findings of the results of the students' questionnaire are presented next. Similarities and differences between data collected by the lecturers' and students' questionnaires will be integrated into the presentation where possible.

- **Students' experiences of the quality of assessment practices with regard to administrative issues are satisfactory.** The aspects that received satisfactory responses in the research were inter alia: Communication of specifications and expectations of assessment to students at the beginning of the course; clarity of assessment guidelines and expectations; redemption and procedures for appeal processes in assessment; and provision of a second chance for reassessment in case of failure. This is in congruence with the opinions of the lecturers (7.3.2.1). The above clearly indicates that there is a challenge for institutions of higher education in Lesotho to find and employ mechanisms for continuous quality improvement in the administrative aspects of assessment.
  
- **Students' experiences of the quality of assessment practices with regard to the improvement of the quality of learning.** The quality of assessment practices in this context is satisfactory. These quality aspects include the following: Motivation of learning; integration of instruction to assessment; the link between assessment and program objectives, as well as

promotion of self-reflection. Other aspects are improvement in students' progress; encouraging a deeper understanding and active learning; identification of students' strengths and weaknesses; as well as provision for challenging cognitive abilities. Most importantly, feedback is prompt and informative. The students and the lecturers agree that assessment of students improves the quality of learning in institutions of higher education in Lesotho. The status of the quality in this context demands identification and implementation of sound mechanisms for continuous quality improvement in the assessment of students. Stetar (1999:11) points to the main purpose of quality assurance systems as the development of uniform procedures across faculties, institutions as well as the improvement of student learning experiences.

- **Students' experiences of the quality of assessment practices with regard to practicality.** The quality of assessment practices in institutions of higher education is relatively good with regard to the practicality of student assessment. This relates to the aspects of fairness of assessment; manageable load of assessment; ability to work in a group; ability to work independently; and finally, a supportive environment for assessment. It is important that assessment should be practical and feasible within the available resources and time (McMillan 2004:36).

#### **B. Extent to which alternative assessment practices are used**

Conclusions on the extent to which alternative assessment practices are used in institutions of higher education are presented in this section. The use of types of alternative assessment was investigated, and the following conclusions were made.

- Assessment of students' own experiments, demonstrations or exhibitions, fieldwork and assessment of extended essays are mostly applied, while assessment of students' projects and products are only sometimes used.



The same conclusions are made on the findings of the lecturers' questionnaire about the extent of the use of experiments and product assessment. The minimal use of the portfolio is emphasised.

- The use of portfolios and the assessment of students performing actions are limited, while paper and pencil assessments are generally used to assess students in higher education of Lesotho. This is also in line with the conclusions made on the lecturers' questionnaire (7.3.2.1).

As pointed out earlier, the problem of this study is once again confirmed. There is overwhelming evidence of the excessive use of traditional assessment and very marginal use of other types of assessment tools. This indicates a clear gap in the use of alternative assessment, more particularly, with regard to the use of portfolios and performance assessment. The use of alternative assessment is still limited in institutions of higher education. However, Gipps (1998:78) is of the opinion that traditional assessment, and especially paper and pencil examinations, still hold the status of raising educational standards in developing countries such as Lesotho. This indicates that examinations may not be abandoned totally, but should be used together with alternative assessment practices within the economic context of Lesotho.

#### **7.2.4 Conclusions on the findings of the face-to-face interviews**

The conclusions of the qualitative investigation are presented and discussed in this section. It must be noted that in presenting the conclusions of the interviews, reference will be made to quantitative conclusions to indicate similarities and differences where necessary.

- **Existence of policy with regard to the use of alternative assessment**

Policy on general assessment of student achievement exists in higher education in Lesotho. However, there is a policy gap as far as the use of alternative assessment is concerned (6.5.2.1.1). The lecturers (7.3.2.1) and instructional leaders agree on this issue. It is necessary to close this gap through the

formulation of relevant policy guidelines to guide the application of alternative assessment in higher education

- **Quality of assessment practices**

There are differing opinions among instructional leaders about the quality of assessment practices in institutions of higher education in Lesotho. Some instructional leaders are of the opinion that the quality of assessment practices is generally good, while some think the opposite. It is indicated that the quality of tests and examinations vary with individual expertise. Some lecturers set good examination papers, while some do not. Moreover, examinations need to be supplemented with the assessment of practical work to cater for students' differences (6.5.3 and 1.2). Similar conclusions have been made on the findings of the lecturers' questionnaires (7.3.2.1). This suggests the need for close monitoring and capacity-building in the assessment of student achievement; staff development, a quality assurance framework and consistency in assessment practices.

- **Major quality aspects of assessment practices**

Major quality aspects of assessment practices in institutions of higher education include the internal moderation of tests and examinations, encouraging the use of alternative assessment by management. Sometimes alternative assessment, such as oral presentation, oral examinations and class presentations are used (6.5.3.1.3). It is clear that the use of alternative assessment is generally very limited. This is congruent with the conclusions from both the lecturers' and students' questionnaires (7.3.2.1 and 7.3.2.2). Moreover, the challenge is that the use of alternative assessment should be encouraged by sound policy formulation and implementation, as well as staff development in assessment.

- **Major weaknesses of assessment practices**

The research has shown that assessment practices in institutions of higher education in Lesotho have weaknesses. These include a gap in national policy

on the assessment of students, content-driven assessment and an exam-based curriculum, which has led to the extensive use of examination papers, rushing to teach for the examination and often the poor quality of examination papers. These weaknesses emphasise some of the defects of examinations and tests cited in the literature review (4.2.6) by Kellaghan and Greaney (1992:10; Salvia and Ysseldyke 1995:240; 241). Mitchell (in Hart 1994:7) points to the corrupting influence of examinations, which force teachers to teach and focus on what can be tested, and thus ignoring what is important for students to learn. Mitchell (in Hart 1994:7) further indicates that examinations and tests also encourage the coverage of superficial content; surface-learning, where examinations and tests determine the curriculum. Gardner (1993:29) criticises that in an examination-based curriculum, the tail (assessment) wags the dog (curriculum).

Inadequate and superficial assessment of students, due to the high student-lecturer ratio, has contributed to the use of only group projects as alternative assessment. Cari (1990:75) agrees that mass education is a threat to the quality of higher education. There are also financial constraints and a lack of availability of adequate resources for the use of alternative assessment (6.5.3.1.4). Excessive use of paper and pencil assessments is also confirmed by the qualitative data.

- **Suggested quality improvements on assessment practices**

A sound policy on internal moderation should be implemented in Lesotho, and heads of departments should take the responsibility to monitor the activities of internal moderation. Assessment of practical work should be emphasised and implemented. Adequate staffing and other resources are needed to implement alternative assessment. Students should be placed in the workplace to be assessed while performing. This may enhance performance assessment. There should also be strong financial support for students' projects.

- **Lesotho government initiatives to improve the quality of assessment practices**

No specific government initiatives were uncovered concerning its involvement in the assessment of student achievement. This emphasises a need to establish a national quality assurance system for the provision of clear policy guidelines to enhance the close monitoring of assessment activities in institutions of higher education in Lesotho.

### **7.3.5 Recommendations**

The following recommendations are made on the basis of the conclusions of the study. It is necessary to improve the quality of assessment practices by employing some of the following.

#### **7.3.5.1 Internal moderation**

External moderation of assessment is a common practice in institutions of higher education in Lesotho. However, internal moderation seems to be uncommon practice. Moderation teams should be formed at departmental level and across faculties with the purpose of re-examining the assessment and the assessed work of the students. This can be achieved by small working teams, which may embark on joint planning and decision-making, as well as sound networking to improve the quality of assessment at faculty and departmental level on an on-going basis. Moderation also helps to ensure that assessment approaches and strategies are appropriate to the objectives of the programs (Murdoch Grobellaar 2004:113).

#### **7.3.5.2 Abandoning over dependence on traditional assessment**

The use of balanced assessment is necessary to improve the quality of assessment practices in institutions of higher education. Assessment approaches and strategies should be varied by reducing overdependence on traditional assessment. Practical assessment, including the use of projects; performance and product assessment; and student experiments are also necessary to

improve the quality of assessment practices in institutions of higher education in Lesotho. Alternative assessment assists to strike a balance in the assessment of students. Adams and Smith (1996:640) are of the view that there is not one best method of assessment. The use of diverse methods of assessment that respond to individual differences and the development of adaptive graduates of higher education in Lesotho and other countries with similar circumstances, is an imperative. This suggests abandoning the overdependence on only one approach or assessment technique.

#### **7.3.5.3 Adequate staffing as well as continuous and systematic staff development**

Higher education in Lesotho should embark on continuous and systematic development of staff to improve expertise in the assessment of student achievement. In line with the conclusions of this study, Gravett and Geysler (2004:220), as well as Heywood (2000:45) point to the need for institutions of higher education to ensure that all lecturers involved in the assessment of students possess the relevant and necessary skills to be competent in undertaking their roles and responsibilities. As one of his fourteen points of quality, Deming asserts that staff development is essential to improve quality in education (Nightingale and O'Neil 1994:127; West-Burnham 1993:8; and Arcaro 1995:80). The escalation of mass education and other trends that impact on educational activities, have challenging implications for quality. Cari (1990:75) notes that mass education is a threat to quality in higher education. Adequate staffing, as well as continuous and systematic staff development is necessary to enhance and maintain the continuous quality improvement of assessment practices in education institutions in Lesotho.

#### **7.3.5.4 Sound financial support**

Sound financial support for the assessment of students in higher education is necessary. Students' projects should be enhanced by proactive planning and efficient budgeting.

#### **7.3.5.5 Regular and systematic review for continuous quality improvement**

Literature reveals that regular and systematic review of assessment practices assists in making informed decisions about the fitness of assessment to its purpose (James 1998:163). The review of assessment practices is important for continuous quality improvement, and is a common characteristic of quality assurance systems in higher education (Ellis 1997:11; and Fourie, Strydom and Stetar 1999:57). In line with the conclusions and the findings of this study, the practice of regular and systematic review of assessment practices in Lesotho is relatively minimal.

#### **7.3.6 The use of alternative assessment in institutions of higher education**

The problem of limited and ad hoc use of alternative assessment has been confirmed by the research. A policy-driven use of alternative assessment may assist to link student performance with assessment for the continuous improvement of quality in higher education, and particularly the enhancement and maintenance of quality of assessment practices in Lesotho. Different alternative assessment tasks (and/ or types) of alternative assessment should be used to abandon the overdependence on traditional assessment (Appendices A and B). Ashcroft (1995:129) asserts that since assessment is central to the maintenance of standards, the use of varied assessment approaches and techniques as best practices are imperative for continuous quality improvement. Alternative assessment practices are also important in responding to student diversity, which includes varying abilities, working and learning styles as well as cultural backgrounds (Anderson and Speck 1998: 55). Assessment of students should enhance the adoption of deep, active and reflective learning that simulate the problems of the everyday life of the student. The use of diverse assessment methods and techniques to suit individual differences and the development of adaptive graduates of higher education in Lesotho and other countries with similar circumstances, is essential.

### **7.3.7 Initiatives of the Lesotho government to improve the quality of assessment**

This study has unearthed that there is a gap in the national policy with regard to quality assessment practices in institutions of higher education in Lesotho. The Ministry of Education in Lesotho should work together with institutions of higher education to continuously maintain and improve the quality of assessment practices. This can be achieved through the formulation and implementation of relevant national and institutional policies, as well as a national quality assurance framework at all levels. Freeman (1993:15) affirms that there is a need for a quality assurance policy so that what the institutions of higher education regard as quality is well-defined and clearly documented. A quality assurance framework may also assist the government of Lesotho through the Ministry of Education to establish effective monitoring and networking systems at institutional and national levels.

### **7.4 Possibilities for further research on the quality of assessment practices**

For continuous quality improvement, intensive research should be carried out on the following:

- Finding appropriate mechanisms of quality assurance to enhance the quality of assessment of student achievement in institutions of higher education in Lesotho. The outcomes of the research may enhance the formulation of a viable quality assurance framework and appropriate policy guidelines.
- Enquiring into the possible ways of benchmarking assessment practices to enhance the maintenance and continuous improvement of quality. Adopting some of the assessment practices to improve local assessment in higher education would assist in the production of graduates that are globally competitive in the workplace.

- Investigation into the strengths and weaknesses of current assessment practices in institutions of higher education in Lesotho on a regular basis so that best practices of continuous quality improvement may be sought. Since quality changes with changing contexts, needs and demands in life, it is clear that research into the quality of assessment practices should be done to abandon old principles that are not applicable and to adopt new ones.

## **7.5 Conclusion**

This chapter has provided the summary of the study by reinstating the problem, the research questions, the purpose and the objectives of the study. The chapter also unfolded by providing a general overview of the sources of data and the methods used to investigate the quality of assessment practices as well as the extent to which alternative assessment practices are used in the higher education system of Lesotho. The findings and the conclusions of the empirical and theoretical research were also presented and integrated.

The recommendations were made with regard to the way in which the quality of assessment practices can be improved, and also on the use of alternative assessment to avoid the overdependence of assessment practices on paper and pencil assessment in the higher education system of Lesotho. Finally, further research opportunities on ways in which to improve the quality of assessment practices were presented.

## **7.6 Final conclusions of the study**

The purpose of the study was to investigate the quality of assessment practices and the extent to which alternative assessment is utilised in institutions of higher education in Lesotho. The focus of the study has been achieved and the study questions have been answered.



The quality of assessment practices in higher education is acceptable, despite some weaknesses. The problem of the study has been confirmed with regard to continuing the overdependence on traditional assessment, while the use of alternative assessment is limited. As such, the gap in the use of alternative assessment is a challenge to institutions of higher education in Lesotho. It is necessary to find ways to use balanced methods and techniques of assessment. It is envisaged that the study has also provided a valuable theoretical background on the quality of assessment practices and the use of alternative assessment as a way of improving quality in the assessment of students in institutions of higher education in Lesotho.

- so that best practices of continuous quality improvement may be sought. Since quality changes with changing contexts, needs and demands in life, it is clear that research into the quality of assessment practices should be done to abandon old principles that are not applicable and to adopt new ones.

## LIST OF REFERENCES

- Abruscado, J. 2000. *Teaching Children: A Discovery Approach*. New York: Allyn and Bacon.
- Abuashake, M. & Tamimi, S. 1996. The Impact of Globalization on Developing Teacher: Trends Towards world Civilization. In: *Teacher Education and Reform: International Yearbook on teacher Education*. 1996 Conference Proceedings. (II):189-198.
- Acosta, R.C. 1996. Consortium: Effective Instrument for fostering partnership in School Reform. In: *Teacher Education and Reform: International Yearbook on teacher Education*. 1996 Conference Proceedings. (II) :680-684.
- Adams, L.D. 1996. Teachers' Views on Assessment Practices. In: *Teacher Education and School Reform: International Yearbook on Teacher Education*. 1996 Conference Proceedings. (II):233-267
- Adel Ajayi, J.F.; Lameck, K.H.; Goma, G. & Ampah, J. 1996. *The African Experience with Higher Education*. London: James Curry.
- Ainley, P. & Bailey, B. 1997. *The Business of Learning: Staff and Student Experiences of Further Education in the 1990's*. London: Cassel.
- Al-Khateeb, A. & Alnabhan, M. 1996. New Roles in Teacher and School Reform. In: *International Yearbook on Teacher Education*. 1996 Conference Proceedings. (II) :271-280.
- Anderson, G. 1998. *Fundamentals of Educational Research*. London: Falmer Press.
- Anderson, G. 1990. *Fundamentals of Educational Research*. London: Falmer Press.
- Anderson, R.S. & Specks B.W. 1998. *Authentic Assessment*. New Jersey: Dale Seymour Publication.
- Arcaro, J. 1995. *Quality in Education*. Florida: St. Luke.
- Ashcroft, K. 1995. *The Lecturer's Guide to Quality and Standards in Colleges and Universities*. London: Falmer Press.

- Ashcroft, K. & Palacio, D. 1996. *Researching into Assessment, Communication and Evaluation in Colleges and University*. London: Kogan Page.
- Aspin, D.N., Chapman, J.D. & Wilkinson, V.R. 1994. *Quality Schooling*. London: Cassel.
- Babbie, E. & Mouton, J. 2001. *The Practice of Social Research*. Cape Town: Oxford University Press.
- Baijnath, M. Maimela, S., Singh, P. 2001. *Quality Assurance in Open and Distance Learning*. Roodepoort: Unisa and Technisa.
- Bartol, K.M & Martin, D.C. 1991. *Management*. New York: McGraw-Hill.
- Baumgartner, T.A. & Strong, C.H. 1994. *Conducting and Reading Research*. Iowa: Brown & Benchmark.
- Bell, J. 1999. *Doing Your Research Project*. Philadelphia: Open University Press.
- Bennet, C. Foreman-Peck, L & Higgins, C. 1997. *Researching into Teaching Methods*. London: Kogan Page.
- Best, J.V. & Kahn, J.V. 2003. *Research in Education* (9<sup>th</sup> Ed.). London: Pearson.
- Biggs, J. 1999. *Teaching for Quality Learning at University*. Buckingham: Open Learning Press.
- Black, P.J. 1991. Social and Educational Imperatives for Changing Examinations. In: *Issues in Public Examinations: a selection of the Proceedings of the 1990*. Ed. Luytjen, J.M.
- Black, P.J. 1998. Testing: A Friend or Foe: Theory & Practice of Assessment. In: *Theory and Practice of Testing*. London: Falmer Press.
- Black, P. & Atkin, and J.M. 1996. *Changing: The Subject: Innovations in Science, Mathematics and Technology Education*. London: Routledge.
- Blake, D. & Henley, V. 1995. *Dictionary of Educational Terms*. Hampshire: Arena.
- Blenkin, G.M. & Kelly, A.V. 1992. *Assessment in Early Childhood Education*. London: Paul Chapman.
- Bless, C & Higson-Smith, C. 2002. *Social Research Methods*. Cape Town: Juta Education.

- Boone, F.J. 1988. *Developing Programs in Adult Education*. London: Kogan Page.
- Bosker, P. & Scheerens, J. 1996. The Foundations of Educational Effectiveness. In: *International Yearbook on Teacher Education*. 1996 Conference Proceedings. (II) 271-280.
- Bowring-Carr, N. & West-Burnham, R. 1994. *Managing Quality in Schools*. London: Longman.
- Bradley L.H. 1993. *Total Quality Management*. Pennsylvania: Technomic.
- Brown, S. & Gasner, A. 1997. *Assessment Matters in Higher education*. Buckingham: Open Learning University.
- Brown, A. & Dowling, P. 1998. *Doing Research/Reading Research: A mode of Interrogation*. London: Falmer Press.
- Brown, S. & Knight, P. 1994. *Assessing Learners in Higher Education*. London: Cogan Page.
- Brown, S. Race, P. & Smith, B. 1996. *500 Tips on Assessment*. London: Kogan Page.
- Brown, S. Racop, J. & Bull, P. 1999. *Computer Assisted Assessment*. London: Kogan Page.
- Burns, R.B. 2000, *Introduction to Research Methods*. London: Sage.
- Calder, J. 1994. *Program Evaluation and Quality*. London: Kogan Page.
- Carroll, Jude. 2002. *A Handbook for Delivering Piagirism in Higher Education*. Oxford: Center for Staff Development.
- CHE: 2001. *An Overview of a new Policy Framework for Higher Education Transformation*.
- Cherry, A.L. 2000. *A Research Primer for Helping Professions on Methods, Statistics and Writing*. Belmont: Cole Thomson.
- Chivers, J. 1995. *Teambuilding with Teachers*. London: Kogan Page.
- Cole, D.J., Ryan, C.W. & Kick, F. 1995. *Portfolios across the Curriculum and Beyond*. Thousand Oak: Corwin Press.

- Cook J.S. 1991. Recording Public Examinations Performance: Usefulness, Accuracy, Ownership. In: *Issues in Public Examinations: a selection of the Proceedings of the 1990*. Ed. Luijten, J.M.(30-39).
- Cornesky, R.A. 1992. *Using Deming to Improve Quality Courses and Curriculum in Higher Education*. San Francisco: Jossey-Boss.
- Cox, B. & Ingleby, A. 1997. *Practical Pointers for Quality Assessment*. London: Kogan Page.
- Craft, A.1994. *Quality Assurance in Higher Education*. Hong-Kong: Falmer Press.
- Creswell, J.W. (1) 2005. *Educational Research: Planning, conducting and evaluating educational research*. London: Pearson.
- Creswell, J.W. (2) 1994. *Research Design: Quantitative and Qualitative Approach*. London: Routledge.
- Cullingford, C. 1997. *Assessment versus Evaluation*. London: Cassel.
- Cunningham, G.K. 1998. *Assessment in the classroom: Constructing and Interpreting Tests*. London: Palmer Press.
- DED: Technical Committee on Revision of Norms and Standards for Teacher. Education. 1997. 14-25.
- Diamond, R.M. 1989. *Designing and Improving Courses and Curriculum in Higher Education*. London: Kogan Page.
- Douglas, W.J. 1992. *Monitoring School Performance*. London: Falmer Press.
- Drydon, G. & Vos, J. 1997. *The Learning Revolution*. London: Accelerated Learning.
- Du Toit, L. 2002. *Quality Assessment of Management of an Instructional Offering Research Methodology in B.Tech. Programming Technicians: A systems Approach*. Unpublished PhD. Dissertation. Bloemfontein: UFS.
- Ecclestone, K. 1996. *How to Assess Vocational Curriculum*. London: Kogan Page.
- Eckstein, .M.A. & Noah, H.J. (1) 1992. *Examinations: Comparative and International Studies*. Oxford: Pergamon.

- Eckstein, M.A. & Noah, H.J. (2). 1992. The Two Faces of Examinations: A Comparative and International perspective. In: *Examinations, Comparative and International Studies*. Eds.: M.A. Eckstein & H.J. Noah. Oxford: Pergamon. 146-148.
- Eckstein, M.A. & Noah, H.J. (3). 1992. Comparing National Systems of Secondary School Leaving Examinations. In: *Examinations, Comparative and International Studies*. Eds.: M.A. Eckstein. & H.J. Noah. Oxford: Pergamon.
- Ellis, P. 1997. *Quality Assurance for University Teaching*. Buckingham: Society for Researching Higher Education.
- Everard, K.B. & Morris, G. 1996. *Effective School Management*. London: Paul Chapman.
- Fourie, M. 2000. A Systems Approach to Quality Assurance and Self-assessment. In: *South African Journal of Higher Education*. Ed.: Phillip Higgs. 14(2): 50-55.
- Fourie, M., Strydom, A.H. & Stetar, J. 1999. *Reconsidering Quality Assurance*. In: Higher Education: Perspectives on Program Assessment and Accreditation. *Bloemfontein: The University of Free State*.
- Fraenkel, J.R. & Wallen, N.E. 1990. *Educational Research: a guide to the Process*. New York: Macgraw Hill.
- Freeman, R. 1993. *Quality Assurance in Education*. UNESCO Library.
- Fullan, G.M. 1992. *Successful School improvement*. Philadelphia: Open Learning.
- Fullan, M. 1993. *Change Forces: Probing the Depths of Educational Reform*. Philadelphia: Open Learning.
- Furlong, J. & Smith, R. 1996. *Higher Education and Initial Teacher Training*. London: Kogan Page.
- Gay, L.R. & Airasian, P. 2003. *Educational Research*. New Jersey: Merrill Prentice Hall.
- Gardner, H. 1993. *Multiple Intelligences: The Theory in Practice*. New York: Basic Books.

- Gary, H. 1993. *Essential School Leadership*. London: Kogan Page.
- Gawe, N.E. & Heyns, R. 2004. Quantity Assurance. In: *Outcomes-Based Assessment*. Eds.: J.G. Maree and W.J.Fraser. Pretoria: Van Schaik (159-182).
- Gillham, B. 2002. *Developing a Questionnaire*. London: Continuum.
- Gipps, C.V. 1998. *Beyond Testing: Towards a theory of Educational Assessment*. London: Kogan Page.
- Goddard, W. Melville, S. 2005. *Research Methodology*. Cape Town: Juta.
- Geyser, H. 2004. Learning from Assessment. In: *Teaching and Learning in Higher Education*. Eds.: Gravett, S. & Geyser, H. Pretoria: Van Schaik.
- Greaney, V. & Kellaghan, G. 1995. *Equity Issues in Public Examinations in Developing Countries*. Washington. DC.: World Bank.
- Greenwood, M.S. & Gaunt, H.J. 1994. *Quality Management for Schools*. London: Cassel.
- Gronlund, N.E, 2003. *Assessment of Student Achievement*. New York: Pearson.
- Guba, E.G. & Lincoln, Y.S. 1994. *Competing Paradigms in Quantitative Research*. N.K.
- Harris, A. Bennet, N. & Preedy, M. 1997. *Organizational Effectiveness and Improvement in Education*. Philadelphia: Open Learning Press.
- Harris, D. & Bell, C. 1994. *Evaluating and Assessing for Learning*. London: Kogan Page.
- Hart, Chris. 2005. *Doing Your Masters Dissertation*. London: Sage.
- Hart, D. 1994. *Authentic Assessment*. New Jersey: Dale Seymour Publications.
- Headington. R. 2000. *Monitoring, Assessment Recording and Accountability*. London: David Fulton.
- Heynemann, P. & Ransom, A. W. 1992. Using Examinations and Testing to improve Educational Quality. In: *Examinations: Comparative and International Studies*. Eds.: Noah and Eckstein. (34-40). Oxford: Pergamon.

- Heywood, J. 2000. *Assessment in Higher Education: Student Learning and Teaching Programs and Institution*. London: Jessica Kingsley.
- Higher Education Quality Council. 1996. *Indicators of Program Quality*. London: Higher Quality Education.
- Holtzhausen, S.M. 2000. External and International Influences on the development and Implementation of quality assurance in Higher education institutions. In: *South African Journal of higher Education*. 14(2): 118-124.
- Hopkins, D.1987. *Improving the Quality of Schooling*. London: Falmer Press.
- Houston, Don. & Maniku, Ahmed.2005. Systems Perspectives on External Quality Assurance. In: Higher Education. In: *Quality in Higher Education*. November 2005. 14(2) 213-224.
- Howe, S. & Plamp, T. 1996. Evaluating Student achievement within different Contexts. In: *Prospects*.1 :11-19.
- Ingleby, A. & Cox, B. 1997. *Practical Pointers for Quality Assessment*. London: Kogan Page.
- James, M. 1998. *Using Assessment for School Reform*. Johannesburg: Heinemann.
- Jardin, C.B. & Holly, P. 1994. *Developing Quality Schools*. London: Falmer Press.
- Jonathan L.T. 2000. Quality Assurance in African Universities: developing a Sustainable quality Culture in a Challenging Environment. In: *South African Journal of Higher Education*. 14(2). 2000.
- Kane, M.B. & Mitchell, R. 1996. Implementing Performance Assessment. In: *Implementing Performance Assessment*. Eds.: M.B. Kane & R. Mitchel. New Jersey: Lawrence Erlbaum (1- 17).
- Kane, David; William, James& Cappuccini-Ansfield, Gillian.2008. *Student Surveys: The Value in Taking an Historical Perspectives*. In: *Quality in Higher Education*.June2008.14(2 ):135-154.



- Khattari, N. & Sweet, D. 1996. Assessment Reform, Promises and Challenges. In: *Implementing Performance Assessment*. Eds.: M.B. Kane & R, Mitchel. New Jersey: Lawrence Erlbaum (1-2).
- Kellaghan, T. & Greaney, V. 1992. *Using Examinations to Improve Education*. Kentucky Department of Education: Early Learning Program. Kentucky Primary Assessment. September 1995.
- Khaahloe, M.B. 2002. *Adapting Assessment to Module Curricula at Lesotho College of Education*. Unpublished Script. Bloemfontein: UFS.
- Killen, R. 2004. Teaching Portfolios. In: *Teaching and Learning in Higher Education*. Eds.: Sara Gravett and Hester Geysler. Pretoria: Van Schaik (181-197).
- Kreeft, H.P.J. 1991. Examinations in Europe: Three Major Streams. In: *Issues in Public Examinations* .Ed.: A.J.M. Luitjen (100-111).
- Kruger A.G. & Van Schalkwyk, O.J. 1997. *Classroom Management*. Pretoria: J.L. van Schaik.
- Kulundi, F.K. 2001. *Effectiveness of Private versus Public Schools in Lesotho's Education System*. Unpublished PhD. Dissertation Bloemfontein: UFS.
- Leedy, P.D. & Ormrod, J.G. 2001. *Practical Research: Planning and Design*. (7<sup>th</sup> ed.). New Jersey. Merrill- Prentice Hall.
- Le Grange, L & Reddy, C. 2000. *Continuous Assessment*. Kenwyn: Juta.
- Lekhetho, M. 2004. *Effectiveness of Secondary Education in Lesotho*. Unpublished Dissertation. Pretoria: UNISA.
- Lello, J. 1993. *Accountability in Practice*. London: Cassel.
- Lemmer, E. 1999. *Contemporary Education: Global Issues and Trends*. Kwa-Zulu Natal: Inter-Pak.
- Lesotho Agricultural College Students: *Students' Handbook* (2005-2006).
- Lesotho College of Education Calendar*. Maseru: Government Printers. (2005-2006).
- Lesotho Government (1): *Education Report*. 1999.
- Lesotho Government (2): *Education Report*. 2003.
- Lesotho Government: *Education Sector Strategic Plan* (2004-2015).

- Lerotholi Polytechnic Calendar (2005-2006). MOED. Maseru: Government Printers. 2005-2006).
- Lewis, G.R. & Smith, D.H. 1994. *Total Quality in Higher Education*. Florida: St Lucie.
- Loder, C. 1990. Quality Assurance and Accountability. In: *Higher Education*. London: Kogan Page.
- .Lomas, Laurie. 2008. Are Students Customers? Perceptions of Academic Staff. In: *Quality in Higher Education*. April 2007.13(1): 38-40
- Lubisi, R.C. 1999. *Assessment in Education*. Pietermaritzburg: University of Natal.
- Luitjen A.J.M.1991. Public Examinations: An Introduction. In: *Issues in Public Examinations*. Ed.: A.J.M. Luitjen. Utrecht: Lemmer (9- 13).
- MacGinity, J. & Fish, J. 1993. *Further Education of Courses and Modules. Equity, Opportunity and Individual Learning*. London: Routledge.
- Maharaso, M.M.M. 2001.*Closing the gap: The relationship between academic access and implementation at the universities in South Africa*.
- Maharaso; M.; Strydom A.H. & Van der Westhuisen L.J. 2002. *A Way Forward through Cooperative Programs*. Bloemfontein: CLF Printers.
- Mapesela-Monnapula. M.L. 2002. *Staff Satisfaction in a Transforming South African University*. Unpublished PhD. Thesis. Bloemfontein: UFS.
- Maxwell, J.C. 1999. *The 21 Indispensable Qualities of a Leader*. Tennessee: Thomas Nelson.
- Mayhew, L.B., Ford, P.J. & Hubbard, D.L.1990. *The Quest for Quality*. San Francisco: Jossey Bass.
- Mcburney, D.H. 1994. *Research Methods*. London: Brooks/ Cole Publishing Co.
- MacDonald, J. & Tanner, S. 1998. *Understanding Benchmarking*. London: Hodder & Stronghton.
- McDonald, R. & Van de Horste, H. 1997. *Outcome Based Education. Teachers Manual*. Cape Town: Kagiso Education.
- McKernan, J. 1996. *Curriculum Action Research*. London: Kogan Page.

- McMillan, J.H. (1)1997. *Classroom Assessment*. London: Allyn & Bacon.
- McMillan, J.H. (2). 2004. *Classroom Assessment*. Boston: Pearson.
- McMillan, J.H. & Schumacher, S. 2001. *Research in Education*. New York: Longman.
- McNay, I. 1998. *Research into Higher Education Abstracts*. London: SRHE. Volume 31(2)
- Miami Museum of Science: Alternative Assessment Definitions*. 2001. <http://www.Miami.org/ph/lpdefine.html>13/15/2005.
- Miles, M.B. & Hubberman, A.M.1994. *Qualitative Data Analysis*. London: Sage.
- Ministry of Education (1): *Lesotho Education Sector Strategic Plan 2005-2015* (2004).
- Ministry of Education (2): *Lesotho Education Sector Strategic Plan 2005-2015* (2005).
- Ministry of education Report*. 2000 (1-35).
- Moeletsi, M.M.V. 2005. *Primary Teachers' understanding and Interpretation of problem solving: How is it promoted in Science Lessons, why and why not?* Unpublished PhD. Dissertation. University of KwaZulu-Natal.
- Mokhorro, C.T.1996. *Science and Technology in Industrial Development*. Paper presented at the workshop on Sensitisation of Science and Technology at Leribe Hotel. Lesotho (pp 4-5).
- Mouton, J. 2001. *How to Succeed in your Masters and Doctoral Studies*. Pretoria: Van Schaik.
- Murdock, N. & Grobbelar, J. 2004. Quality Assurance of Assessment in Higher Education. In: *Teaching and Learning in Higher Education*. Eds.: Sarah Gravett and Hester Geyser. Pretoria: Van Schaik. (112-125).
- Murgatroyd, S. & Morgan, C. 1993. *Total Quality Management and Schools*. Philadelphia: Open Learning Press.
- Nasta, J. 1994. *How to Design a Vocational Curriculum*. London: Kogan: Page.
- National University of Lesotho Calendar (2006-2007)*.
- NCHE: A Framework for Transformation Report*. Pretoria: NCHE. 1996 (1-23, 68-116).

- Niemann, R., Niemann, S., Brazelle, R., Van Staden, J., Heyns, M. & De Wet, C. 2000. Objectivity, Reliability and Validity in Qualitative Research. In: *South African Journal of Education* 20 (4):283-286.
- Neuman, W.L. 2003. *Social Research Methods: Qualitative and Quantitative Approaches*. New York: Library of Congress Cataloging-in-Publication Data.
- Nightingale, P. & O'Neil, M.1994. *Achieving Quality Learning in Higher Education*. London: Kogan Page.
- Nitko, A.J. 2004. *Educational Assessment of Students*. New Jersey: Pearson.
- Noah, H.J. & Eckstein, M. A. 1992. Comparing National Systems of Secondary School Leaving Examinations. In: *Examinations, Comparative and International Studies*. Oxford: Pergamon. Eds.: Max, A. and Harold J. Noah (1-9).
- O'Neil, J. & Kitson, N. 1994. *How to Design a Vocational Curriculum*. London: Kogan Page.
- Ongom, D.L. 1991. Politics in Assessment. In: *Issues in Public Examinations: a selection of the Proceedings of the 1990*. IAE. Ed.: A.J.M. Luitjen. (111-145).
- Oosterhof, A. 1994. *Classroom Application of Educational Measurement*. New York: McMillan.
- Oppenheim, A.N. 1992. *Questionnaire Design, interviewing and attitude measuring*. London: Pinter.
- Ornstein, A.C. & Hunkins, F.B. 2004. *Curriculum: Foundations, Principles and Issues*. 4<sup>th</sup> ed. London: Pearson.
- Paris, S.G. & Ayres, L.R. 1994. *Becoming Reflective Students and teachers*. Washington DC.: American Psychological Association.
- Parsons, C. (1). 1992. *Quality assurance in Higher Education*. London: Fulton publications.
- Parsons, C. (2). 1994. *Quality Improvement in Education*. London: Fulton Publishers.
- Payne, D.A. 2003. *Applied Educational Assessment*. London: Thomson.

- Pretorias, F. & Lemmer, E. 2004. *South African Education and Training: Transformation in a Democratic Era. Report*. Braamfontein: Nolwazi.
- Preece, R. 1996. *Starting Research*. London: Cassel.
- Public Eye*. Friday, July 30. 2004. The Minister of Education, Mr. Lesao. Lehohla. *Policy to Improve Education Systems* (3).
- QAACHE: Evidence to the enquiry into Higher Education. [www.qaa.ac.uk](http://www.qaa.ac.uk). September. 1994. London: Allyn & Bacon.
- Race, Phil. 1999. *2000 Tips for Lecturers*. London: Kogan Page
- Race, Phil. 2001. *The Lecturer's Toolkit*. London: Kogan Page
- Radford, J. 1997. Ends and Means in Higher Education. In: *Quantity and Quality in Higher Education*. Eds.: John Radford, Knell Anaheim, Peter de fries and Ruth William. London: Sigma (139-179).
- Radford, J. 1997. Changing Purposes in Higher Education. In: *Quantity and Quality in Higher Education*. Eds.: John Radford, Kjell Raaheim, Peter de Vries and Ruth Williams. London: Sigma (88- 95).
- Riley, K A. & Nuthal, D.L.1994. *Measuring Quality: Education Indicators*. Hong Kong: Falmer Press.
- Robert, Dew. John. & McGrower, Nearing. Molly. 2004. *Continuous Quality Improvement in Higher Education*. New York: Praeger.
- Roberts, T.S. 2006. *Self, Peer and Group Assessment in E- Learning*. London: Information Science Publishing.
- Rosa Maria, João; Tavares, Diana & Alberto, Amaral, L. 2006. Consequences of Quality Assurance. In: *Quality in Higher Education*.12(2):145-158.
- Rozner, S. & Moore, M. 1996. Reform of Matriculation Examinations in Israel: Interaction between Teaching /Learning Process and Assessment. In: *International Yearbook on Teacher Education.1996. Conference Proceedings*. 11 : 597-609.
- RSA (Republic of South Africa). Department of Education. 1995. *White Paper on Education and Training*. Pretoria.
- RSA (Republic of South Africa).Department of Education.1997. *White Paper 3: A Program for Transformation of Higher Education.1997* (150-161).

- Salisbury, V.; Wilson, B.; Goldsmith, M. 1990. *CASTIME Conference on Technology and Mathematics Education* (April, 1991). London: CASTIME.
- Sallis, E. 1993. *Total Quality Management in Education*. London: Kogan Page.
- Salvia, J. & Ysseldyke, J.E. 1995. *Assessment*. Boston: Houton Mafflin.
- Schurr, S. 1999. *Authentic Assessment: using Product, Performance and Portfolio measurer from A-Z*. Ohio: National Middle school Association.
- Schutz, F. 1994. *Criteria in Education*. Virginia: Duskin Publishing Group.
- Schwartz, P. & Webb, G. 2002. *Assessment: Case Studies, Experiences and Practices from Higher Education*. London: Kogan Page.
- Scott, D. 1994. *Accountability and Control in Educational Setting*. London: Cassel.
- Scott, D. 1998. Methods and Data. In: *Understanding Educational Research*. Eds.: David Scott and Robin Usher. London: Routledge (52-73).
- Seepe, S.1998. *Black Perspectives on Tertiary Institutional Transformation*. Florida: Vivlia.
- Shaw, H. 1995. *Quality Measurement in Education*. London: Crac DD.
- Sieborger, R. & Macintosh, C. 1998. *Transferring Assessment*. Kenwyn: Juta.
- Sikes, P. 2004. Methodology, Procedures and Ethical Concerns. In: *Doing Educational Research*. Ed.: Clive Opie. London: Sage (15-32).
- Smith, G. 1996. Alternative Assessment and Successful School Reform. Power, Participation and Equity. In: *Teacher Education and School Reform. International Yearbook on teacher Education*. 1996. Conference Proceedings. 11: 649- 651.
- Stake, R.G. 1995. *The art of case study*. Thousand Oak: Sage.
- Stiegelbauer, Z.M.1991. Change has changed: Implications for Implementation of Assessments from the Organizational Change Literature. In: *Issues in examinations*. Ed.: Anton J. Luitjen. Utretch: Lemma (70-77).
- Strydom, A.H. Lategan, L.O.K. & Muller, A. 1996. *Quality assurance in South African Higher Education: National and International Perspectives*. Bloemfontein: University of Free State.

- Taiti, A. 1997. *Perspectives on Distance Education and Development in Higher Education*. London: Stirling.
- Thackwray, B. 1997. *Effective Evaluation of Training and Development in Higher Education*. London: Allyn & Bacon.
- UNESCO 1: *Trends and development of technical and vocational education*. 1990. (17-20)
- UNESCO 2: *Policy Paper for Change and Development in Higher education*. 1995. (16-17).
- UNESCO 3: 1996. *World Statistical Outlook on Higher Education*. Paris: UNESCO.
- UNESCO 4: 2000. *The Dakar Framework for action: Education for all. World Education Forum*. Dakar: Senegal (26-28).
- Usher, R. 1998. A Critic of the Neglected Epistemological Assumption of Educational Research. In: *Understanding Educational Research*. London: Routledge (9-32). Eds.: David Scott and Robin Usher. London: Allyn & Bacon.
- Van Niekerk, L.J, Mellet, S.M. & Potgieter, C. 1998. *Media Science, Critical Assessment and Computer Literacy*. Pretoria: Muckleneuk.
- Vedder, P. 1992. *Measuring the Quality of Education*. Amsterdam: Switz & Zeitlinger.
- Verma, G.K. & Mallick, P. 1999. *Researching Education*. Philadelphia.
- Vithal, R. & Jansen, J. 2001. *Designing Your First Research Proposal: A Manual for Researchers in Education and Social Sciences*. Cape Town: Juta.
- Vitko, A.J. 2004. *Educational Assessment of Students*. New Jersey: Pearson.
- Warner, T. & Palfreyman, Y. 1996. Staff Development. In: *International Yearbook on Teacher Education*. 1996 Conference Proceedings. Vol. (ii) (271-280).
- Welman, J.C. & Kruger, S.J. 1999. *Research Methodology for the Business Administrative Sciences*. Cape Town: Oxford.
- West-Burnham, J. 1993. *Managing Quality in Schools*. London: Longman.
- Westerheijden, Don, Stensaker, Bjørn & Rosa Maria, João. 2007. *Quality Assurance in Higher Education*. Dordrecht: Spriger.

- Wilnut, J & Rainbow, R.G. 1991. *The Wessex Project: A Modular Development*. Luitjen. Utretch: Lemma. (177-178).
- Wiersma, W. 1995. *Research Methods in Education. An Introduction*. London: Page.
- Whisker, G & Brown, S. 1994. *Enabling Students Learning* . London: Kogan Page.
- Wiggins, G. 1993. *Criteria and Principles in Education*. Virginia: Dushkin Publishing Group.
- Wiley, D.E. & Haertel, E.H. 1996. Extended Assessment tasks: Purposes, Definitions, Scoring and Accuracy. In: *Implementing performance assessment*. Eds.: M.B. Kane and R. Mitchell. New Jersey: Lawrence Erlba (61-91).
- Williams, R. 1997. The UK's External Examiner System. Its Rise or Demise? In: *Quantity and Quality in Higher Education*. Eds.: John Radford, Kjell Raaheim, Peter de Vries and Ruth Williams. London: Sigma Forlag (45-53).
- Wilson, M & Adams, J.R. 1996. Evaluating Progress with Alternative Assessment: A model for title. In: *Implementing Performance Assessment*. Eds.: M.B. Kane and R. Mitchell; New Jersey: Lawrence Erlbaum (39-58).
- Wilson, M. & Scalise, K. 2006. Assessment to Improve Learnig in Higher Education. In: *The International Journal of Higher Education and Educational Planning*. 52(4):635-663)
- Wrag, T. 1997. *Assessment and Learning*. London: Routledge.
- Yearout, R.D.1995. *Benchmarking in Higher Education: Adapting Practices to Improve Quality*. Asheville: UNC.
- Yorke, M. 1996. *Indicators of Quality*. London: Chameleon Press.



**Electronic Sources:**

(<http://qaa.ac.uk/aboutqaa/evidence.htm>.2004-09-02)

The quality of Assessment. s.a.

><http://www.gower.k12.il./staff/Assess/4.ch2.htm>.s.l. (Retrieved on 2004.09.02).

Principles and Indicators for Student Assessment Systems. s.a. ><http://www.qaa.ac.org/assessmentprinciples.htm>.s.l. (Retrieved on 11.27.2003).

Quality Assurance<[http:](http://www.qaa.ac.uk/public/Cop/COPaosfinal/contents.htm)

[//www.qaa.ac.uk/public/Cop/COPaosfinal/contents.htm](http://www.qaa.ac.uk/public/Cop/COPaosfinal/contents.htm).s.l. (Retrieved on 2004.09.02).

**APPENDIX A**  
**QUALTY ALTERNATIVE ASSESSMENTS IN LESOTHO**  
**RESEARCH QUESTION FOR LECTURERS**

Dear respondent,

You are cordially requested to complete this questionnaire. I am currently pursuing a Ph D degree with the university of the University of the Free State and I am conducting this study to fulfill the requirements of the degree. The Purpose of this study is to investigate the quality of assessment practices and the use of alternative assessment in institutions of higher education in Lesotho. You need not write your name and the collected information will be treated as confidential. Your cooperation will help towards the improvement of the quality of education in your country.

Thank you in advance for your participation.

Yuors sincerely,

**(Mrs.) 'MATSELANE KHAHLLOE.**

PH. D STUDENT, UFS

## PART 1: BIOGRAPHIC INFORMATION

Mark with a cross in the provided space.

For office use only

1. **Age group**

20 - 30		01
31 - 40		02
41 - 50		03
51 - 60		04
61 - 65		05

1    2    3

01

2. **Gender**

Male		01
Female		02

02

3. **Position held**

Junior lecturer		01
Lecturer		02
Senior lecturer		03
Other(s): _____		04

03

4. **Subject area**

Sesotho		01
English		02
Mathematics		03
Science		04
Other(s): _____		05

04

For office use only

5. Experience (in years)

01 - 05	01
06 - 10	02
11 - 15	03
16 - 20	04
21 - 25	05
26 - 30	06
Other(s): _____	05

**PART 2:**

**QUALITY OF ASSESSMENT PRACTICES IN HIGHER EDUCATION**

Use the following four-point scale to indicate your evaluation regarding the quality of assessment practices in your institution.

Very good	Good	Poor	Very poor
4	3	2	1

For office use only

Quality aspects of assessment practices		1	2	3	4
1.1	Clear policy exists for all activities of assessments				06
1.2	Clear policy documents on student assessment are accessible to all staff members				07
1.3	Other(s): _____				
2.1	Assessment objectives match program objectives				08
2.2	Assessment measures what it is supposed to measure (to fit its purpose)				09
2.3	Other(s): _____				

		For office use only				
		1	2	3	4	
3.1	Assessment practices will be consistent if repeated					10
3.2	Assessment instruments test what they are supposed to test					11
3.3	Other(s): _____					
4.1	Specifications of assessment expectations are communicated to students at the beginning of the course/program					12
4.2	Methods of assessment match tasks					13
4.3	Other(s): _____					
5.1	In general assessment is used effectively to make important decisions					14
5.2	Other(s): _____					
6.1	Assessment represents important components of the curriculum					15
6.2	Assessment covers sufficient content					16
6.3	Other(s): _____					
7.1	Assessment practices are consistent with recent developments in assessment					17
7.2	Assessment represents current perspectives of the subject area					18
7.3	Other(s): _____					
8.1	Assessment focuses on skills and their transferability					19
8.2	Assessment results indicate how well students have achieved specific objectives of the program					20
8.3	Other(s): _____					

		For office use only				
		1	2	3	4	
9.1	Assessment covers higher order cognitive skills such as problem solving, critical thinking, reasoning and others					21
9.2	Assessment encourages active learning not memorization and regurgitation of factual knowledge					22
9.3	Other(s): _____					
10.1	In general assessment is a reasonable burden on lecturers and students					23
10.2	Assessment is manageable within instructional time					24
10.3	Assessment practices are coordinated to enhance practicality					25
11.1	Assessment tasks are meaningful to students					26
11.2	Assessment tasks are relevant to problems students encounter in every day life					27
11.3	Other(s): _____					
12.1	Feedback takes place within a reasonable period of time					28
12.2	Feedback informs instruction to improve students' achievements					29
12.3	Adequate feedback is provided to monitor student progress					30
12.4	Other(s): _____					
13.1	Equal assessment opportunities are provided to all students					31
13.2	All students have equal access to assessment information					32

		For office use only				
		1	2	3	4	
14.1	Policy in assessment on redemption in case of failure or otherwise exists (for example supplementing or others)					33
14.2	Students can make appeals regarding their results (e.g. wrong entry)					34
15.1	Students and lecturers are involved in assessment, i.e. they make shared decisions in assessment					35
15.2	Lecturers and parents make shared decisions in assessment					36
15.3	All lecturers make shared decisions in assessment					37
15.4	Other(s): _____					
16.1	Clear policy on staff development exists					38
16.2	Every lecturer is given an opportunity to capacity building in assessment					39
16.3	Other(s): _____					
17.1	Individual departments review assessment practices regularly					40
17.2	Individual departments review assessment practices systematically					41
17.3	Other(s): _____					

### PART 3: THE USE OF ALTERNATIVE ASSESSMENTS

Use the following five-point scale to indicate how often you use the assessment the tasks and types that are described below.

Very frequently	Frequently	Occasionally	Rarely	Never
5	4	3	2	1

Quality aspects of assessment task						For office use only				
		1	2	3	4	5				
18.1	Clear policy guidelines regarding the use of alternative assessment.									42
18.2	Authentic (real life) assessment are used									43
18.3	Alternative assessments (non-traditional pencil and paper tests and examinations) are used									44
18.4	Performance assessment focusing on assessment of a student performing an action is used									45
18.5	Performance assessment focusing on assessment of a product is used									46
	<b>How often do you employ the following types of assessment practices?</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>				
18.6	Students' own experiments									47
18.7	Students' projects									48
18.8	Students' portfolios									49
18.9	Students' products									50
18.10	Assessment of a student performing an action									51
18.11	Demonstrations (exhibitions)									52
18.12	Field work									53
18.13	Extended essays									54
18.14	Other(s): _____									

**THANK YOU FOR YOUR COOPERATION**



**APPENDIX B**  
**QUALTY ALTERNATIVE ASSESSMENTS IN LESOTHO**  
**RESEARCH QUESTION FOR STUDENTS**

Dear student,

You are cordially requested to complete this questionnaire. I am currently pursuing a Ph D degree with the university of the University of the Free State and I am conducting this study to fulfill the requirements of the degree. The Purpose of this study is to investigate the quality of assessment practices and the use of alternative assessment in institutions of higher education Maseru area in Lesotho. You need not write your name and the collected information will be treated as confidential. It is envisaged that your cooperation will help towards the improvement of the quality of education in your country.

Thank you very much in advance for your participation.

Yuors sincerely,

**(Mrs.) 'MATSELANE KHAHLOE.**

PH. D STUDENT, UFS

## RESEARCH QUESTIONNAIRE FOR STUDENTS

The purpose of this questionnaire is to collect data on how students experience the quality of assessment practice and the extent to which they are presented with alternative assessment practices in higher education: Maseru area, Lesotho.

The study is undertaken in pursuance of doctoral degree in curriculum studies at the University of the Free State, Bloemfontein.

### DIRECTIONS

1. To complete this questionnaire, read the instructions and then answer the questions.
2. Attempt all the questions as indicated.
3. The questionnaire is strictly confidential and the responses will be used for the purpose of this study only.
4. Your cooperation is highly appreciated.

### PART A: BIOGRAPHIC INFORMATION

1. **What is the name of your institution?**

\_\_\_\_\_

Mark with a cross (x) in the appropriate box.

2. **Gender**

Male	<input type="checkbox"/>	01
Female	<input type="checkbox"/>	02

3. **Which is your subject area?**

\_\_\_\_\_

**For office use only**

1	2	3

01

02

03

## PART 2: QUALITY ASSESSMENT PRACTICES

The aim of this part is to determine how you experience the quality of assessment practices in your institution. Use the following 4-point scale to rate the quality assessment in your institution.

<b>Strongly agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly disagree</b>
4	3	2	1

Use a cross (x) to indicate your choice.

4.	Assessment	1	2	3	4	
4.1	Is motivating					01
4.2	Is integrated into instruction					02
4.3	Is fair					03
4.4	Is linked to learning objectives					04
4.5	Is manageable					05
4.6	Encourages self-reflection					06
4.7	Helps you improve					07
4.8	Encourages deep understanding					08
4.9	Encourages active learning					09
4.10	Feedback is informative					10
4.11	Feedback is prompt					11
4.12	Identifies individual strengths					12
4.13	Identifies individual weaknesses					13
4.14	Improves any ability to work in a group					14
4.15	Improves ability to work independently					15
4.16	Challenges cognitive abilities, for example, critical thinking, problems solving, transfer of skills and knowledge					16

For office use only

<b>Assessment</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>For office use only</b>
4.17	Specifications and expectations are communicated to students at the beginning of the course					17
4.18	Guidelines and expectations are clear and explicit					18
4.19	Procedures allow for appeal process or grievance procedures (in case of failure or any problem)					19
4.20	Assessment is redeemable (e.g. second chance is provided in case of failure or otherwise)					20
4.21	Environment is conducive					21
4.22	Other(s): _____					

## USE OF ALTERNATIVE ASSESSMENTS

Indicate how often you are assigned the following types of assessment tasks using the following four-point scale:

<b>Always</b>	<b>Most of the time</b>	<b>Sometimes</b>	<b>Never</b>
4	3	2	1

Use a cross (x) to indicate your choice.

<b>5. Types of assessment tasks</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>For office use only</b>
5.1	Student's own experiment					22
5.2	Project assessment					23
5.3	Portfolio assessment (assessment of collected items)					24
5.4	Product assessment (where a student has constructed something e.g. a circuit board)					25

Types of assessment tasks		For office use only				
		1	2	3	4	
5.5	Assessment of actual performance (a student is assessed performing an action, e.g. a first aid skill)					26
5.6	Demonstrations (exhibitions)					27
5.7	Fieldwork					28
5.8	Extended essay					29
5.9	Pencil and paper assessments (exams & tests)					30
5.10	Other(s); Specify _____					31

**THANK YOU IN ADVANCE FOR YOUR COOPERATION!**

## APPENDIX C

### QUALITY ALTERNATIVE ASSESSMENT IN HIGHER EDUCATION SYSTEM OF LESOTHO

#### INTERVIEW PROTOCOL FOR LESOTHO GOVERNMENT OFFICIAL

The purpose of this interview protocol is to investigate the opinions of the government officials of the Lesotho government on the quality of assessment practices in higher education system of Lesotho.

#### Question one: What are opinions of the Lesotho Government officials on the quality of assessment practices in higher education system of Lesotho?

- i) What is your opinion on the quality of assessment practices in higher education in Lesotho?
- ii) What do you see as major quality aspects of assessment of students' achievements in higher education system of Lesotho?
- iii) What do you see as major weaknesses of assessment practices in higher education system of Lesotho?
- iv) What quality improvements would you suggest to be made on assessment practices in higher education system of Lesotho?

#### Question two: What are the government initiatives to improve quality of assessment Practices in higher education?

- i) What is the Government doing to improve the quality of assessment practices in higher education in Lesotho?

.....  
.....

.....  
.....  
.....

**APPENDIX D**

Lesotho College of Education  
P.O. Box 1393,  
Maseru 100.  
Lesotho.

20<sup>Th</sup>. APRIL.2006

The Administrator  
.....  
.....  
Lesotho

Dear Sir / Madam,

**Request to conduct research study**

I would like to present this letter to request permission to conduct a research study in your institution/ department among the students and the lecturers/officers.

The purpose of the study is to investigate the quality of assessment practices and the use of alternative assessments in higher education in Lesotho. The study is undertaken as a requirement for a Ph.D. degree in education (Curriculum Science) with the University of Free State (UOFS). It is envisaged that your cooperation will help towards the improvement of the quality of higher education in your country.

Thank you very much in advance for your cooperation.

Yours Sincerely,

(Mrs.)' Matselane Khaahloe.

Ph.D. Student, UOFS.





APPENDIX E

**RE: PERMISSION TO UNDERTAKE A RESEARCH  
STUDY.**



**THE KINGDOM OF LESOTHO  
MINISTRY OF EDUCATION AND TRAINING**

Date: 14 September, 2007  
Ref. No.: ED/X/2

Mrs. Matselane Khaahloe,  
Lesotho College of Education,  
P.O. Box 1393,  
MASERU. 100

Dear Mrs. Khaahloe,

**RE: PERMISSION TO UNDERTAKE A RESEARCH  
STUDY.**

Your letter dated 20<sup>th</sup> August, 2007 on the subject above has reference.

The Ministry of Education and Training has no objection to you conducting your research in our institutions on the quality of assessment practices. Nevertheless, it remains your responsibility to seek the consent of the appropriate management structures of such institutions.

We hope that your research will also enrich our efforts to improve the quality of assessment practices and procedures in our educational system. Good luck in your endeavours.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'N.I. Kokome', written over a horizontal line.

**N.I. KOKOME**  
**PRINCIPAL SECRETARY**

P. O. BOX 47 MASERU 100 LESOTHO

TEL: (00266) 22312849

Fax 00266 22310206

APPENDIX G

UNIVERSITEIT VAN DIE VRYSTAAT  
UNIVERSITY OF THE FREE STATE  
YUNIVESITHI YA FREISTATA

Fakulteit Geesteswetenskappe  
Skool vir Opvoedkunde  
Dept Kurrikulumstudie

*Faculty of the Humanities  
School of Education  
Dept Curriculum Studies*



2 October 2006

TO WHOM IT MAY CONCERN

M B KHAHLOE (STUDENT NUMBER: 2001107412)

This is to confirm that Ms MB Khaahloe is a PhD student in Curriculum Studies at the University of the Free State. She is busy with her thesis on **Alternative quality assessment practices in Lesotho**. She would like to obtain information from your institution in order to advance assessment practices in Lesotho. She is progressing very well and intends to complete the degree towards middle 2007.

Regards

*G. S. Kogé*



339, Bloemfontein 9300, (051) 401 2523, (051) 401 9456, [casaleggi@hum@mail.uovs.ac.za](mailto:casaleggi@hum@mail.uovs.ac.za)  
Republiek van Suid-Afrika, Republic of South Africa

## APPENDIX H

### Pearson's correlations of questions 18.1 to 18.13

	Q18.1	Q18.2	Q18.3	Q18.4	Q18.5	Q18.6	Q18.7	Q18.8	Q18.9	Q 18.10	Q 18.11	Q 18.12	Q 18.13
Q18.1	1	.594	.384	.389	.369	.529	.047	.444	.290	.293	.324	.369	.190
Q18.2	.594	1	.503	.553	.432	.513	.089	.480	.333	.346	.412	.389	.059
Q18.3	.384	.503	1	.496	.457	.406	.114	.319	.215	.095	.345	.284	-.013
Q18.4	.389	.533	.496	1	.697	.386	.233	.260	.495	.457	.387	.373	.178
Q18.5	.369	.432	.457	.697	1	.422	.284	.275	.474	.362	.333	.325	.063
Q18.6	.529	.513	.406	.386	.422	1	.406	.535	.495	.511	.585	.487	.221
Q18.7	.047	.089	.114	.233	.284	.406	1	.289	.421	.441	.448	.299	.244
Q18.8	.444	.480	.319	.260	.275	.535	.289	1	.486	.539	.602	.407	.220
Q18.9	.290	.333	.215	.495	.474	.495	.421	.486	1	.603	.557	.432	.188
Q18.10	.293	.346	.095	.457	.362	.511	.441	.539	.603	1	.628	.435	.223
Q18.11	.324	.412	.345	.387	.333	.585	.448	.602	.557	.628	1	.675	.386
Q18.12	.369	.389	.284	.373	.325	.487	.299	.407	.432	.435	.675	1	.472
Q18.13	.190	.059	-.013	.178	.063	.221	.244	.220	.188	.223	.386	.472	1

## APPENDIX I

### Pearson's correlations for questions 5.1 to 5.9

	Q5.1	Q5.2	Q5.3	Q5.4	Q5.5	Q5.6	Q5.7	Q5.8	Q5.9
Q5.1	1	.240	.347	.358	.356	.309	.306	.134	.058
Q5.2	.240	1	.324	.345	.167	.268	.392	.217	.119
Q5.3	.347	.324	1	.457	.418	.305	.218	.159	-.013
Q.4	.358	.345	.457	1	.394	.271	.325	.246	.078
Q5.5	.356	.167	.418	.394	1	.400	.306	.216	.052
Q5.6	.309	.268	.305	.271	.400	1	.377	.267	.185
Q5.7	.306	.392	.214	.325	.306	.377	1	.281	.185
Q5.8	.134	.217	.159	.246	.216	.267	.281	1	.281
Q5.9	.058	.119	-.013	.078	.052	.185	.185	.281	1