Assessment and Study Strategies A study among Rwandan Students in Higher Education

Innocent Sebasaza Mugisha



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Table of Contents

ACKNOWLEDGEMENT	11
1. INTRODUCTION	13
1.1 ASSESSMENT AS AN ELEMENT OF THE COURSE CURRICULUM	15
1.2 AIM OF THE STUDY	
1.3 Organisation of the thesis	16
2. CONTEXT OF THE STUDY	19
2.1 EDUCATION IN RWANDA AFTER INDEPENDENCE	19
2.1.1 Changes in the Rwandan educational system during the first republic	19
2.1.2 Changes in higher education during the second republic	20
2.2 THE RWANDAN HIGHER EDUCATION SYSTEM AFTER 1994	21
2.2.1 The role of the Ministry of Education in higher education	21
2.2.2 National policies governing higher education	23
2.2.3 Law governing higher education	24
2.2.4 Admission to higher education.	25
2.3 THE ROLE OF THE FACULTY AND THE DEPARTMENT	26
2.3.1 The running of course-programmes	26
2.4 Introduction of a modular system in public institutions	29
2.5 Summary	30
3. THEORETICAL FRAMEWORK OF ASSESSMENT	33
3.1 Assessment over time	33
3.2 NATIONAL EXAMINATIONS.	34
3.3 CLASSROOM ASSESSMENT	40
3.3.1 Recent changes in classroom assessment	40
3.3.2 Classroom assessment and aspects of socio-cultural theory	
3.3.3 Learning in context	44
3.4 PURPOSES OF ASSESSMENT	46
3.5 ASSESSMENT AND GRADING	52
3.5.1 Norm-referenced	52

3.5.2 Criterion-referenced	53
3.6 Assessment and study strategies	54
3.7 DEEP AND SURFACE APPROACHES TO LEARNING.	56
3.8 SUMMARY	57
4. METHODS	59
4.1 Methodological considerations	59
4.2 Settings	61
4.2.1 Status	61
4.2.2 Languages of instruction	61
4.2.3 Study programme and data collection	62
4.3 Design	63
4.4 PANEL WAVE 1: THE SURVEY	65
4.4.1 Selection of participants	65
4.4.2 Instrument	65
4.4.3 Data collection procedures	66
4.4.4 Data analysis	67
4.5 PANEL WAVE 2: FOCUS GROUP DISCUSSION	67
4.5.1 Selection of participants	67
4.5.2 Instrument	68
4.5.3 Data collection procedures	68
4.5.4 Data analysis	69
4.6 PANEL WAVE 3: INDIVIDUAL RESPONSES	70
4.6.1 Selection of participants	70
4.6.2 Instrument	70
4.6.3 Data collection procedures	71
4.6.4 Data analysis	71
4.7 PANEL WAVE 4: SEMI-STRUCTURED INTERVIEW.	71
4.7.1 Selection of participants	71
4.7.2 Instrument	72
4.7.3 Data collection	72
4.7.4 Data analysis	73
4.8 ETHICAL CONSIDERATIONS	73
4.9 QUALITY CONSIDERATIONS FOR THE STUDY	74
4.9.1 Dependability	
4.9.2 Credibility	75
4.9.3 Transferability	
4.10 Summary	

5. STUDENTS' CONCEPTIONS OF ASSESSMENT	77
5.1 Purpose of assessment	77
5.1.1 Motivating students	78
5.1.2 Grading achievement and purposes of assessment	78
5.1.3 Evidence guided assessment	80
5.1.4 Control and monitoring	81
5.1.5 Assessment for authority and selection	83
5.1.6 Multipurpose assessment	84
5.1.7 Assessing performance	85
5.2 Who carries out assessment	86
5.3 Modes of assessment	87
5.4 TIME OF ASSESSMENT	88
5.5 ASSESSMENT AND FEEDBACK	89
5.6 ALTERNATIVE MODES OF ASSESSMENT	89
5.6.1 Students' views on modes of assessment	90
5.6.2 Performance assessment	91
5.6.3 Self- and peer- assessment	92
5.6.4 Problem-solving assessment	92
5.7 Assessment regulations	96
5.7.1 Focus on assessment regulations and implementations	96
5.7.2 Students' involvement and a need for change	98
5.8 Summary	100
6. STUDENTS' CONCEPTIONS OF STUDY STRATEGIES	103
6. 1 Considerations before choosing a study strategy	103
6.1.1 Prior information about the teacher	104
6.1.2 Cue-seeking and fear-driven strategies	105
6.1.3 Fight against 'fear'	106
6.1.4 Need to categorise the teacher	107
6.1.5 Guard against failure and expulsion	107
6.1.6 The nature of the course	108
6.2 Adopted study strategies	110
6.2.1 An individual study strategy	110
6.2.2 A group study strategy	111
6.2.3 Teachers' styles of asking questions	112
6.2.4 Common study strategies.	
6.3 Information Sources	116
6.3.1 Influence from senior students	116

6.3.2 Influence of other courses	117
6.3.3 Influence of teaching and assessment culture	117
6.4 Influence of course value	118
6.4.1 Existing influence of course value	118
6.4.2 Conditional influence of course value	119
6.4.3 No influence of course value	120
6.5 Summary	120
7. STUDENTS' RETROSPECTIVE REFLECTIONS ON ASSESSME	
STUDY STRATEGIES	125
7.1 DESCRIPTIONS OF WAYS OF ASSESSMENT	125
7.1.1 Course oriented descriptions of assessment	
7.1.2 Teacher-oriented descriptions of assessment	
7.2 IDEAL ASSESSMENT	
7.2.1 Continuous assessment	129
7.2.2 End-of-course assessment.	131
7.2.3 Participatory assessment	131
7.2.4 Authentic assessment	
7.3 REFLECTIONS ON STUDY STRATEGIES AND STUDY CONDITIONS	134
7.3.1. Study–environment	134
7.3.2 Initiation of newcomers	135
7.3.3 Contextual pressures	136
7.3.4 Survival strategies	136
7.4 ACCOUNTS OF THE STRATEGIES ADOPTED	138
7.5 Summary	138
8. DISCUSSION	141
8.1 STUDENTS' CONCEPTIONS OF ASSESSMENT	141
8.1.1 Purposes of assessment	141
8.1.2 Ways of assessment	145
8.2 Adoption of study strategies	147
8.2.1 Influence of study context	
8.2.2 Considerations of study strategy adoption	148
8.3 STUDENTS' PROPOSED WAYS OF ASSESSMENT	151
8.3.1 Assessment in authentic settings	151
8.3.2 Self- and peer-assessment.	152
8.4 PEDAGOGICAL IMPLICATIONS	153
8.4.1 Backwash effects of assessment	153

8.4.2 Combined modes of assessment.	155
8.4.3 Use of appropriate study strategies	156
8.5 METHODOLOGICAL REFLECTIONS	157
8.6 Possible areas for further research	158
REFERENCES	159
APPENDICES	169
Appendix I	169
Questionnaire for third year geography students in Rwanda	169
Appendix II	173
Guide for the focus group discussions	173
APPENDIX III	175
Interview Guide for Individual follow-up tasks	175
APPENDIX IV	176
Interview Guide for former Geography Students	176

List of tables

- Table 1. Design of the four-panel wave study
- Table 2. Is assessment used to motivate the students?
- Table 3. Grading/ranking achievement
- Table 4. Variations in purpose of assessment
- Table 5. Distribution of frequencies of peers as assessors
- Table 6. Presentation to peers as mode of assessment
- Table 7. Assessment made at the end of the course
- Table 8. Feedback based on the assumption that assessment improves learning
- Table 9. Students' views on when assessment was conducted
- Table 10. Assessment regulations under discussion
- Table 11. Students' study strategies

List of figures

- Figure 1. Assessment for learning as a cycle of events
- Figure 2. Assessment of learning
- Figure 3. Factors considered by students before adopting a study strategy
- Figure 4. Summarised study approach combining individual and group responsibilities

List of abbreviations

COMESA Common Market for Eastern and Southern Africa

EAC East African Community

EFA Education for All

ESP Education Sector Policy

ESSP Education Sector Strategic Plan

GoR Government of Rwanda

HEC Higher Education Council

KNEC Kenya National Examination Council

MINEDUC Ministry of Education

NCDC National Curriculum Development Centre

NCHE National Council for Higher Education

NUR National University of Rwanda

NURBP National University of Rwanda Business Plan NURSP National University of Rwanda Strategic Plan

OGRR Official Gazette of Republic of Rwanda
RNEC Rwanda National Examination Council

RNOF Rwanda National Qualification Framework

SFAR Students' Financing Agency of Rwanda

UNEB Uganda National Examination Board

UPE Universal Primary Education

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Mugisha Innocent June 7, 2010

1. Introduction

The motivation for studying assessment and study strategies is related to my interest in the quality of learning, which is a major concern today all over the world. In Rwanda, it is particularly emphasised for example, in the Education Sector Policy (MINEDUC-ESP, 2003; 2006). At the same time, there is increasing empirical evidence (Ramsden et al. 1986; Charman et al. 1995; Gibbs, 1999; Ramsden, 1992; Ho et al. 2001; Ramsden, 2003) that the quality of learning depends on the adopted learning approach. There is equally profound literature available that links students' learning approaches to the perceptions students have about assessment (Crooks, 1988; Boud, 1990; Gibbs, 1999; Crossman, 2004). The influence of assessment on study strategies adopted by students has been extensively researched (e.g. Marton et al., 1984; Dahlgren, 1984; Laurilland, 2002). Moreover, there are recent works on assessment of learners from different parts of the world, for instance Australia (Crossman, 2004), United Kingdom (Maclellan, 2001), Ghana (Akyeampong et al., 2006) and Rwanda, (Rwanamiza, 2004). These works reiterate the influence on learning by the context in which assessment is conducted. On a national level, for instance, Rwanda has lifted the issue of better quality in education to become a national priority (MINEDUC-ESP, 2003; 2006) and institutions of higher learning in the country are taking part in the same endeavour as stated in the National University Plan (NURSP) and the Strategic Business Plan (NURBP) 2008-2012 (NUR, 2007).

All these national and institutional policy documents are supposed to be followed in practice, to achieve quality and relevant education. However, little is mentioned in the same documents about considering students' perspectives and their participation in designing what would constitute assessments to be conceived as a contributory part of their learning process. Crossman argues that 'since student teachers are experienced consumers of assessment, their perceptions should make a useful contribution to discussions about curriculum design in university schools of education' (Crossman, 2004:582).

My educational background has had some influence in my choice of geography students as opposed to students of any other discipline at the same level of education. Throughout my early education, geography was one of the subjects I studied and later I conducted research at masters level, which focussed on the performance patterns and contributory factors in Lesotho high school geography candidates in Cambridge for Overseas School's Certificate (COSC) for the period 1986-1990 (Mugisha, 1993). This study brought me close to geography classroom issues and moreover, I had an opportunity of teaching Curriculum Studies to student-teachers in the National University of Lesotho (NUL) who were trained to teach geography at high school level in the same system I had researched. Through the training of the student-teachers, supervision of teacher trainees on their teaching practice periods, when they were based in schools were other opportunities to be in direct encounter with learning and assessment. During the same period I was teaching Curriculum Studies and got involved in national geography curriculum activities, in my capacity as a representative from the NUL on Lesotho national geography curriculum panel. This gave me a deeper understanding of the dynamics of the geography curriculum. During seven years (1993-2000) I worked closely to situations that enabled me access to geography classroom activities and training of geography teachers that made me develop an interest in the discipline.

When I moved to the National University of Rwanda (NUR) I continued teaching teacher trainees and some of the courses included Assessment and Evaluation. This was yet another encounter that brought me close to classroom issues where assessment was taught as a course and, at the same time, carried out as a curriculum activity. The teaching and study environments within the institutions of my experience were different and I became interested in learning how students experienced the assessment and how they went about arranging their study strategies. The study I carried out (Mugisha, 2006) about the state of the teaching of geography in Rwanda secondary schools contributed to the further development of my interest in study strategies and quality of learning in the geography field. I would say a combination of the fore said background and the literature I read have all contributed to my curiosity about how geography students in Rwanda tertiary education conceive assessment and study strategies in their courses. The knowledge I have of the reforms going on in higher education in Rwanda coupled with the literature from the cited empirical studies intrigued me to conduct this study.

1.1 Assessment as an element of the course curriculum

Assessment is used in everyday life to refer to different things, depending on the context, and the philosophy underlying the system in which it is used. As a way of eliciting how it is used in this thesis, its operational meaning is presented in the following section.

Assessment as an element of curriculum can be used at different levels, like national, institutional and students' achievement of a programme course level. For example, when national examinations for schools are conducted in the Rwandan educational system, one would correctly say that assessment is carried out. At the same time, if students in an institution sit for their end of semester examinations, they are being assessed. However, in other systems, such as that of the United States of America in all the cited examples, the concept evaluation would suffice (Rowntree, 1981) and even in Anglophone systems (Rwanamiza, 2004) they would talk about evaluation and not assessment. In this thesis, the meaning I have given to assessment is flexible and a basic one in a sense that it refers to whatever is done in the name of getting information that helps to understand the students' quality of learning. This means that the operational meaning of assessment used in this thesis comprise both formative and summative aspects. It includes assessment conducted by teachers, peers, or even a combination of teacher and students. This line of thinking subscribes to the differentiation Harlen (2007) used in her work 'Assessment of Learning', where she differentiates between assessment and evaluation as follows:

'Assessment' is used to refer to the process of gathering, interpreting and using evidence to make judgments about students' achievement in education. The term 'evaluation' is reserved for this process of using evidence in relation to programmes, procedures, materials or systems. (Harlen, 2007:11)

It is unimaginable to talk of assessment in an educational setting at a course level and fail to appreciate that there is some level of judgement being made by the assessor about the student's achievement. However, this does not qualify the exercise of assessment as being equal to that of evaluation. The present study has been influenced by Harlen (2007) when she suggests that components of an assessment system are elaborated in terms of the purpose of assessment; uses of assessment; types of assessment tasks and how reporting of assessment outcome is done.

1.2 Aim of the study

The aim of this study is to gain deeper understanding of students' experiences of assessment and what study strategies they adopt. In order to achieve this aim, I was guided by the following three research questions:

- 1. How do geography students conceive assessments in their courses?
- 2. How do students determine their study strategies adopted in geography courses?
- 3. How do students reflect on alternative ways of assessment in geography?

Through these questions I will gather information that will contribute to deeper understanding of how students' describe their experiences with assessment and how they adopt study strategies, which they deem to be appropriate in their settings. This knowledge will contribute to the understanding of assessment from students' perspective, especially in the Rwandan context where little research has been conducted in the field of assessment in higher education (Rwanamiza, 2004). In the long term the findings can be used to improve the quality of learning in higher education.

1.3 Organisation of the thesis

In this first chapter of the thesis, an introduction to the research interest of the study is presented, what motivated me to carry it out, and where the study was conducted. The motivation is supported by acknowledging some earlier studies that were carried out in the same field. In addition, an explanation as to why the study was conducted is that it was done when contextual changes in Rwandan higher education took place. The chapter goes further and introduces assessment as a main concept in the thesis. Moreover, the chapter explains the aim of the study and states the research questions, which have guided the study. The chapter concludes by highlighting the organisation of the study

In chapter two, the background to the study is explained. First, education in Rwanda during the first and second republics is presented and it proceeds to the recent (1995-2008) reforms in higher education. The focus of these reforms concerns the role of the Ministry of Education; the law and policies governing higher education, both public and private. Also, the role of a faculty and a department, at an institutional level, are explained and the chapter concludes by highlighting a new modular programme that was

introduced in higher education. However, the latter did not affect the students who were participating in this study.

Chapter three is divided into two parts. The first deals with earlier studies conducted in the area of assessment of learners and their study strategies. The second part includes a discussion of theoretical perspectives (educational assessment and a socio-cultural perspective on learning) which underpin the interpretation of the findings of my study.

Chapter four is essentially concerned with the empirical study in terms of methodological considerations made and how the study was designed. The chapter describes how each of four investigated panel waves were organised regarding methods used in selection of participants, data collection and the settings in which the study was conducted.

Chapter five elaborates the findings of students' conceptions about aspects of assessment: purpose of assessment; when assessment is carried out; assessment and feedback; and mode of assessment. The findings are presented according to the categories, which evolved during the elaboration of data. Chapter six comprises the findings of students' conceptions about study strategies gathered through the four panel waves of the study. The research interest in the chapter focuses on how combinations of strategies are used by the students, depending on how they conceive their course. Chapter seven, the third chapter of the findings, are based on in-depth interviews which I conducted after the students had completed their study programme. At this stage, I assumed the participants would find it easier to talk more freely than when they were still students. Hence, the analysis focuses on former students' expressed ways and visions about assessment and their conceptions of study strategies.

In the final chapter of the thesis, I discuss the themes about assessment and those under study strategies as well as former students' visions about assessment as presented in chapter seven and relate them to theories reviewed in the theoretical framework chapters. The chapter concludes with a discussion of what the implications would be of the findings in the Rwandan education context and to the alignment of assessment and teaching and learning goals. Based on these conclusions, possible further research areas are suggested.

2. Context of the study

Students' assessment in a particular course is influenced by the wider institutional context. Hence, it is of paramount importance to describe the educational context in which the study is conducted at the earliest stage of the thesis since education systems are different and they are influenced by historical, socio-economical, political and cultural factors. This explains the need for a chapter on the context of the study that helps the reader to position the thesis in the relevant environment. The purpose of this chapter is to describe the recent historical changes in the Rwandan education system in general and those in higher education in particular, so as to understand the system in which this study was conducted. The chapter gives a brief description of the education system Rwanda inherited from her colonisers after the acquisition of independence in 1962. Further, it describes the policies that were introduced in higher education and their implications.

2.1 Education in Rwanda after independence

The major reforms higher education went through during the first and second republics, up to 1994, are presented. The period after 1994 to date is another historical landmark in the educational reforms in Rwanda and the changes that took place since then are addressed. Furthermore, the role of faculties and departments in public institutions of higher education in relation to the implementation and monitoring of programmes are outlined. The chapter concludes by highlighting the introduction of a modular system in addition to the existent credit course system in public higher education institutions.

2.1.1 Changes in the Rwandan educational system during the first republic

When Rwanda gained her independence from Belgium in 1962 the country inherited an education system that was characterised by a limited number of schools, low educational level, and admission to schools that was based on ethnic segregation. It lacked higher education. The first republic period (1962 to 1973) history of Rwanda was marked by political instability and change of allegiance by the former colonisers from one ethnic group to another, which caused the first exodus from Rwanda. The change in political administration brought about a shift in education policy implementers, as decision making changed from being in the hands of one group to another, from Tutsi into the

hands of Hutus. The new republic government considered establishment of more primary schools a priority, for instance:

By 1975, school enrolment had increased from 2500 pupils at the time of independence to 386,000 pupils at primary level whereas at secondary level there were 64 schools with a student population of 11,227 students. (NCDC, 2006:151)

Kinyarwanda remained as the language of instruction in schools while French was taught as a subject until higher education level where it was used as the language of instruction. The influence of Belgians as former colonisers of Rwanda remained prominent in the system and later the French joined in training and sponsoring Rwandans at higher education level. It was during this period that Rwanda established her first institution of higher education, the National University of Rwanda (NUR) in 1963, in addition to the establishment of schools and making the primary education free and mandatory (Mugesera, 2004). The extent to which NUR as the only university met the demand for attending higher education from the increased number of youths completing secondary school education was limited and the problem was coupled with the national policy of segregation within the admission process, as well as the limited offering of education opportunities in general.

2.1.2 Changes in higher education during the second republic

At the beginning of 1970, segregation based on ethnicity in public institutions was still practised and during the second republic (1973 to 1994), the basis of segregation changed to be sectarianism-driven, based on religious affiliation, in the pretext of the quota system in education. The system continued to use the same Manifeste des Bahutu (1957) but with a strategy different from that which was used before independence. It was against such a background that government officials made it clear in their document policy, how education implementers, must adhere to a quota system in admitting students to secondary and higher education institutions:

We want education to be strictly monitored. The system should be improved and made more realistic and modern through the rejection of the system of selection whose results can be seen in secondary schools. We think that this should be respected, if the places are not enough, Identity Cards should be used in order to respect quotas. We wish that the award of scholarships takes place because the population pays taxes. Bahutu should

not be victims of Tutsi monopoly which had kept them in an eternal and unbearable social and political inferiority. For tertiary education, we think that sending students to 'Congo Belge' is good because this country can accommodate many students but this will not prevent us from sending our most brilliant students to continue their studies in Europe (metropolis). (Manifeste des Bahutu, 1957: 6)

The above policy made accessibility to higher education more restricted as it was not based on academic merit but other politically motivated criteria (ethnicity and region). The few students who were admitted to higher education and happened to be from the sector of the population that was supposed to be segregated could hardly get employed in public services after their graduation. The situation at the tertiary level shows according to the MINEDUC Statistics (1989), that the number of students who enrolled at the NUR during the period 1981 to 1987 increased from 1,144 to 7,367. Higher education in Rwanda was sponsored by the government which had full control over the policies that governed NUR, the only public tertiary institution, in terms of its academic and administrative operations. Restricted access to higher education characterised by segregation against students of particular ethnicity and regions of the country one came from was practised until 1994 when there was a change of government.

2.2 The Rwandan higher education system after 1994

Education, personnel and structures suffered horrendously during the genocide in 1994 and a reestablishment of the system was done from scratch. The government of national unity that came into power in 1994 put in place some emergency measures to re-establish a running government and education was one of the public services that was given first priority. In the next sub-sections, I will address how the reviving of education, particularly higher education, was achieved through various policies and strategies.

2.2.1 The role of the Ministry of Education in higher education

The Ministry of Education, Science, Research and Technology, which later became the Ministry of Education (MINEDUC) was one of the first ministries that were re-established. It maintained the previous education system structure of 6 years of primary; 3 years of junior secondary; 3 years of upper secondary and 4 or 5 years of tertiary education depending on the study

programme (MINEDUC-ESP, 2003). The ministry was given an immediate task of re-opening schools and this had to be done at all education levels. The ministry had to play the role of service provider, sponsor and custodian of education quality at all levels. The move of opening education institutions played a multipurpose role in a sense that it gave confidence to refuges to return to their homes and took care of large numbers of children, some of them orphans that were out of school and losing study time. The opening contributed to social order by keeping children in schools. This required the ministry to address the educational challenges that arose as the schools were reopened.

The huge number of students who were eligible to join institutions of higher education after the re-opening was far beyond what the institutions could accommodate (MINEDUC, 1997). Some students were already registered in these institutions before the national calamity of 1994. In addition, there were students who are off springs of Rwandans who went to exile long before 1994 and had returned in equally big numbers. They had to join higher education too. This was a big challenge because among this second category some students were educated within an Anglophone system. They did not know French well enough to follow university courses in the new system they were joining. In an attempt to address the problem, parallel classes of Anglophone and Francophone students were organised. In addition, bridge language programmes were established in various higher education institutions.

The language of instruction at higher educational level in Rwanda had all along been French alone until the re-opening of the institutions in 1995 (MINEDUC-ESP, 1998). The admission of Anglophone students into a Francophone system, coupled with the fact that it happened drastically without adequate time for planning, meant there was an immediate need to get resources in terms of both more Anglophone teaching staff and reading materials and all this had to be done by the ministry of education. There was a mismatch between the merge resources (teaching and learning materials, teaching space, qualified teaching staff, programmes written in English and French, just to mention a few) and the relatively high number of students which compounded the challenge the ministry of education faced at the time of declaring the institutions of higher education open (ibid.).

It is worth noting that shortly after the reopening of the education institutions, there were no constitutional laws in existence and most of the issues were carried out on an emergency and ad hoc basis and matters would be rectified later after the activity was implemented (MINEDUC-ESP, 1998). However, for the smooth running of the programmes, each higher education institution was given a rector, nominated by the members of the cabinet and the rector would be in-charge of the day to day running of the institution. The rector would be accountable to the institution senate, a body that constitutes all the executive office bearers of an institution plus student and teaching staff representatives. The Senate would, in turn, be answerable to the Board of Governors, whose members are nominated by the members of the cabinet. These are the levels of executive decision making bodies of any public institution of higher education in Rwanda. Through their respective departments, faculties were in-charge of design, review and delivery of courses and programmes but they had to be approved by the higher bodies of the institution administration before their delivery.

2.2.2 National policies governing higher education

The Education Sector Policy (ESP) (MINEDUC-ESP, 1998) can be considered as the first instrumental policy that was used in addressing education system matters during the four years of the emergence period. The implementation of the policy guidelines brought the system back to an operational level, and the system was out of crisis. The next phase focussed on long term policies and strategies which would make the system address both national and international commitments as spelt out in the ESP:

Rwanda like many other countries now finds itself at a crossroads with commitments to achieve certain international targets, notably Universal Primary Education (UPE) and Education for All (EFA), and a great need to develop other levels of education which remain at a low point. (MINEDUC- ESP, 2003:3)

The period that followed the emergence phase required the system to have a different policy document from the MINEDUC-ESP (1998) that had been in operation specifically to be used in the unusual circumstances in guiding implementation of immediate and short term solutions. This explains why there was a review of the first policy which came up with the production of MINEDUC-ESP (2003), whose main focus was to address areas that were still lagging behind after the years of operation to effect emergence. One such issue was that there were 'few girls being admitted in public higher institutions of higher education in general and enrolling in science and technology disciplines in particular' (MINEDUC-ESP, 2003:6). On the basis of the MINEDUC-ESP (2003), Education Sector Strategic Plans (MINEDUC-ESSP, 2004-2008; 2005-2010) were written and higher education in

Rwanda is guided by these strategic plans. Some of the salient issues in these plans that fall within the period covered by this thesis are addressed below.

2.2.3 Law governing higher education

The law that governs higher education emerged as part of national rebuilding efforts in Rwanda (OGRR, 2006). It was time to plan for more developmental and sustainable long term goals and, as part of this process, constitutional laws that govern higher education in Rwanda had to be enacted. The government of national unity has, through its policy document Vision 2020, explicated the roles of each ministry towards the achievement of the national goals. It has also assigned the ministry of education, through provision of higher education, its portion of responsibilities. In 2005, higher education had reached a level where it was aiming towards acceptability and integration into a wider community, both in the region and internationally. This made it necessary for the system to have laws and policies that would govern provision of quality education and monitor the process of integration in terms of cooperation and partnership with other universities outside Rwanda.

The MINEDUC-ESP (2003) paved the way for enacting a higher education Law of 2005 that recommended the establishment of an education council, which would be the overseer of operations in institutions of higher education in the country. The National Council for Higher Education (NCHE) was then established. Later its name was changed by a cabinet decision to Higher Education Council (HEC) but its responsibilities remained the same. The implementation of the law of higher education in the country is the primary focus of HEC. Among its other terms of reference is to make sure that all higher education providers are licensed and that they cater for quality education, which meets the required standards as spelt out in the National Qualification Framework for Higher Education (2007). This is applicable to all institutions of higher education, which are defined by the law as:

An institution of education that provides further general or technological training programmes compared to those provided by secondary school education. The programmes are provided in the classical way or by way of distance learning and lead to the award of Associate Degree at least. A higher institution of learning may offer part-time courses leading to the award of a certificate. (OGRR, 2006:22)

The implementation of the law cleared the confusion, which had existed in the system earlier regarding which institutions were legally qualified to be higher education institutions. A higher education provider can either be an institution based in Rwanda or outside Rwanda through distance learning or using an institution for incubation of the already made programmes or even on transnational provision. The law has provision for this kind of service and requires the provider to be authentically accredited. All these possibilities of offering higher education can be on either an individual or collaborative basis between institutions. Certification in cases where more than one institution is the education provider is managed according to the agreement between institutions as it was when the application for the operating license was approved by the Ministry of Education. (MINEDUC-HEC, 2008).

2.2.4 Admission to higher education

The discrimination policies based on Article 60 of the Law (No. 14/1985 of 29th June 1985), which had become institutionalised even in education, were removed in 1994, immediately after the change of government (MINEDUC-RNEC, 2009). As part of an attempt to address the issues of examinations and improve the transparency in organising national examinations, a presidential decree of 01/05.2003 recommended the establishment of the Rwanda National Examination Council MINEDUC-RNEC (2009), which from here after will be referred to as RNEC.

The Rwanda National Examination Council is responsible for the organisation and administration of the national examinations at all educational levels prior to the tertiary level. One of the examinations that RNEC is responsible for is written after the sixth year of secondary education, preparing students for entry to tertiary education. According to the education system in Rwanda, this examination level is referred to as the Advanced Level Examination-A2 (RNEC, 2009). The national examinations are set by RNEC and marked by subject school teachers under the supervision of RNEC. The examination results are graded and passed by RNEC to the Minister of State in charge of Primary and Secondary schools who authorise the announcement of the results to the public through various media. Copies of the results are sent to schools and local administrative offices, so that they can be easily accessed by the general public.

It is on the basis of individual candidates' examination results and also the choice of institution and programme as indicated on the application forms, which are filled in by the candidates before sitting for the examination. The selection process for admission to public tertiary institutions commences strictly on merit. The selection joint committee comprises representatives from various public institutions of higher education, the Student Financing

Agency (SFAR) and RNEC. Students who are admitted to the public institutions are informed and they have to sign a scholarship loan contract with SFAR on behalf of the Rwandan government. Those whose parents' or guardians' financial status is such that they cannot afford to sponsor the candidate at tertiary level are given first priority in receiving a loan. The loan is re-payable by the beneficiary on instalment after completing tertiary education. In contrast to the segregation period before 1994, a new development in the education system of Rwanda which was established by Students Financing Agency by Law (OGRR-SFAR, 2006) has started to work. In principle, every Rwandan citizen who qualifies for admission to a higher education institution is eligible for the loan sponsorship but due to limited funds, priority is given to the most disadvantaged among those who have passed. Some of the students, who have passed and secured admission in institutions outside Rwanda, usually qualify for the loan, especially if the capacity of the Rwandan institution is limited. Sponsorship outside Rwanda is largely reserved for post-graduate students in programmes that are not offered in Rwanda. Students who do not benefit from the government sponsorship and fail to get any other sponsor may end up being enrolled in private institutions and look for employment and study at the same time. This is one explanation for the rapid expansion of private higher education in the country.

2.3 The role of the faculty and the department

The roles of faculty and department are presented from both the perspectives of administrative and pedagogical responsibilities entrusted to them by institutional regulation policies. The presentation is made with close references to the classification of levels at which regulations are applied, which reflects what issues are addressed at respective levels.

2.3.1 The running of course-programmes

The Faculty: Since the reestablishment of the higher education system in public institutions of higher education in 1994, a faculty has been the highest administrative unit within an institution that is in charge of individual programme(s) and it is answerable to the office of the vice-rector in charge of academics. The roles of a faculty are administrative in coordinating duties of different departments and promoting their interests, so as to achieve the goals of the programmes (MINEDUC-HEC, 2007). From this perspective, a faculty acts as a link among its departments and at the same time represents departments' interests at higher levels of the institution. A faculty is headed by a dean who is nominated by members of the teaching staffs who are

employed on a full time basis and represent all the departments of the faculty. The nomination has to be approved by the institution senate. Faculties also advise the office of the vice—rector academic on admission of students. In public institutions, finances are handled by the central accounts department. Faculties have to approve departments' requisitions before being presented to the accounts department. As a part of the administrative duties, the faculty is guided by administrative and academic regulations, which are provided by an institution. The regulations are meant to safeguard the smooth running of programmes at a departmental level.

The day to day delivery of courses is organised at a departmental level in all public institutions of higher education. This arrangement puts the department into direct contact with students more regularly than any other structure within the institution. The roles of a department in a faculty include: initiating recruitment of course lecturers; design and review of courses; teaching; assessments and participation in promotional activities of students. It is at the departmental level that pedagogical expectations of an institution are translated into action through interaction with students, course content and lecturers. The focus of the present study is laid on this level of interaction specifically studying the conceptions of students' experiences of assessment and study strategies adopted.

A department acts as a direct functional unit of an institution that handles the delivery of courses by lecturers and students' studies (MINEDUC-HEC, 2007). Matters that arise out of such interactions between course lecturers and the students are in principle, expected to be handled first at departmental level. For example, assessment matters are entrusted to the course lecturer who is expected to report students' marks to the department at the end of the course during the semester in which the course was offered. However, because of the shortage of qualified teaching staff, institutions still depend to some extent on hiring part-time lecturers from both within and outside Rwanda and this makes it somewhat difficult to adhere to the set timetable. In a few public institutions time-tabling of courses is performed centrally on the basis of information provided by all the departments in the institutions.

Among academic regulations, there are those who are general and applicable by higher authorities of an individual institution, for example, in registering and certifying students at the beginning and end of programme respectively. However, there are other regulations that are applicable at a faculty level through its departments. Since the activities of offering various programmes and their assessments are the backbone of each department, some of the

academic regulations regarding teaching and learning are more relevant and frequently used at departmental level. Such regulations include areas of how teaching and research are supposed to be conducted and monitored in various programmes. The regulations go as far as to cover assessment expectations in terms of number of assessment tasks and percentages in relation to the number of credits of a course. The same regulations have Articles that spell out how to handle assessment outcomes regarding all possible performance eventualities, ranging from promotion to repeating. The regulations are more focused on which assessment tasks constitute the assessment of a course. For instance, at NUR in the credit course system, a course is marked on combinations of continuous and final examination basis. According to the assessment regulations, continuous assessment refers to 'a set of assessments, which are spread over the span of course, laboratory, practical work, seminars or internship' (NUR, 2005:7). Nevertheless, 'the lecturer is responsible for allocation of partial and final mark' (NUR, 2005:10). Marking and allocation of marks in a course is done by the individual course lecturer, who transmits all the marks of all students in a particular course to the department. The regulations are written in a manner that makes the teacher the unilateral assessor in a given course in the system in which this study was conducted. A department has no power to make judgemental decision on promotional issues, instead teachers present students' marks to the faculty meeting of all teaching staff. The faculty meeting deliberates upon each student's marks in each course using academic promotional regulations and students are classified accordingly.

Certifiable programmes: The programmes in higher education of Rwanda range from certificate to postgraduate degree programmes and operate on a credit system. In 2007 the Bologna modular system was introduced in public institutions of higher education. The credit system, used to weigh courses on the basis of a credit, is employed as a benchmark by all the public institutions as spelt out below:

Every course is measured according to its relevance in the whole programme. The unit of measure is a credit and is defined as 15 hours of theoretical courses, laboratory sessions, seminars, practical work or a week of internship. A course hour is defined as 50 minutes. (NUR, 2005:5)

Certification: The credit system has been in use since the reestablishment of higher education in Rwanda after 1994 and each institution has its own regulations governing the weighting of courses and programmes. Such

institutional regulations also spelled out how many credits are required for awarding a certificate, a diploma and degree. Bachelor degrees range from 160 to 240 credits depending on the programme that correspond to a period ranged betwee 4 and 5 years of full-time study. The autonomy that institutions use to employ in deciding which courses constitute programmes. coupled with lack of harmonisation exercise of programmes, resulted in a lack of common understanding of the weight and definition of a credit in the system. It was a challenge as it limits transferability of students from one institution to another. Furthermore, in that credit system, if a student did not complete the programme, which he/she was originally enrolled for, it was not possible to establish the equivalence of the work accomplished and as such the system did not permit multiple exits of students. In the same vein, if a student had, for instance, a certificate or even a diploma and wished to register into a degree programme, it became difficult to establish the level of entry. Hence, again the system did not allow multiple entries. This limited comparability of graduates of the same system has created even more challenges in employability in the country. It becomes even more difficult when the academic credentials of the system are to be accepted in a wider region and even internationally.

2.4 Introduction of a modular system in public institutions

In 2007, HEC established the Bologna modular system and Rwanda National Qualification Framework (RNQF) in public higher education institutions as an attempt to address the limitations of the credit system, that is the limited transferability of students; restricted multiple entries and exits of students; difficulty in comparability of graduates from the same educational system and reluctance of acceptability into the wider region of the graduates from the system. As part of a wider national developmental initiative, Rwanda has recently joined wider economic blocs, for example, Common Market for Eastern and Southern Africa (COMESA) in 2004 and East African Community (EAC) in 2006. This partly explains why her national systems also had to be reformed so as to be more open and acceptable. The transformation of higher education was made a priority by HEC as it was mandated by the Education Sector and an alternative to the credit system had to be sought. The credit system which was followed was criticised of having many courses of which some are no longer relevant to the needs of society as described in the preface of the Rwanda National Qualification Framework:

The Rwandan National Qualification Framework and the associated Code of Practice will support our institutions of higher education in providing programmes of learning that are fit for purpose and internationally credible. It will ensure that our higher education programmes provide students with opportunities to gain graduate competencies and skills as well as subject knowledge. All higher education qualifications in Rwanda will have to conform to the requirements of the Rwandan National Qualifications Framework and demonstrate that they are meeting the requirements of the Code of Practice. (NCHE-RNQF, 2007: 2)

The modular system will use RNQF for certification and its introduction started with first year programmes in 2008. This will allow the existing credit system to be phased out gradually and the implication is that there are two programme systems running in the institutions concurrently. However, this has had no effect on the participants in this study because the modular system was introduced during the fourth year of their programme. It is because of this that the details of the modular system are considered to be beyond the scope of this study, and hence are not discussed further.

2.5 Summary

To summarise, the background of higher education in Rwanda is presented by providing a brief history of the political changes that influenced this education. The time of attaining national independence has been used as a starting point in the chapter, because before independence there was no higher educational level in the country. The establishment of the national university of Rwanda with Francophone influence in terms of programmes and language of instruction, as the first higher education institute and how it was used to serve the political interest of the government of that time has been described. The segregation based on ethnicity that was practised in education during the first republic and that of the second republic under the pretext of the quota system have also been mentioned.

The main focus of this chapter was to give an account of the changes in Rwandan higher education after 1994. These changes brought in new government after the genocide had collapsed the nation. A description how the educational system in the country was re-established and organised after 1994 is presented. Also, the language of instruction in institutions of higher education changed from being French alone to the use of both French and English. The challenges (high number of students, scarcity of structures and resources, related problems regarding language of instruction) the system

went through the emergence period have been outlined. The strategies used to rectify the problems and normalise the situation have been presented in two phases, emergency and long term development planning phases. Firstly, in the former phase the ministry of education paid attention to immediate needs. so as to ensure that the institutions of higher education were put back into operation. The explanation covered how the reviving of the system was achieved through the placement of short-term policies meant for the emergence situation; rehabilitating the old institutions; establishing new ones, acquiring resources in terms of materials and teaching staff. Secondly, the coverage given of changes in higher education during the long term planning phase highlights how the government through the ministry of education embarked on making higher education more relevant to the society it is serving. Laws governing higher education were enacted, and a council responsible for the implementation of these laws was established. The chapter has also highlighted how different policies have been set up aimed at encouraging the private sector to contribute to higher education; regularising higher education in all the institutions of higher education; the establishment and introduction of the National Qualification Framework to be followed by all the providers of higher education in the country. Academic regulations governing the operations of faculties and departments have been briefly explained. It has been reiterated how a course lecturer is given powers by the assessment regulations of being a unilateral assessor and how the same regulations do not mention anything about monitoring the course activities during the course. The presentation of the background ends with an introduction to the modular system in the public institutions, which is supposed to bring about harmonisation through the review of programmes, improve on the quality of the education provided, and make the system more comparable and even acceptable, within and outside the country.

3. Theoretical framework of assessment

This chapter serves the purpose of reviewing literature related to educational assessment, and study strategies. After I have shown examples of how assessment is used and how it has changed over different periods both in terms of its social and cultural implications, I review classroom assessment and some of its socio-cultural aspects. Further purposes of assessment and grading of students' work as well as study strategies are elaborated.

3.1 Assessment over time

This section looks at how psychometric testing of mental traits has been socially and culturally biased. These were mostly employed in the 19th century and up-to the early 20th century. Also, as opposed to the transmission model, the works of educational researchers who studied assessment of learning and its implications from a constructive model during the 20th century are considered.

Traditionally, assessment through testing has been used for selection purposes. For example, the introduction of the use of tests in China in 206 BC (Dubois, 1965) was meant to be used as a tool for social control and selecting individuals who were deemed better eligible than others for recruitment to government services. Such use of exams and tests in China continued for centuries before it spread to other parts of the world (Phoehner, 2008), as explained by the same author '...it was not until the nineteenth century that assessment emerged as an area of interest for researchers and educators, and the widespread assessment began only in the twentieth century' (Phoehner, 2008:7). Interestingly, Gould's (1996) work traces the use of non-formal assessment to have been in societies long before the formal assessment.

During the 17th century, Jesuits started using examinations for selection of school entries in their education system. The use of examinations continued spreading to the Northern parts of Europe and United States of America as industrialisation increased and spread as a result of the improvement of communications (Eckstein et al. 1996). All along it was at a national level that examinations were conducted but gradually institutions started developing their own tests and examinations as means of selecting candidates

for admission into training. In the 1850s, universities that were in the lead of introducing examination systems were Oxford and Cambridge (Gipps, 1999). This was the beginning of examination and testing practices in schools and colleges in some countries in Europe, the US and Asia. In Africa, the introduction of public examinations and later National Examinations came much later in the early 1900s. For instance, in Rwanda, the use of testing and examinations were practised for the first time in the 1930s by church-run schools and were only used in public schools much later, after the country had gained independence in 1963 (Mugesera, 2004).

Literature shows that assessment has undergone changes from the first time when it was dominated by testing of individuals to the contemporary time when the discourse is on formalising collaborative self and peer assessment (Ramsden, 2003; Thompson, Pilgrim & Oliver, 2005; Cassidy, 2007; Craddock & Mathias, 2009). In one of his keynote speeches Broadfoot (1993) explains the changes in assessment at the time as emerging of a new assessment paradigm: "...in which it is learning itself rather than simply measurement of the learning which is the central purpose...' (Broadfoot, 1993:90). One year later, also in recognition of changes in learning and subsequently assessment, Gipps (1994) used the phrase paradigm shift when referring to the change from psychometric to a broader educational assessment and other changes in forms of assessment. Building on the earlier ideas of Broadfoot (1979) and Keeves (1994), the modernisation of systems and the subsequent increased competition for services, like higher education and better jobs, are regarded by Eckstein (1996) to have been the driving force behind putting in place selection mechanism using written examinations. Such examinations coupled with certification of successful candidates would legitimise the social selection.

3.2 National examinations

In Africa, tests and examinations have from the times of political independence, provided selection decisions which are based on the progression of a learner from one level of education to another; placement in certain vocations and selection for further educational opportunities or jobs. Literature about assessment in African education systems seems to indicate some consistence in how high stake examinations, examinations with important consequences for the examination taker, are considered in their respective societies. In a conference paper meant to analyse the role of assessment as an instrument of political reconciliation and economic socioeconomic reconstruction in Rwanda, Rutayisire (2007) retaliates the

achievements made by the Rwanda National Examination Council (RNEC) since its inception in May 2001. Spelling out the great achievement made by RNEC, Rutayisire counts on the confidence the society has for the council: 'A great achievement of the Council is the confidence that Rwandan society has in it. Every parent, especially the poor ones, knows that their children have access to higher levels of education if they pass the national examinations' (Rutayisire, 2007:88). In the fore mentioned quotation about Rwanda education system, the power of examination results seems to be central in selection and certification of eligible candidates for admission into higher education, like it is done elsewhere. Furthermore, the confidence members of the society have for the Council should not be mistaken to be an indication of socio-economic equity brought about by the examinations. It is probable that instead the confidence is linked to the transparency exercised in conducting examinations and declaring examination results to the general public.

A cross-sectional survey study was conducted in Uganda (Odongo, 2007) with a purpose of determining the opinions of 3,200 Ugandan schoolteachers regarding the necessity and relevance of public examinations as conducted by Uganda National Examination Board (UNEB). The motivation for his study was that 'while the Ugandan public appears to accept the inevitability of the summative public examinations, there has been strong arguments against challenging the legitimacy of these examinations' (Odongo, 2007:5). One of the major conclusions Odongo makes is that:

Urban schools perform better in public examinations than the rural ones even when the examination questions themselves do not have any obvious intrinsic bias. Indeed the majority of respondents who submitted that the examinations favoured the urban students did not point out any flaws with the examination itself. Rather they pointed out the disparity in the resource levels, which weighed heavily against rural schools. (Odongo, 2007:10)

The status accorded to national examination in the Kenyan education system does not differ much from what studies have reflected elsewhere in the region according to Onyango (2007). In a study that was aimed at investigating the link between School Based Assessments (SBA) and public examinations from Kenya National Examination Council (KNEC), he highlights how the examinations offered by examination boards such as KNEC are considered by the public to be 'high stake examinations since they determine who in society will move from one level of education to the next' (Onyango, 2007:23). One of the findings in his study is that 'The differences in terms of

facilities and conditions in various schools across Kenya affect the quality of work produced by learners. This makes the comparison of the performance of learners less objective. The reliability of the SBA results is therefore undermined' (Onyango, 2007:30). Much as the author recognises the effects of inequalities between schools on their learners' performances in SBA results, he seems to overlook the effects of the same inequalities even in national examinations

Even in old democracies like India, the use of examinations is criticised. A study which investigated the views of the society about Basic Education in India revealed that the public had no trust in the examination system:

The examinations system is actually cheating the masses by concealing deep divisions within the education system where a child from a neglected government school is made to compete with children from well-to-do public schools. The system submerges these ugly realities under a veneer of total parity among candidates. But it hardly needs probing to find that the majority of failures belong to the disadvantaged. (The Probe Team, 1999:81)

However, considering the social-economic disparity among communities of various societies there is often a common pattern of inequality. On the one hand, the part of the society that has economic means to afford the quality education is the one likely to have their children go to better schools, passing the examinations and hence stand better chances of being selected for their preferred professions. On the other hand, the children from the disadvantaged sector of the society are likely not to get access to quality education and end up enrolled in ill-equipped schools. Literature shows that in different countries' education systems and similar national examinations are administered to all schools irrespective of social and economic disparities among them. The outcome of the use of similar examinations for selection in societies with different abilities of the learners has social and economic repercussions.

During the late 19th century and early 20th century different education systems were working on ways of improving their selection mechanisms in schools. The introduction of Intelligence Quotient (IQ) tests were used as a mechanism to control the high numbers of children that were in school goingage (Gipps 1999). The underlying principle of the IQ tests was that different children are born with different levels of mental intelligence and thus have different abilities to learn. It was on such basis that teachers tested, judged and classified their students (Wood, 1986). The tests were applied to children

regardless of the differences in their cultures and social backgrounds. However, the state education systems saw the act as being legitimate and efficient (Thomson & Sharp, 1988). Much as the implementers of IQ tests might have considered the mechanism to be more efficient than other forms of selection that were used before, they were later heavily criticised on the grounds of being biased (Torrance, 1981; Husen & Tuijnman, 1991).

Initially, in all parts of the world where tests and examinations were first used at national and school levels, they were used for selection and relied heavily on the philosophy of psychometric theory. The underlying assumption in the use of psychometric theory was that individuals are born with attributes which are fixed and hence some individuals would have acceptable levels of such attributes that would make them more intelligent than others (Biggs, 2003). In the twentieth century, however, assessment practices have been transformed at different levels of societies, national, institutional, and even inside classroom, as James explains in her chapter about 'Assessment, Teaching and Theories of Learning':

Interactions between people and mediating tools such as language are now seen to have crucial roles in learning. Thus assessment of learning outcomes needs to take more account of the social as well as the individual processes through which learning occurs. (James, 2006:48)

James's view of assessment taking a broader perspective of assessing students' learning is shared by many researchers (e.g. Boud, 1990; Ramsden, 2003; Harlen, 2007). Educational assessment as an element of curriculum has various and expanding roles in any educational system (Odongo, 2007; Onyango, 2007) and as such it is difficult to attach a single specific meaning to it. Rowntree (in Ramsden, 2003) is one of the authors that give a general encompassing definition of assessment as being about to know a student. One decade earlier Boyle and Bowden (1997) had come up with an explanation that ties assessment closely to the purpose it serves, using information secured from assessment of students. They argued that the three broad purposes of assessment can be expressed as:

... providing information to enable judgments to be made in relation to a particular student; focusing and enhancing student learning while it is taking place; and providing information to enable judgments and plans for the improvement of educational programmes per se. (Boyle et al. 1997:113)

The trend of explaining assessment in a purpose-oriented manner is also observed in the works of Black and Wiliam (1998b) and Boston (2002) where one finds a strong argument that it is only when assessment outcome is used for the purpose of improving students' learning that it qualifies to be formative. According to other academics (Gibbs, 1999; McKeachie, 2002; Brookhart, 2005) the naming of assessment as either formative or summative is grounded in what the outcome of the assessment is used for and not the contents of the outcomes. In throwing more light on the distinction between the two forms of assessment Brookhart asserts that: '...some information is more conducive to being used formatively and some is more conducive to being used summatively, it is the use not the information that makes the distinction' (Brookhart, 2005:6)

As assessment information is today becoming increasingly used for improving students' learning, contemporary definitions of assessment seem to be linked to the time when the activity of assessing is carried out, the partners involved in the process of conducting assessment and what the assessment outcomes are used for (Ramsden, 2003; Harlen, 2007). Ramsden acknowledges that assessment encompasses a variety of issues and he differentiates what it is from what it is not as follows:

It is not about simple dualities such as grading versus diagnosis. It is about expressing to [students] more clearly the goals of our curricula. It is about measuring students learning; it is about diagnosing misunderstandings in order to help students learn more effectively. It concerns the quality of teaching as well as the quality of learning; it involves us in learning from our students' experiences, and is about changing ourselves as well as our students. It is not only about what a student can do; it is also about what it means he or she can do. (Ramsden, 2003:177)

It is worth noting that Ramsden's explanation of assessment goes beyond testing and examining, and it is not restricted to any one particular mode of assessment. Ramsden also moves focus; it is not just students that can be assessed, it is also teachers. However, in addition to Harlen's pervious statement on assessment and evaluation she describes how the terms are at times used in the field of education. She explains the two terms as:

The terms evaluation and assessment in education are sometimes used with different meanings, but also interchangeably. In some countries, including the USA, the term 'evaluation' is often used to refer to the process of collecting evidence and making judgments about programmes, systems, materials and processes; 'assessment' refers to the process of

collecting evidence and making judgments relating to the outcomes, such as students' achievement of particular goals of learning or teachers' and others' understanding. (Harlen, 2007:12)

Harlen's differentiation of evaluation from assessment concurs with Ramsden (2003) and Brookhart (2005). In her chapter Assessment Theory for College Classrooms, Brookhart (2005) takes the benchmark of educational assessment to be collecting information (evidence) and making use of it in judgements about students. Nevertheless, Brookhart expands her explanation scope of assessment to general terms when she asserts that: 'Assessment broadly defined, means collecting information about something to be used for some purpose' (2005:12). One of Brookhart's contributions to the meaning of assessment is the acknowledgement of the possibility assessment has of generating various types of information (quantitative and qualitative). On the basis of this claim some forms of assessment like testing, examining and others are implied. Brookhart explains how evaluation goes a step further than assessment and that it uses assessment information, that is 'evaluation means using assessment information to make judgements about the worth of something' (Brookhart, 2005:12). In the next hypothetical example, Brookhart illustrates the relationship between assessment, measurement and evaluation:

If you give a midterm exam and a student scores 64 per cent that is, both a measurement and an assessment. If you use that information to conclude that your student should come and see you to get extra help or remedial assignments that are evaluation. If you ask what the problem seems to be the student's response is also assessment information but not measurement (no numerical scale). Your judgment about the worth of the student's insights is evaluation. Your task on how you should work on the problem together involves both evaluation and instructional decision making and, one hopes, additional ongoing assessment. (Brookhart, 2005:6)

Also Rwanamiza (2004) takes somehow a similar approach when he differentiates assessment from testing, basing himself on the reviewed literature and personal experience in a Rwandan education system. His differentiation is also based on common attributes of assessment and testing. He acknowledges that not all assessment practices qualify to be testing though he asserts that all educational test tasks qualify to be forms of assessment.

3.3 Classroom assessment

In this section the focus of the literature review is on assessment at classroom level unlike in the previous section in which I view the social and cultural implications of assessment activities at a national system level through different times

3.3.1 Recent changes in classroom assessment

In a study by Falchikov (1986) on 'Product comparisons and process benefits of collaborative peer group and self assessment' he advocates for collaboration that promotes learning. The study has in the contemporary education research been regarded as an eye-opener to the adaptation of assessment that is different from the transmission model where the teacher is the unilateral assessor. According to Stefani, 'Falchikov's work introduced one of the first pragmatic and adaptable models for the introduction of what she termed collaborative self, peer and tutor assessment' (Stefani, 1998:341). Other studies in the field of educational research that were published almost at the same time as Falchikov's work, and which also have influenced my arguments on approaches to learning in this section are those conducted by Marton and Säljö (1984). They elicit how approaches to learning can be categorised differently according to learners' descriptions of their own experiences in learning. Also, Rowntree (1987) explores how others, especially teachers, can understand their students better through studying students' learning activities.

However, teachers and students do not always have the same view on what learning strategies and assessment can consists of. For example, in a study by Fejes, Johansson and Abrandt Dahlgren (2005) on students' participation in higher education seminars the role of the teacher and the learners became an issue for negotiations at an initial phase of students' studies. The study focused on students' encounters with the seminar as a basic working form, where aspects of communication were analysed from a socio-cultural perspective. Among other findings it became clear that the negotiation about what should be discussed during the seminars reflected that some students preferred to discuss other questions than those set up by the teacher. Also, the aim of the seminar was understood differently. The teacher said that the seminars were primarily a learning opportunity but as the students were 'ticked off' when they made contributions they experienced the activity as an examination. Hence, an ongoing negotiation about the purpose of the seminar became an issue, as many students were new to this specific practice. Hence, when the seminar is used as a basic working form in higher education there is

somehow a conflict within the teacher as his role is twofold 'on the one hand, he has to pay attention to the students learning and on the other hand he has to satisfy the requirements of the university assessment system' (Fejes et al., 2005:37).

Entwistle (1988) have investigated factors that influence the students' adoption of some learning approaches and not others. He found that students' perceptions of assessment have a link to their choices of approaches to learning in different learning situations. Ramsden (1992) advocates for recognition of learners as partners in the teaching-learning process, in which assessment is an integral component. The fore mentioned works conducted during the 1980s and 1990s are among those that have contributed to the contemporary paradigm shift and continued research and adoption of collaborative assessment in schools and institutions of higher education. However, it has to be mentioned that the use of collaborative assessment is still in its infancy stage in most places (Ramsden, 2003). Traditional assessment is undergoing a change from a testing and examination culture to a form of assessment, which is characterised by collaboration, and participation of students and teachers. Below I will expand on this and explain the collaboration in assessment by using some aspects of Vygotskian socio-cultural theory (1978), which are different from the traditional assessment model that was guided by measurement and theory of intelligence (Thomson & Sharp, 1988).

3.3.2 Classroom assessment and aspects of sociocultural theory

Lave and Wenger (1991) and Wenger (1998) maintain that in socio-cultural theory learning is given primacy to the dynamics of everyday collaboration. The considerations of social interactions in explaining learning are also used by Brown and Palincsar (1989). They viewed learning to be contextualised in terms of social and physical environments. The interaction with and observation of others within the same social and communal contexts are the major doctrines of the theory. Vygotsky (1978) claims that if learners are offered appropriate help from adults (teacher or other experienced persons), they can perform tasks they would not otherwise have managed on their own. Rømer (2002) explains the same contention by asserting that the teacher facilitates, and assumes the locus of control on the process of learning. In the following sections I consider the use of cultural tools and learning in context as two aspects of socio-cultural theory.

In explaining the importance of artefacts in a learning environment, Lave and Wenger (1991) regard learning as an example of a social practice. They assert that 'increasing participation in communities of practice concerns the whole person acting in the world' (Lave & Wenger, 1991:49). The importance of the use of artefacts has been advocated by Vygotsky, when he for example asserts that the inclusion of signs in daily activities does not lead to a simple lengthening of the operation in time, rather, it creates conditions for the development of a single system that includes effective elements of the past, present and the future' (Vygotsky, 1978:36-37). The same author explains how the tools are created by human beings to be used in achieving the primary goal of satisfaction. In a teaching-learning situation a variety of tools, usually referred to as teaching-learning aids are often available for both students and their teachers. However, depending on the philosophy of education the institution subscribes to, the use of external tools by students during assessment can at times be regarded as unacceptable. Gipps argues that 'Assessment in the traditional examination and psychometric model, which denies the pupil the use of external tools, reduces its usefulness and ecological validity' (Gipps, 1999:375).

The use of external tools (that is cultural tools) in a teaching-learning context can range from use of artificial materials like books, computers to human beings. Vygotskian ideas on learning and assessment advocate for teachers to develop assessment tasks that encourage students to use external tools so that they can produce their best performance. The argument that human beings can serve as tools to facilitate improvement of the learner's performance is also emphasised by the same author. The difference between the two levels of performance, one with use and another without use of external tools is central in the definition of the zone of proximal development (ZPD). Vygotsky defines this zone as 'the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers' (Vygotsky, 1978:86). In the same line of argument, the ideas of socio-cultural theory encourage the use of external tools during collaborative assessment. The puzzle with those who still have legacies of traditional assessment models in their educational policies is how to assess an individual student who is allowed access to external support. They contemplate on whether to accord credit to the student or to the support provider or both. Gipps (1999) argues that in situations where learning is considered both as a social and individual activity then assessment of learning progress takes a different form. The emphasis is put on rendering student support throughout the teaching and learning and assessment moments

Wells (1999) uses the ZPD terminology when referring to the potential of learning between aided and not aided performances of an individual student. Classroom assessment methods that subscribe to the socio-cultural perspective take into consideration the principle that what students can do on their own is their level of actual development and what they can do with help is their level of potential development. In socio-cultural theory it is the use of methods of teaching, learning and assessment that promote joint active participation and engagement of students with their teachers, and together with the consideration of the context in which the interaction is taking place, that are more likely to facilitate and motivate students to create meaning and possibly realise a wider zone of proximal development.

Traditional assessment philosophies, which used to be heavily entrenched in educational institutions and societies, are slowly opening-up to accommodate collaborative assessments (Dochy, Segers & Sluijsmans, 1999). Havnes (2008) discusses the explanatory powers of the Vygotskian notion of zone of proximal development by uplifting the discussion about the dynamics of peer-learning beyond the merits levelled on zone of proximal development and he argues that:

...there is a need for research that addresses learning as an aspect of the complexity of the learning environment, including extracurricular learning and interaction among peer students beyond the didactic structure and instructional organisation of learning. (Havnes, 2008:193)

Havnes' finding seems to concur with earlier works (e.g. Chickering, 1969; Boud, 1990), which have demonstrated that students learn more than what is prescribed in their curricula at higher education. Notwithstanding the importance socio-cultural theory puts on the use of external collaborative assessment, Newman, Griffin and Cole (1989) contend that at a certain stage dynamic and traditional assessment models are handled similarly by having no external support. There are other advocates of constructing curricula that recognise the role of peer learning and assessment (O' Donnell and King, 1999; Boud, Cohen & Sampson, 2001; Falchikov, 2001; Topping, 2005). For instance, Boud, et al. emphasise five outcomes that can be particularly promoted by peer learning strategies: 'working with others; critical enquiry

and reflection; communication and articulation of knowledge, and self and peer assessment' (Boud et al. 2001:8-9).

As can be seen, there is a great emphasis laid on peer learning in the literature based on ideas from Vygotsky's socio-cultural theory. However, from a neo-Vygotskian perspective, Mercer, (1995:90) points out that most of the research on collaboration on learning 'involves adapting ideas from the study of more asymmetrical (i.e. teacher-learner) relationship to the study of more symmetrical ones (i.e. learner-learner)'. Regarding the latter, studies show that a more competent peer can give support to a fellow peer but there is a problem if peers are not more competent. That is a research question left unanswered according to Mercer. Yet, other studies for example, Boud et al. (2001) have suggested that 'having to explain your own ideas to someone you are learning with' (ibid.) is useful in that it encourages the development in terms of an explicit and organised kind of understanding. In my view, the reasoning on needs for different levels of competencies in peer learning can also be taken into consideration when conducting studies on peer assessment. However, simply looking from a peer's perspective may also contribute to learning.

3.3.3 Learning in context

Some socio-cultural theorists that focus on situated learning (Lave & Wenger, 1991) capitalise on the idea of regarding learning and knowledge as being situated within contexts. The implication of this view is that unlike in the traditional theory where learning and assessment are confined in designated places like schools and examination centres, situated learning theory advocates for knowledge to be regarded as 'found and developed socially and in practical contexts' (Rømer, 2002:233). Situated learning theory implies that knowledge production is a shared activity in a community and under such idea assessing an individual student would not be valid since increasing participation on the learner's side has its own value (Lave & Wenger, 1991).

The socio-cultural inferences of the idea of knowledge being continuously and collaboratively produced in a community calls for assessment that puts the settings in which learning takes place and the process of producing the knowledge under consideration. Here, underlying assumptions can, for example, be supported by theories on authentic learning, which takes the learners' perspectives in an attempt to create a relevant learning environment. Where possible, this is made by referring the content to the learners' actual

life experiences. In a study on authentic learning in a socio-cultural framework Andersson and Andersson (2005) suggest that the content of learning is assumed to become genuine and meaningful when

... an authentic activity implies real world experiences, which make the content relevant and engage the learners in their own meaning making. This can be achieved through collaboration, by posing questions, by simulating situations, and by using cases and authentic material. (Andersson & Andersson, 2005:424)

One of the recommended ways to gain information about students learning is to use authentic assessment tasks (Darling-Hammond & Snyder, 2000). Another example, is to assess an individual as part of a group by the use of portfolios (Sambell, McDonell & Brown, 1997; Struyven, Dochy & Janssens, 2005). Glaser and Silver point out how an individual can be assessed as part of a collaborating group and they elicit some of its merits:

Performance in a social setting where students contribute to a task and assist others has the advantage of encouraging students to question and develop their definitions of competence. In such assessment, as in instruction using group approaches, the student can observe how others reason and can receive feedback on his or her own efforts. In this context, not only performance, but also the facility with which a student adapts to help and guidance, can be assessed. (Glaser et al. 1994:412-413)

The knowledge construction emphasised by the two authors encourages the philosophy of collaboration among peers themselves and also between students and their teacher. According to the ideas of socio-cultural theory, the role of a teacher is not to plan for students but to plan with them and learn with them and also assist them where and when they are stuck and gradually start scaffolding (Lave & Wenger, 1991; Wenger, 1998), as the students start becoming more active participants in their learning. The implication on assessment of such kind of collaboration is that assessment information regarding goals, modalities and information about assessment criteria should be shared in transparency. The underlying message behind the ideas of socio-cultural theory on assessment is to encourage for assessment that is part of learning and based on the context in which students are active participants. Moreover, Biggs explains that: 'how and what students learn depends to a major extent on how they will be assessed' (2003:141). In his explanation the

signals sent by assessment practices from a teacher in a given course does influence what, how, when students will concentrate or not concentrate.

3.4 Purposes of assessment

There is extensive literature that ties purposes of assessment of learning to the uses of assessment information (e.g. Gipps & Stobart, 1993; Ramsden, 2003; Gardner, 2006; Harlen, 2007). The same literature links the purposes of assessment to some of the definitions of educational assessment. At a more encompassing level we have researchers like Black and Wiliam (1998b) who define assessment broadly to include all activities that teachers and students undertake to get information that can be used to improve teaching and learning. They consider assessment to encompass teacher observation, classroom discussion, and analysis of student work, including homework and tests. Both in Black and Wiliam (1998b) and Boston (2002) one finds a strong argument of how assessment becomes formative when the information is used to adapt teaching and learning to meet student needs. According to some academics (Angelo, 1993; McKeachie, 2002; Brookhart, 2005) educational assessment is viewed in different ways, though they all concur on two main types which are formative assessment and summative assessment. The main logic behind this kind of classification seems to be the timing in terms of how the whole process of teaching and learning assessment is carried out and what the assessment outcome will serve.

Biggs (2003), in his work 'Teaching for Quality Learning at University', explains how the reasons for assessing students are either formative or summative or both. He further argues that formative and summative assessments have a lot in common and the major difference between them is that at some point in summative assessment a final decision has to be made. Biggs anchors his differentiation between formative assessment from summative in terms of on the one hand, the use of feedback from formative assessment which is given continuously, for improving both students' learning and teachers' methods of teaching, with continuing judgement of the situation for improvement purposes. On the other hand, the judgment in summative assessment has to stop at a certain stage and final decision is taken

Ramsden (2003) takes a different view from the one, which considers formative and summative assessment to be different types of assessment that are carried out at different stages of a course or project. He argues for a view of regarding assessment in university education as serving three purposes:

(a) means of helping students to learn; (b) a way of reporting on standard progress and (c) a way of making decisions about teaching. Functions (a) and (b) are inextricably linked, the separate worlds of assessment called 'formative' and 'summative' in the assessment manuals do not exist in reality. There is only one world: in that world, candid diagnosis implies valid judgments about student achievement and appropriate changes to teaching. The connection between diagnosis and judgments is like a one way street. There can be no truth reporting or effective changes to teaching in the absence of faithful diagnosis of students' understandings. (Ramsden 2003:205)

Ramsden's argument about assessment for learning and assessment of learning reflects a point of departure from those who consider them as two different sides of the same coin. His argument clearly dismisses the possibility of a dichotomy and instead he argues for the two to be part of a process in which activities generate information for different purposes.

Literature about formative and summative assessments, which takes a more traditional perspective, seems to give an impression that the two are distinct categories of assessment with a clear boundary between them. However, in classroom use the distinction is not so clear. Brookhart (2005) throws some light on what is commonly taken for granted yet worth revisiting, especially in the era when issues of assessment are increasingly becoming linked to learning. She asserts that:

First, formative and summative assessments describe two assessment functions. That is, they describe the use of assessment information... [whereas] some information is more conducive to being used formatively and some is more conducive to being used summatively, it is the use not the information that makes the distinction. (Brookhart, 2005: 6)

Brookhart (2005) in her chapter 'Assessment Theory for College Classrooms' concurs with earlier researchers and authors on affirming that educational assessment has two main purposes. She explains how 'formative assessment gives information that is useful for continued students' learning, positive classroom change, and other improvements. '... summative assessment gives information that is useful for making final decisions: for example, assigning end of term grades' (Brookhart, 2005:6). However, Brookhart explains that the qualifiers, formative and summative, usually attached to the assessment do not mean that in a classroom situation it would be possible to differentiate a task, like test, meant to be used for one type of

assessment from the other. She argues that the naming of the assessment is influenced by the purpose the assessment information is meant to serve. The same purpose is what is translated into action through the use of the assessment information and thus determines whether it qualifies to be either formative or summative assessment. To explain her argument she used the following example: 'If I gave you a copy of a test or a description of a project or paper assignment, you would not be able to tell whether it was a formative or a summative. You would only know that by asking me what I did with the information about student achievement yielded by the assessment' (Brookhart, 2005:7). Brookhart's approach of describing the purposes of assessment is reservedly linked to what the information out of assessment activity is used for and there is little use of the phrases: assessment for learning and assessment of learning, in her work, though she admits that assessment information is meant to serve the two purposes.

In the work by Boud and Falchikov (2006) there is an attempt to align assessment with long-term learning. They explain the purpose of assessment in the following words:

It has long been assumed that there are two main purposes of assessment. The first is to provide certification of achievement. This enables students to graduate with a validated record of their performance in the programme in which they have participated. Certification is used by employers and by educational institutions, typically to make judgments about acceptability for employment and further studies. The second purpose of assessment is to facilitate learning. Through the provision of information about responses to various kinds of test or assignment, students are enabled to learn more effectively within the program. (Boud et al. 2006:401)

Boud's et al. (2006) elaboration of assessment purposes cuts across the boundaries of two levels at which the outcomes of assessment are used. It covers issues assessment is expected to serve at national level like certification. Such certification is used as a proof of qualification after completion of an educational programme and it is also used as a proof of eligibility for employment and further studies of individual graduates. The same explanation of the purposes of assessment elicits how assessment outcomes are used to facilitate learning at a classroom level where assessment is conducted using class-course exercises, tests and examinations.

Harlen (2007) identifies two main purposes of assessment. In explaining formative assessment she writes 'formative means that the assessment is carried out in order to help learning' (2007:15) and asserts that 'when

assessment is used for summative purposes, the chief aim is to summarize what has been learned' (2007:121).

In explaining the purpose of assessment as being formative, Harlen considers formative assessment as being an integral part of a teaching-learning process, especially considering how assessment information is continuously used to improve learning. The same author makes it clear when talking about formative and summative assessments that: 'since both formative and summative are important in education, it is not a matter of 'formative, good' and 'summative, bad', it is essential to discuss how summative can be conducted most effectively and without negative consequences for formative assessment' (Harlen 2007:16). In making argument for the two purposes of assessment, which consequently have been used for differentiating forms of assessment, Harlen makes use of two diagrams. (see Figure 1 and Figure 2) to depict the events involved in collecting assessment information.

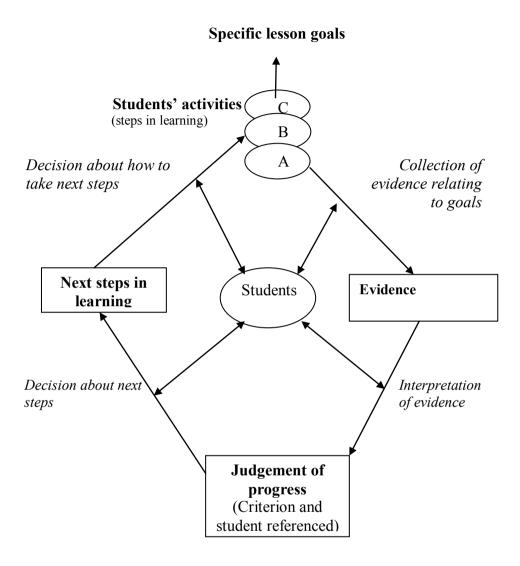


Figure 1. Assessment for learning as a cycle of events (from Harlen, 2007:120)

In explaining formative assessment, Harlen emphasises the dynamics involved in gathering assessment information (Figure 1), which she prefers to refer to as evidence relating to goals. She considers the students to be in the centre of the whole process. The assessment process starts by collecting and analysing information from the student, in relation to set objectives. The

evidence obtained from the analysis is then used in thinking about what improvement steps to take next. The diagram in Figure 1 depicts, with the use of double-directed arrows, how information is continuously being used and collected from the student who is central in formative assessment. This kind of depiction is an indication of participation and interaction between the student as an assessee and the teacher as an assessor in the same setting, in which the assessment is conducted. The section under assessment from socio-cultural perspective comes back to this issue of participation of a student in the activities of assessment as an integral component of learning. In order to differentiate summative assessment from formative assessment but still keeping the common aspect in both, Harlen has again used a diagram to depict events in summative assessment as shown in Figure 2.

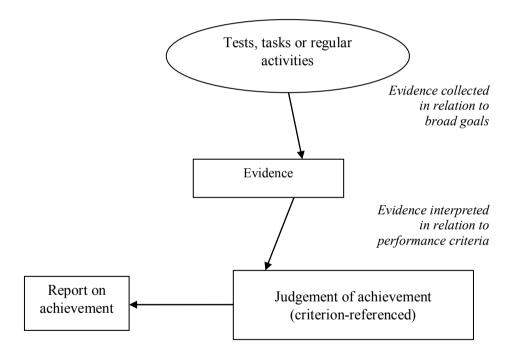


Figure 2. Assessment of learning (from Harlen, 2007:122)

The event of collecting assessment information (evidence) from the student is common to both types of assessments but their foci are at different levels of goals. While in formative assessment the goals are at the level of a lesson or a topic, in summative assessment they are at the level of a chapter or even a

course thus making them broader. The aspect of judgement is also common in both formative and summative assessments but for different purposes. While the decision in formative assessment is for improvement of the learning and teaching the one in summative is for reporting on achievement based on preset criteria and it is usually final, at least for at particular assessment task and students. Harlen shows how judgement made in summative assessment events is not student referenced and this marks a distinct point of departure between the forms of assessment. Furthermore, much as Harlen admittedly accepts the possibilities of cautiously using summative information for formative purposes she makes such intentions specific at the earliest stage of planning the teaching—learning process so as to avoid confusion, especially on the side of students.

3.5 Assessment and grading

After reviewing literature about definitions of assessment, meanings and purposes in the previous sections I will review different concepts against which the assessment evidence is judged. I have limited the review of literature within the scope of the study. This implies that the assessment being focussed on is at course level. This is where it is absolutely necessary that the grading of students' performance in national examinations is mentioned. The reporting of summative assessment is usually done in two ways as explained in the next section.

3.5.1 Norm-referenced

Once summative assessment is used, the results obtained are either norm-referenced or criterion referenced. The use of the terms norm-referenced test and criterion referenced test can be traced far back to the 1960s when Glaser used them in a seminar paper on measurement of learning outcomes (Glaser, 1963). In a norm-referenced assessment, the assessment evidence depicting the level of achievement of an individual student is judged against the performance of her peers. Hence, the student's mark is used to decide the student position in the whole class. Furthermore, the same evidence is used in giving position to the student in relation to the performance of her or his peers in the whole class. In some institutions, especially of higher learning, the practice of comparing the performance of students is done by using a norm-distribution curve.

The reporting of assessment results using a distribution curve is at times used to convince those students who will have complaints about their grade,

indicating that their performance did not earn them a better category, when actually the student cannot argue with the categories, which are predetermined by the teacher. Hence the teacher is saved from the responsibility of explaining the reasons behind the awarded mark and instead uses the curve for justification.

McKeachie (2002) makes reservations about grades expressed on a curve in regard to communicating the performance of a student, especially when the scores have been converted to letter grades such as A, B, C, D or F. In his explanation of grading on such basis he gives an example of how a teacher might give: 'the top 10 per cent of the scores A's, the next 25 percent B's, the next 35 percent C's, the next 20 percent D's and the bottom 10 percent F's the results reported using grading on curve' (McKeachie, 2002:87). The limitations of such kind of grading range from discouraging cooperation among students and instead encourage competition, to fear by the teacher of having more students to pass with high grades. The same author explains that one risks being accused of inflating the standards if most students pass with grade. Nevertheless, McKeachie asserts that some teachers would prefer not to assist weak students because of the fear of tampering with per cent of students within the preset grades. Implying that assisting weak students would help them perform better, resulting in changing the original positions and possibly pushing other students in new lower positions.

3.5.2 Criterion-referenced

Some assessment modes like authentic assessment, which among other goals serve the purpose of establishing the extent to which the students have mastered the targeted learning outcome, usually make use of criterionreferenced form of reporting assessment results. Students are not compared on the basis of their scores as is done in the norm-referenced assessment. Davis (2001) explains how criterion-referenced grading is used to reflect an individual student's level of achievement independent of how other students in the same class have performed. To elaborate on her explanation of criterion-reference, she uses the following example: 'If all students in a seminar give strong oral presentations, they will receive A's or B's. Conversely, if none of the students in a class scores better than 80 per cent on a midterm exam, then no one in the class receives a grade higher than, say, Bon the exam' (Davis, 2001:289). Situations where mastery learning is used the focus is on the process of mastering the curriculum content and not the content itself, so that is why the assessment used aims at establishing the level of what was achieved in relative to what was targeted. After the introduction of the concept criterion-reference as Wood (1986) contends, there are other educational assessments which have developed based on criterion-references like graded assessment and standards assessment. Gipps (1994) explains that such assessments have in common that they do not interpret performance in relation to norms. The underlying philosophy governing the criterion-reference assessment is that all learners can learn provided that they are in appropriate study conditions. Such ideas subscribes to the aims of educational measurement, which emphasises assessment tasks that 'consider an individual as an individual and not in relation to other individuals and to use measurement constructively to identify strengths and weaknesses individuals might have so as to aid their educational progress' (Gipps, 1994:8). Haertel (1985) is one of the educationists who suggest that caution should be exercised in using the term criterion-referenced test as a form of assessment arguing that the term can refer to the interpretation of the score as well as the test itself.

3.6 Assessment and study strategies

In this section a review of literature is done on how assessment may influence study strategies students adopt. Firstly, a distinction between two curricula, visible curriculum and hidden curriculum, which co-exist in learning institutions is made by using the arguments of educational researchers like Snyder (1971) and Miller and Parlett (1974). Secondly, the influence of the latter form of curriculum on how students decide study strategies is also reviewed.

Curriculum is a term that at times is used interchangeably with syllabus at national, institutional, and classroom levels. The review in this section focuses on a classroom level, where the students interact with the teacher, other students, subject curriculum and other aspects of the teaching-learning context. The subject curriculum spells out the content, learning outcomes aimed at and how students in the course will be assessed. Such kind of curriculum is official and visible and it is the core of what most teachers teach with little or no questioning of the prescribed content (Farrant, 1964; Ramsden, 2003; Biggs, 2007).

To every learning context in which a visible curriculum is taught, there is also a hidden curriculum, which Snyder (1971) describes as implicit demands where students have to address a way of survival in a particular learning situation. Students do various activities, like concentrating more on some topics than others for examinations. Such activities, which students decide to

do to cope with the situation, are not taught by teachers. Rather, they are developed by the students as approaches to respond to the implicit demands like passing examinations, scoring the highest mark, just to mention a few.

The review of literature on various study strategies has been influenced by the work of Miller and Parlett (1974). The two researchers conducted a study using interviews on final honours students in one department of an institution of higher learning. Their work was motivated by earlier works by Becker et al. (1968), Parlett (1969), Snyder (1971) and all of which appreciate the complexity of studying how strategies work and how students practice them. Miller and Parlett (1974) were concerned with what was common or shared by students in preparing for examinations. In their study the findings on students' study strategies are presented in three categories:

The first strategy, cue-consciousness, is according to Miller et al. (1974) when students are emphasising:

...the need to be perceptive and receptive to cues sent out by staff – things like picking up hints about exam topics, noticing which aspects of the subject the staff favoured, noticing whether making a good impression in a tutorial and so on. (Miller et al. 1974:52)

The users who are cue conscious consider it to have great influence on the final grade, which they achieve. Factors like perceptiveness and receptiveness of an individual student are considered to be the most important characteristics of this strategy.

Secondly, cue-seeking as a study strategy involves not only being perceptive and receptive but also some deliberate interaction with the system. The cue-seeking strategy users involve themselves in activities that they hope will help them to get hints from the teacher about possible examination questions. Usually these deliberate activities by cue-seekers also aim at impressing the teachers. For example Miller et al. explain how cue-seekers interact with the staff:

...they button-holed staff about the exam question; sought them out over coffee; made a point of discovering who their oral examiner was, what his interests were and most of all deliberately attempted to make a good impression on staff. (Miller et al. 1974:52)

Also, cue-seeking as a study strategy is accompanied by intentionally conducted moves by the user to involve the examiners in discussions as a

way of extracting information from them and use it as a hint on what is likely to be examined. Students use cue-seeking with the aim of scoring high marks and meeting the demands of the system hence ensuring their survival.

Thirdly, the users of a cue-deaf strategy rely on working hard as means to success. Unlike in the previous other two strategies, Miller et al. (1974) found out that even if during the process of studying, students who use such strategies make an impression that they do not believe that there is any link to how they are marked and how they study.

All the above mentioned categories of strategies are not meant to be rigid categories and each one of them can possibly have sub categories. Furthermore, it is probable that in different settings from the one Miller and Parlett conducted different categories of study strategies would emerge.

3.7 Deep and surface approaches to learning

The use of deep and surface descriptors as approaches to learning were originally derived from an early phase of experiments conducted with students from Gothenburg University (Marton & Säljö, 1976a, 1976b). On the basis of outcomes from the experiments on reading a text, Marton and Säljö classified the levels of students' understanding of the text. They found that students tend to adopt two qualitatively different learning approaches, which can be classified as either deep or surface approaches to learning.

Ramsden (1987) developed further the argument of Marton and Säljö on the students' approaches to learning and came up with a third approach. He refers to it as a strategic approach, which is a well-organized form of surface approach. Ramsden's line of argument is based on what meaning the learner gives the approach. He argues that 'the way in which anyone goes about learning is a relation between the person and the material being learned' (Ramsden, 2003:41). The emphasis of viewing different approaches to learning is extended to what and how someone learns and not necessarily how much he/she remembers. Such arguments about learning approaches put emphasis on both strategies and the motives the learners have for undertaking the task (Biggs & Tang, 2007). Entwistle also argues that interviews with students suggest that strategic students have two distinct focuses of concern 'the academic content and the demand of the assessment system' (Entwistle, 2000:3).

Findings in Scouller's (1998) study, with a sample of 206 second-year university students in education, strengthen the idea about the relationship between assessment methods and students' approaches to learning. Depending on what the students perceived to be the assessment task, they adopted either a deep or a surface learning approach. For example, the findings indicate that when the students were given an assignment to write an essay the results were classified as deep learning (focusing on meaning and understanding) while an end-of-course multiple choice question examination resulted in surface learning (focusing on recall and reproduction). Hence, the perceived motive of the assessment task influenced what and how the students studied.

In a deep learning approach the student reacts to the teaching environment by using a constructive approach that aims at not only understanding concepts at face value, but also to have a meaningful cognitive understanding of the subject content. Much effort is put on how to grasp the underlying principles of the task at hand. By using a surface approach to learning, the student reacts to the teaching environment in such a way that they finalize the learning task as fast as possible (Biggs & Tang, 2007). The major intention is to get the task out of the way with as little cognitive effort as possible but meeting the course requirements and scoring highly.

3.8 Summary

In this chapter it has been argued that assessment as a concept has been used for a long period of time even before formal educational examinations. The review has shown how traditional assessment mainly based on psychometric model were mostly used tests in the 19th and beginning of the 20th century to control social and economic opportunities irrespective of its biases. Educational changes in the roles of assessment in society over time have been reviewed and there are social and cultural implications. The reviewed literature also indicates that the use of mass examinations as a form of assessment to justify socio-economic decisions in Rwanda as well as in other countries. The argument is about how irrespective of social, cultural and economical differences in schools, one mass examination is conducted.

The literature under the subsection classroom assessment reviews how some aspects of socio-cultural theory are used to explain the contextual process. The review deals with how the purposes of assessment are used to serve and name the forms of classroom assessment indicating how complex the use of the term assessment is. Assessment has been described, mainly along the

lines of what the outcomes are to be used for and at the same time the level at which the assessment is conducted. Basically, the purposes of assessment have shown to be summative and formative, and it is possible to have the same assessment information used for both purposes provided it has been planned before. Literature about norm- and criterion-referenced forms of assessment has been reviewed and their points of departure spelt out. Comparing the performance of an individual student to the rest of the classmates is the primary objective in norm-referenced assessment while criterion-referenced assessment aims at identifying the level of achievement of targeted goals. Literature about study strategies in relation to classroom assessment is reviewed by considering variations like cue-consciousness, cue-seeking and cue-deafness strategies.

The socio-cultural perspective dealing with ZPD has been taken into account. It suggests how the students can construct and bring together knowledge. The idea that more knowledgeable students can help others is an aspect with relevance for the present study. Another important perspective of the same theory is how students, both seniors and beginners, collaborate in the same community of practice, especially in sharing information regarding how to manage the study pressure. Also, socio-cultural theory advocates for the use of external tools so as to enhance and improve learning. This will be used in analysing the forms of assessment. Generally, reviewed theories on assessment, learning and study strategies will provide a source for the analyses and interpretations of the empirical part of this study.

4. Methods

This chapter describes methodological considerations and research methods that have been adopted in four panel waves of this study. Description of the settings at two sites (A and B) where the study was conducted as well as selection of participants and the instruments used are also dealt with. The chapter covers an explanation of how the collected data are analysed and presented and finally ethical and quality aspects of the study are described.

4.1 Methodological considerations

Guided by the overall aim to understand the descriptions geography students give about their experiences with assessment and study strategies, I adopted multiple research methods in collecting data (survey, focus group, follow-up questionnaire and individual interviews). During the first panel wave my aim was to obtain common information through a questionnaire (Appendix 1) from the entire sample of students participating in different phases of the study. As identified by Aldridge and Levine (2001), survey questionnaires target opinions and preferences of the participants, which in this study focuses on students' experiences with assessment and study strategies. I used the data collected from the first phase to design questions for the next panel waves and again I was influenced by Aldridge et al. in their contention that:

One frequently used tactic is to employ a survey in the first phase of a project to establish what the general outlines of the researchable problem are and then use the data collected to design a more intensive second phase using case studies or other intensive approaches. (Aldridge et al. 2001:28)

Building on the information from the survey and still with the aim to deepen our understanding of students' conceptions about assessment and study strategies, focus group discussions were conducted at the two sites. The outcome of the data from the survey was to a great extent used when formulating the focus group guide (Appendix II). My interest was to establish how students, as members of the same student community in geography programmes, explained their experiences with the phenomena under study by

discussing them. I used focus group discussions where individual participants interacted in the discussion. Morgan (1996:130) defines focus group as 'a research technique that collects data through group interaction on a topic determined by the researcher'. According to Morgan (1996) the method has three essential components. The focus group is a research method increasingly used for data collection, the source of data is the interaction in a group discussion and the researcher has an active role in creating the discussion. Hence, in the present study the participants were engaged collectively in meaning making where a specific phenomenon was focused. The researcher was monitoring, listening and observing the ongoing discussion. The process contributed to the researcher's understanding of how the group constructed meaning of a specific topic (Bryman, 2004).

Also, these procedures were adopted with the purpose to get a variation of views on how students conceive their experiences with assessment and study strategies. The analysis of data from the focus groups raised new questions. I considered it necessary to follow-up some issues; hence the third panel wave of data collection emerged. Here, an open ended, self-completion questionnaire was administered because of its flexibility as 'it invites respondents to give their answers in their own words' (Aldridge et al. 2001:179). Finally, during the fourth panel wave an in-depth individual interview was used. This qualitative approach had an overarching aim of soliciting conceptions through individual interviews about how participants conceive the phenomena under study. Taken together, the reflections by geography students are analysed in categories and themes, representing descriptions of students' experiences with assessment and study strategies, which form the findings of the study.

Generally, the design of the study was conducted with an attempt to enrich the data analysis. Therefore, I made use of Miles and Huberman's (1994) suggestion to combine both quantitative and qualitative methods when data is collected in the same settings. The reasons behind this approach were that it enabled comparison of the two sources. By providing richer detail the analysis of data could be elaborated and new lines of thinking be developed, which provided new insights (ibid.). Moreover, Morgan discusses the combination of surveys and focus groups. He claims that focus groups are increasingly common as they 'act as a follow-up that assists in interpreting the survey results' (Morgan, 1996:135). Seen from a methodological point of view, the arrangement to contact respondents of the survey again and establish focus groups is made with the effort to get illustrative data to further clarify survey results.

4.2 Settings

4.2.1 Status

The selected two sites are public institutions of higher learning in Rwanda, answerable to the Ministry of Education (MINEDUC), through the Higher Education Council (HEC). Site A is an 'old' university which has undergone various changes under different governments, while Site B is a relatively new institution that was established in the late nineties. Site A has various programmes at the levels of degree, diploma and certificate in a number of disciplines, while site B also has programmes at the same levels, with Education as a common subject. Geography courses are offered in both institutions by faculties of science but with different aims. At site A. geography students are admitted into different geography oriented professional options like: Geography Information Systems, Urban Planning, and others. At site B they are all training to become secondary school teachers with geography as one of the two required teaching subject majors. Another major difference is that admission criteria to both institutions differ. as it is more difficult to be admitted to site A than to site B. Some of the geography courses in site A used to be in the faculty of Arts and Humanities but was later taken to the faculty of Natural Sciences. The old debate as to whether geography is a Natural or Social Science discipline is beyond the scope of this thesis but it might be behind the placing of geography departments in Arts and Humanities or Natural Sciences in different institutions at tertiary level in Rwanda. This means that, during different periods, geography has been considered as more of a Social Science discipline; while at other times it is perceived as a Natural Science. This makes classification of geography a controversial issue.

4.2.2 Languages of instruction

Officially, the languages of instruction in both institutions, until first semester of 2009, have been French and English. This has been a challenge in both institutions since the number of teachers available to teach in both languages has been low. This challenge has been compounded by admission of students from high schools that did not have sufficient command of both languages to enable them to study courses at tertiary level increased. This matter has been a national problem and is not limited to the two institutions in which the study was conducted. Yet, the two institutions adopted different models to deal with this language challenge. At site A, a bridge language programme was organised for the admitted students. However, there was an exception for those who could sit for a language proficiency test either in English or

French. The tests were organised by the institution and had to be passed. This meant that for a student to enter site A, a pass in both languages was a prerequisite in addition to meeting other entry requirements. At site B, an integrated model was adopted. The language courses were given an intensive time table at the beginning of the first year of admission. After a few months, the students would commence with the main programme but still English and French language courses would continue, spread over the programme rather than on an intensive basis.

4.2.3 Study programme and data collection

While geography students at site A would start with general courses in various disciplines that were not necessarily geography, at site B there was a different arrangement. Once students at site B had chosen geography as one of the two teaching subjects, they started from first year of the programme with geography and another teaching subject plus courses within education. It is worth noting that at site B it is recommendable for the students, who intend to take geography as one of the teaching-subjects, to have studied and passed geography at secondary school A-level, while at site A it is not necessary. Among the education courses taken by all students at site B, there is an Assessment Course (Evaluation, Examination and Testing) as an element of the curriculum. This course is taken by all student teachers irrespective of their teaching-subject majors. At site A, there is no course on assessment and the only assessment students are most likely to be exposed to, is through their own experience of different ways of being assessed. Hence, it will be expected that students in site B will use pedagogical terms about assessment and study strategies in their responses while those in site A will use nonpedagogical vocabulary to explain their experiences. Examples of excerpts from their responses are shown in chapters 5, 6 and 7 of this thesis. Furthermore, the faculties at both sites were operating on a course system, where a course was a component of a larger course programme. During the second year of the study (2007), the Bologna module system was introduced in the Public Higher Institutions of Education (HIE) of Rwanda. However, the introduction of the modules system did not affect those students who were already registered under the previous course system. The changes were supposed to be implemented progressively. This means that the assessment, which this study focused on, is the one included in the earlier course system. According to the academic regulations at both sites, Geography course designing, delivery and assessment belong to the responsibilities of the course convener, under the supervision of the Geography departments.

Data collection was targeted at particular points of the programme, where I anticipated capturing interesting data in relation to the phenomena under

investigation. At the first panel wave, a survey was conducted at the beginning of the second semester of the third year of the programme. I deemed this point to be appropriate in targeting the students' views after they had just completed the first half of their four year programme, which from now on will be referred to as the general part of the study programme. Students had just experienced some ways of assessment in the second half of the programme in addition to the one gained in the general one. This explains why the data from the questionnaire were assumed to be important in providing a general view about assessment and approaches to study. At the second panel wave, six months after the survey was conducted, focus group discussions were held at the two sites. By then, the students had started the 4th year of the programme. They had been assessed in most of the courses and had also completed field work tasks, or practice for those who were training to become teachers. At this final stage of the programme, the targeted data were expected to be drawn from experiences from various course assessments and study strategies encountered throughout the programme. After three months when I had analysed the data collected through the focus group discussions, I realised that there was a need to have a follow-up with the participants to obtain further clarification on some of the issues that had been raised. A questionnaire with three open-ended questions (see Appendix III) was used to solicit this clarification.

Finally, after the students had completed their programme, I organised twelve in-depth individual interviews with those I regarded as key informants based on their previous contributions both in the focus group discussions and follow-up sessions. I chose to conduct the interviews four months after students had finalised the programme, firstly because by then they knew whether they had successfully completed the programme or not, and secondly they would be in a better position to reflect and talk about their experiences with the programme. Here, my assumption was that when the former students had completed their studies they were freer to talk and hence they could provide important information about their experiences with assessment seen from a new angle. With the purpose to gain useful information and with an attempt to learn from them they were asked about their visions about assessment and asked to elaborate on the issue.

4.3 Design

Based on the aim of this study and the contextual setting in which it was to be conducted, a longitudinal approach (Table 1) was adopted, allowing data collection on the same sample more than once over a period of time (Aldridge et al. 2001; Bryman, 2004). In the context of this thesis the concept

longitudinal study is limited to collecting data from the same sample of students, though in different sizes at different times during their study programme. However, in the same context the collection of data was not done for the purpose of comparison between the different panel waves but deepening my understanding of the phenomena that was under investigation.

Table 1. Design of the four-panel wave study

	Panel wave 1		Panel wave 2		Panel Wave 3		Panel Wave 4	
	2006, 3rd year, 2nd semester		(6 months later) 2007, 4th year 1st semester		(9 months later) 2007, 4th year 2nd semester		(13 months after first collection) 2008. Four months after completing the programme	
Number of Participants at site A and site B	Site A (36 stud.) Returned n = 33 (92%)	Site B (38 stud.) Returned n = 36 (95%)	Site A n=15	Site B n=15	Site A n=15	Site B n=15	Site A n=6	Site B n=6
Data- collection approach	Survey		Focus group discussion		Individual response		Semi-structured interview	
Research instruments	Questionnaire: quantitative and qualitative sections		Focus group guide		Follow-up questionnaire: open-ended questions		Interview guide	
	(Appendix 1)		(Appendix II)		(Appendix III)		(Appendix IV)	

As shown in Table 1, the study adopted specifically a panel-study approach (Aldridge et al., 2001:179), as 'data were collected repeatedly from the same respondents though in varying cohort sizes'. I did so with the ambition that it would enrich the data base and hence form a foundation for my understanding of students' ways of perceiving assessment during the undergraduate programme and after they had completed their studies.

4.4 Panel Wave 1: The survey

4.4.1 Selection of participants

The participants of this study were all the geography students who were registered in geography departments at both sites at the time the study commenced. The total number of participants invited to the study was 74. This number included 9 female students only, which made it impossible to take any gender aspects into account in this study. I made a breakdown of different panels that were selected by using purposive sampling (Bryman, 2004:333), that is 'such sampling is essentially strategic and entails an attempt to establish a good correspondence between research questions and sampling'. This was made at subsequent phases as reflected in Table 1. I selected third geography students because they had reached slightly more than half-way of the third year programme and they had been exposed to various courses both at introductory and majoring levels. Also, they had at least one more academic year to study during which I would get a chance of going back to them and collect further data.

After permission was granted from both sites, I made appointments with the heads of the departments who responded positively to the study. I also obtained students' consent through the class leaders. These students were elected by their classmates to represent the whole class and act as channel of communication on class matters. I requested the leaders to encourage all their classmates to be present on the first meeting with the group. At site A, 36 students were present and at site B 38 students registered and I asked for their willingness to participate in answering the questionnaire. All of them assured their keen interest in participating. On the day when the questionnaires were returned three students were absent at site A and at site B two questionnaires were uncompleted. Hence, the total number of completed questionnaires was 69. Divided into the two settings the participants in the survey were at site A 33 (92% responses) and at site B they were 36 (95% responses).

4.4.2 Instrument

A two-section questionnaire, with questions based on topics of assessment and study strategies applied to geography was used. Questions in Section A required participants to indicate, in the appropriate box, to what extent their views are represented. Section B had two sub-sections. The first one had questions about study approaches in geography and required short answers. The second had open ended questions, seeking detailed explanations of

participants views on the two topics mentioned above. All the questions were written in English.

4.4.3 Data collection procedures

Two hours of an afternoon session were allocated for the questionnaire distribution exercise at site A. I explained to the students the contents of the letter of consent which was on the first page of the questionnaire. Furthermore, I explained to them how they were under no obligation to answer any question they were uncomfortable with. Nevertheless, I promised the students that the information they would provide would be used solely for the stated purposes of the study. Also, I made use of a coding system to ensure confidentiality as shown under 'ethical considerations' at the end of this chapter. All details about data collection were also present in the letter accompanying the questionnaire. We went through the document jointly so that every participant understood what each question item required. On the advice of the participants, it was agreed that the team leader would read each question and that I would then translate it from English to Kinyarwanda (first language of all the participants and the researcher), if there was a request to explain what the question meant. My role in this panel wave was to translate questions verbally to Kinyarwanda, while the reading and identification of questions that needed translation was in the hands of the class leader and the class respectively.

It was agreed that the questionnaires would be handed back to the class leader the following day. Nevertheless, I invited interested participants to take part in the next phases of the study. I told those interested to register their interest by giving their codes to the class team leader on returning the filled-in questionnaire. It was made clear to the participants that only those who had participated in the first panel wave (answering and returning the questionnaire) would be eligible to participate in other phases of the study.

On the day of administering the questionnaire at site B, the experiences from site A of jointly going through the questionnaire and seeking for video recording assistance from the class leader was found to be helpful, Hence, the questionnaire was explained to the students and there were few questions raised. One issue was whether assessment of geography teaching-practice sessions should be considered as part of assessment in the program, which needed clarification compared to site A. Returned filled-in questionnaires and a coded list of participants were collected two days later. Participants at site B were also invited to take part in the next panel waves of the study. Those interested were told to register their interest by giving their new codes when

returning their filled-in questionnaires. It was made clear to these participants as well that they were eligible to participate in the next panel waves.

4.4.4 Data analysis

Analysis of quantitative data from the first section of the questionnaire was performed by using the Statistical Package for Social Scientists (SPSS). Chisquare test values and percentages were used to obtain an overview of participants' views on assessment and study approaches related to issues in geography. The results reflecting the respondents' views are shown in tables of frequencies and percentage. A bar graph has also been used to portray the pattern of variation in considerations made by students in their adoption of study approaches. The qualitative data from the open ended questions in sections B and C of the questionnaire were analysed qualitatively along the lines of similarities and differences, which in turn were used as points of departure for formulating questions for the focus group discussions. They gave me an orientation of where to focus my search for answers to the three research questions: 'how do geography students conceive assessments in their geography courses, how do students determine their study strategies in geography courses and also how do students reflect on alternative ways of assessment in geography'?

4.5 Panel Wave 2: Focus group discussion

4.5.1 Selection of participants

Out of all the participants (33) at site A, who had responded that they were interested in participating in the next panel waves of the study, the first priority was purposively given to all the women (3) to participate in the focus group discussion. This was done with an aim of not losing the three female students that were already misrepresented compared to their male counter parts. This meant that 12 male participants at site A were also required to participate so as to make a case cohort of fifteen students. At this stage the purpose was to get a broad insight of the themes to be elaborated (Appendix II) so I had a high number of focus group participants. Later on (see Table 1) I collected data from individual participants with an attempt to both gain from the group discussions and from individual participants.

At site B, 9 males and 6 females, which also made up the second case of fifteen participants, which is the size of the sample I had planned to use in both focus group discussions. I regarded the choice of this method for data

collection as one part of a multiple case study approach (Yin, 1984; Eisenhardt, 1989). As mentioned earlier the fifteen participants from each of the two sites, who participated in the focus group interview, had earlier participated in the survey.

4.5.2 Instrument

The focus group was based on four main topics regarding the students' conceived purpose of assessment, study strategies used in geography courses by the student, the conceived roles of the teacher in geography course(s) and the desired modes of assessment. The focus group discussions at both sites were conducted in Kinyarwanda. On some moments I had discreetly to bring back the discussion to the guide as it was taking an unintended turn. Also on some occasions, I had to intervene by repeating the question when there was a prolonged and unconstructive silence. The details of the focus group guide are found in Appendix II.

4.5.3 Data collection procedures

After contacting the group leader, with whom I had kept in touch from the time of the first phase of the study, we set appointments for the focus groups. I made a familiarization visit to site B, so that I could make logistical arrangements because I wanted the discussions to be videotaped to capture everything said and how it was said (Bryman, 2004). The participants at site B were available before those at site A and I never minded reversing the order. A professional videographer, who is an employee in the education IT department at site B, agreed to video record the discussions at both sites. As a matter of validating the convenience of the rooms that would be used, the videographer visited both venues (sites A and B) before hand and declared them to be sufficient for the recordings.

In both cases, the fifteen participants were seated randomly. At site A, the seats were fixed and there was no way they could be arranged in a semicircle pattern which, I would have preferred. The participants sat in rows and columns. Seven participants sat on one side and eight on the other. I was positioned myself just in front of them and acted as a facilitator of the discussion and at the same time took field notes. However, the video coverage came out clearly and all utterances and images are clear, even after transferring the copies of the tapes to a computer. The video recordings were useful when identifying the participants. The guiding questions used in the focus group discussion were to a great extent the results I got from the questionnaire. I used them as stimulus in encouraging the students to participate actively in the discussions. The details of the topics and guiding

questions used are available in Appendix II. However, it should be noted that the order in which the questions were asked is not necessarily according to the way they are written in the guide. The order depended largely on what the previous participant said, or how I wished the discussion to proceed. The discussion took fifty-five minutes at site A and one hour at site B.

4.5.4 Data analysis

After transferring copies of the focus group interviews, and videotapes to the computer, I transcribed the tapes from both sites. With the assistance of the computer software it was possible to identify the demarcations of different excerpts of the discussion concerning a particular question, in terms of minutes and seconds. Furthermore, the video copy on the computer programme enabled me to view simultaneously who the participants were on a particular issue under discussion and who said what. I referred to the sitting patterns which I had drawn, as part of my field notes. By looking at the images on the screen I was quite sure as to who is who, in terms of given codes. This made transcription more articulate and coherent as a result of both visual and audio facilities data in place, which could be traced by the coding when needed. Also, it became helpful during the iterative process of data elaboration because, whenever the need arose, I could refer to the original Kinyarwanda version. The first thing I did after translating all the transcripts was to put the transcriptions together, irrespective of the site. At this stage I proceeded by bringing together portions of the discussions pertaining to the same questions on the interview guide, using Microsoft Word Programme.

At the second stage, I repeatedly went through all the material, searching, sorting and arranging the material. Actually, it was more of a circular process. It was during this stage that I started the process of establishing some themes within the material in line with the three research questions of the study (Kvale, 1996). I tried to minimise the influence of my prior knowledge about theories in the field of pedagogy, especially those on assessment, and kept the exercise of analysis as data driven as far as I possibly could. I shared the outcome texts with my supervisors at subsequent stages, as new categories and sub categories emerged. I continued with further sorting, redefining and re-arranging the earlier categories and subcategories, this time aligning them more with the themes I had used during the focus group interview (the students' conceived purpose of assessment, study strategies used in geography courses, the conceived roles of the teacher in geography course(s) and the desired modes of assessment) and produced a text.

During the process of looking for categories and sub-categories I had instituted after the second phase of analysis, I continued with the process of analysis, reducing and condensing materials, as expressed by the participants, into relatively short expressions. This is an example of meaning condensation, which Kvale talks of as 'an abridgement of the meanings expressed by the interviewees into shorter formulations' (1996:192). The analysis process at this stage focussed mostly on re-reading all the material and ensuring that there was a clear presentation of concentrated meaning in every phrase used. I was seeking meaning within the statements, regardless of the divergence based on the external wordings used by interviewees (Merrian, 1998). The condensed categories representing geography students' conceptions about assessment and study strategies in geography are elaborated in chapters five to seven of the findings. With the purpose of transparency, I have made use of quotations from students' responses.

4.6 Panel Wave 3: Individual responses

4.6.1 Selection of participants

One year after the first data collection, and three months after the focus group discussion, a follow-up session was organised and conducted at both sites. Again, the same 15 subjects from each focus group participated. The idea of conducting a follow-up session was triggered by my curiosity to gain deeper understanding of some unfamiliar phrases that were used by participants from both sites. In both settings, the participants were given the option of choosing the language in which to respond and they all preferred to use Kinyarwanda. Furthermore, they requested to write down their views instead of using verbal discussion which was my intention.

4.6.2 Instrument

The follow-up questionnaire had three open-ended questions based on the themes that had appeared frequently in the responses during the focus group discussions. I needed to understand what participants meant in the context when they were asked to explain the phenomena: 'studying the course-teacher' before studying the 'course-content'; sourcing of information about study strategies from other geography students and, finally, considering possible course value in the adoption of study strategies in geography courses. The detailed question items are shown in Appendix III.

4.6.3 Data collection procedures

The follow-up sessions were organised at both sites later the same year (August, 2007) when focus group discussions had been conducted (Table 1). Building on the outcome from focus group discussions, I realised that some issues needed further clarification on an individual level. I used follow-up questions to solicit individual information on such issues. A two-hour session was arranged at each site to administer the questionnaire. The questions were written in Kinyarwanda so as to ease the exercise and maximize the advantage of the limited time that was secured for the exercise. All the participants responded in Kinyarwanda, if they wished and the responses, irrespective of the language used for answering the questions, were not supposed to exceed one A4 page (for details of the questions, see English version Appendix IV). Fifteen pages of responses from each site were collected.

4.6.4 Data analysis

After collecting the thirty pages of responses from the two sites, I read them to find out if they were all addressing the questions asked. After that I translated them from into English. This stage was followed by sorting and searching through the responses. The initial text I came up with was shared in department seminars as I had done with analysis of data collected during panel wave two. Furthermore, with the input from the discussions about the text, I continued with deeper sorting, redefining and re-arrangement of the earlier categories and sub-categories in-line with three themes on which the three open-ended questions were based: studying the teacher, information gathering and the influence of perceived course value. The text was analysed and condensed to have an accurate and clear presentation of the meaning that it carried. In a similar manner, I had handled the focus group transcriptions, sought meaning within the phrases without considering the divergence in the use of words by the participants (Merrian, 1998). On many occasions, I had to refer to the original Kinyarwanda version to ensure that I understood what the participants meant.

4.7 Panel Wave 4: Semi-structured interview

4.7.1 Selection of participants

The interviews were conducted four months after the participants had completed their undergraduate programme. In total, this event was thirteen months after the first data collection. By that time, I had started to analyse the

data from the previous panel waves inductively with an intention of establishing some themes and coding them. At this stage of the data analysis, I was in a position to identify key informants from the two settings. By using their codes I was able to trace who contributed with what at the different panel-waves of the study. I selected six participants from each setting of those who had given clear narrations in the earlier responses and were willing to participate were other criteria used in selection of participants. But this was made after giving the females first priority so that they would not be missed out due to low representation in the programme. Individual interviews were conducted with twelve participants, six from each former study site. The departments did not have much role in arranging my meetings with the interviewees because, by this time, the participants were no longer students.

4.7.2 Instrument

The in-depth interview guide comprises three topics: experiences with assessment in geography, experiences with the study strategies they used in their studies and desired modes of assessment. The interview questions sought information about the participants' reflections on these topics because they were in a new position to talk since they were no longer in the education system and indeed it was reflected in their responses, as they could act and talk more independently. The details of the interview guide are shown in Appendix IV.

4.7.3 Data collection

The interviews were tape-recorded and were completed over three weeks. The average duration for each interview was almost one hour. All the interviews were conducted in Kinyarwanda as free expression was deemed important in asking questions by the interviewer and in expressing reflections by the interviewees. The interview topics focused on the phenomena of assessment and study strategies. The participants were open to share with me their reflections on various modes of assessment and study strategies they used in geography and even those, which they would have wished to use in their undergraduate programme. Also, the participants were asked to speculate on what the study consequences would be if there was no assessment in their education sector. The data collected through the individual interviews were expected to enrich the earlier collected data in the same areas when the participants were still undergraduate students. The details of the interview guide are shown in Appendix IV.

4.7.4 Data analysis

All the interviews were transcribed verbatim. Again, during the analysis I tried to refrain from using my preconceived ideas about assessment and study strategies. Hence, I attempted to employ an inductive approach. I focussed on the similarities and differences in the ways participants retrospectively looked at their experiences with assessment during the time when they were still pursuing their undergraduate programme.

I brought the twelve transcriptions together and made a single extensive pile and I did not consider any single transcript as a unit of analysis, temporarily abandoning the borders between individuals to find the variations in the ways the participants had experienced assessment in the geography courses. I continued by searching for a deeper understanding of what the utterances meant by carefully selecting excerpts about the same issues from the twelve interviews. At this stage, I was trying to understand what every utterance meant in two contexts. At first, I would look at the utterance in relation to what different participants had said. In the second instance, I considered the meaning of the same utterance in relation to what the same participant had said about other issues during the interview.

After I had grouped all the different utterances that I considered to be relevant in both contexts of completed meanings and re-introduced the individual boundaries, I took into consideration the comments from the departmental seminar participants. Here, I focused on differentiating the groups along the features that were unique to each. This involved identifying those attributes that made a particular group different from the others on the same topic. Therefore, I focused on differentiating the groups along the salient features that characterized each category. During this exercise, I identified those attributes that made each particular group. The same attributes highlighted the variations and some linkages, for instance, some participants' reflections on assessment formed hierarchy, which was used as a basis to form categories about conceptions. The formed categories were ranked and formed in what I consider to be the outcome space based on the interview data collected after the participants had completed their undergraduate programme.

4.8 Ethical considerations

The four phases of data collection involved my interaction with both the participants and other people within the administration of the institutions where data were collected. I have tried to follow research ethics guidelines in

the human and social sciences as they are defined in the literature (Kvale, 1996; Merriam, 1998; Swedish HSFR, 1990). Right from the beginning I involved the institutions where the study was conducted by officially requesting permission to carry out the study in their respective geography departments. Furthermore, I explained the purpose and design of the study at departmental level. Once permission was granted, I organized meetings with students in their settings and explained to them what the study aimed at and how the information they provided would be used for the specified purpose of this study. I sought consent from the students for their participation and explained to them that they had the right not to participate and even to withdraw at anytime they should wish.

In all the phases of the data collection the participants' real names were not used as I had provided each participant with a code. An example of the codes that were assigned to participants during the data collection exercises is A3:M01 where A stands for site A; 3 for year three of the programme; M for male and 01 for number one. Confidentiality was further assured to the participants with regard to the information provided during interviews. Moreover, with the purpose to get a board representation, I have been gender sensitive in the selection of participants as I have purposively considered that women would not be missed out. Participants were always reminded of their rights at the beginning of each of the data collection phases and also that they are not obliged to answer any question they might not feel comfortable with. I sought the consent of the participants to use tape recorder and video camera. I promised both sites that I would share with them the findings of the study once completed.

4.9 Quality considerations for the study

A number of studies make use of validity and reliability in justifying the quality of the study and the extent to which the findings can be generalized (Kvale, 1996; Silverman, 2001; Bryman 2004). However, this section aims at considering aspects of the quality of the study in terms of trustworthiness on the basis of dependability, credibility and transferability.

4.9.1 Dependability

The dependability factor as an aspect of quality is in this context used as one of the criteria that constitute trustworthiness and parallels 'reliability in quantitative research' (Bryman, 2004:273). On the same line of argument trustworthiness considers the whole study (Guba and Lincoln (1994) and Bryman (2004) suggests that researchers should employ an 'auditing'

approach, which involves that careful records are kept of all phases of the research process. In my work I have kept records of the research activities that took place from the stages of problem formulation, participant selection for the first panel wave and so on to the interpretation stage. The research process was shared with other researchers who acted as auditors at various levels including meetings with my supervisors and seminars organized by the Higher Education Research group of Behavioral Sciences and Learning Department at Linköping University. Throughout the study I attempted to exercise diligence openness in keeping the study records so much that any other interested part would take an audit of how the study was conducted and as such ensuring and protecting dependability of my study findings.

4.9.2 Credibility

Credibility is another criterion used in discussing the trustworthiness of qualitative studies. It is paralleled with internal validity in quantitative research and concerns the extent to which 'there is a good match between researcher's observations and the theoretical ideas they develop' (Bryman, 2004: 273). The same idea was raised by Miles and Huberman (1994), and implies that credibility of results reached and the conclusions delivered from them are in-line with the empirical data collected. I have dedicated three chapters of my thesis to findings based on participants' views on the studied phenomena. Furthermore, the findings are given to some former participants with the aim to seek, respondent validation (Bryman 2004:274). The comments received from the former participants regarded the findings as reasonable. Much as it was not possible to get all the participants to engage in the respondent validation exercise I managed to get all those who participated in the panel wave 4. These are the participants that participated in all the four panel-waves and as such gives credibility to the findings of my study.

4.9.3 Transferability

Transferability of the findings is yet another criterion of judging the trustworthiness of a study (Bryman, 2004). It concerns analytical generalization, which 'involves a reasoned judgment about the extent to which the findings from one study can be used as a guide to what might occur in another situation' (Kvale, 1996:233). Kvale further argues for a possibility of making analytical generalization claims in multiple ways, for example, by providing the reader with specific evidence in terms of data and theories used in making conclusion. Larsson (2009) urges for a pluralistic view of generalization in qualitative research. He elaborates on the complexity of generalization and suggests several lines of reasoning. He points out that the researchers need a repertoire out of which the 'researchers

have to find out which line of reasoning makes sense in the specific study they are conducting' (Larsson, 2009:36). In my qualitative study I have described the background and the settings with the purpose to provide the reader with contextual information of where the data were collected. These descriptions provide opportunities to employ one of Larsson's lines of reasoning that focus on context similarities. In other words, the opportunities for transferability in this reasoning focus attention on similarities between the sending context (where the study was conducted) and receiving contexts (where the findings can be employed).

As mentioned earlier, chapters five, six and seven presents the students' views on assessment and the study strategies they adopted. In these three finding chapters there are no interpretations. Instead, they provide the reader with an insight into the specific data and the following analyses. Contrary, chapter eight is dedicated to interpretations of the findings with the support of relevant theories. Hence, in Kvale's way of reasoning, I make some analytical generalization claims and theories are used to make conclusion that would enable the reader to judge the extent to which the findings of my study can be used as a guide to what might occur in other situations.

4.10 Summary

In this chapter, an attempt has been made to organise methods and design that reflect how the study was conducted at sites A and B and how data were elaborated. On issues that appeared to be common to most of the panel waves, such as matters concerning ethical considerations and quality issues a joint coverage is used to limit repetition. More specifically in the first panel wave I have explained how and why a survey was used as a means of collecting information. I took advantage of those findings in a second panel wave and developed a guide for focus group discussions. Next, the information from the focus group discussions were used to formulate an interview-guide used during the third panel wave, when individual follow-up tasks were administered. The chapter further explains that this was done with the aim of deepening our understanding of geography students' conceptions about assessment and study strategies. According to the adopted design of the study the first three panel waves were all conducted when the participants were still pursuing an undergraduate programme. It was after completing the same programme that individual interviews in the forth panel wave were held with some of the participants. The data from the first part the survey were analysed by using quantitative methods while qualitative methods were used to analyse the remaining parts of the collected data.

5. Students' conceptions of assessment

In this chapter, students' views and conceptions drawn from the two sites of higher education in Rwanda are elaborated. The findings are based on analyses of data collected through multiple research methods and I have examined various aspects of assessment in relation to the research questions: How do geography students conceive assessments in their courses? How do students reflect on alternative ways of assessment in geography? These are two of the three research questions that guided this part of the study in the pursuit of achieving the aim to gain deeper understanding of the experiences of assessment as reflected in students' utterances.

5.1 Purpose of assessment

Firstly, the purpose of assessment in geography courses was one of the items in the questionnaire (Panel wave 1). The participants were provided with different possibilities. For example, to motivate students by grade/rank achievements on which to react by rating their views. I explained to the participants from the onset that all the questions in the first section about teaching, learning and assessment, require them to indicate in the box the alternative which best represents their view. I further pointed out that there is no right or wrong answer but a mere representation of varying possibilities. The questionnaire findings of assessment purposes are described in the subsections on 'Motivating students' and 'Grading achievement'.

Secondly, there was a need for further investigation of students' explanations of their experiences of purposes of assessment. When the focus group guide (Panel wave II) was developed it was influenced by the results I obtained from the questionnaires used during panel wave one. When answering the open-ended questions in the questionnaire, individual students had hinted about some experiences. However, on that occasion there was no chance to prompt and probe the participants about their responses, as was the case in the focus group discussions and in the follow-up questionnaire with open-ended questions. The findings are presented in the following parts of this chapter.

5.1.1 Motivating students

Participants' views about the purpose of assessment were investigated with an interest to see whether assessment is considered to motivate the students. As shown in Table 2, the results reflect an array of variations.

Table 2. Is assessment used to motivate the students?

	Don't know	Never	Sometimes	Frequently	Total
Site A count	1	5	17	9	32
%within site A	3.1%	15.6%	53.1%	28.1%	100%
Site B count	3	7	21	5	36
% within site B	8.3%	19.4%	58.3%	13.9%	100%
Total count	4	12	38	14	68
% of total	5.9%	17.6%	55.9%	20.6%	100%

On average more than three quarters (76,5%) of the participants both from sites A and B agreed with the statement that 'assessment is used to motivate students' (Appendix 1), it was considered to be to varying degrees (sometimes and frequently). The remaining quarter constitutes those who claimed that assessment is never used to serve the purpose of motivating students and those who claimed that they did not know. The results show that percentages of those who claimed that assessment sometimes serves the purpose of motivating students are almost equal at both sites and it is just above half of the participants at each site. However, the extent to which assessment frequently serves the purpose of motivating students differed. At site A the percentage was about twice as high as that in site B.

5.1.2 Grading achievement and purposes of assessment

The participants were asked to rate their views about assessment as a way of grading (Table 3). In the context of this study it is considered to mean that students' achievement also are ranked

Table 3. Grading/ranking achievement

	Don't know	Never	Sometimes	Frequently	Total
Site A Count	2	1	8	20	31
% within site	6.5%	3.2%	25.8%	64.5%	100%
Site B Count	1	3	8	24	36
% within site	2.8%	8.3%	22.2%	66.7%	100%
Total count	3	4	16	48	67
% of total	4.5%	6.0%	23.9%	65.7%	100%

The results in Table 3 show that about two thirds of the students at both sites claimed that the purpose of assessment in their geography courses was frequently used to grade and rank their achievements. About one fourth of the students indicated that it is only sometimes that the purpose of assessment had this focus.

Beyond what we have learnt from the questionnaires regarding purposes of assessment, as shown above, the participants discussed these issues in focus groups. As an introduction to these additional findings Table 4 provides major variations on this issue and how the participants expressed their experiences.

Table 4. Variations in purpose of assessment

Purpose of assessment	Examples of students' statements
(5.1.3) Evidence guided assessment	- Something to use as a proof of a completed course; serving the purpose of getting marks for records.
(5.1.4) Control and monitoring: - Evaluation of achievement of course objectives	- Course objectives, so assessment is carried out to establish whether they have been achieved or not.
- Evaluation of achievement of teacher objectives	- Assessing the extent to which a student has crammed what the teacher gave in his notes.
(5.1.5) Assessment for: - authority and	- How well the teacher knows a lot of material, which students do not know and some teachers seem to be proud of it.
- selection	- Find the assessment done here at [site B] to be aimed at getting every student marks which are used to decide on promotion and discontinuing students.
(5.1.6) Multipurpose	- Difficult to generalise because we are assessed differently.
(5.1.7) Assessing performance	- They establish if you can perform some activities.

In the following subdivisions I will expand on each of the purposes of assessment illustrated in Table 4.

5.1.3 Evidence guided assessment

In the focus group discussions the majority of the participants considered assessment to be an exercise that is carried out as a way of fulfilling some requirements of the department, like proving that teaching is carried out and providing the students with marks. Two of the participants sum it up:

Me, I usually consider the assessments teachers give us to be a way to get marks so that our teachers get something to use as a proof of having completed the course and hand-over the class to another teacher, because without the final examination results there is no way, a course teacher would say that he has completed teaching. (A3:M19)

Even if you consider the way our institution's academic regulations are worded, you see clearly that assessment activities are aimed toward earning marks for the departments, for the use of deciding who gets promoted to the following year of study or not. (B3: M7)

Marks from assessment tasks are perceived by the majority of students to be used by their teachers as evidence of having completed the teaching of a course. This proof is an obligation for every member of teaching staff in the institutions of higher education in Rwanda and each one of them has an assigned teaching load, which is expressed in terms of hours. Marks are seen as proof that the course has been completed. In a way, it is an internal control mechanism ensuring that courses are taught and that teachers have done their duties. Assessment thus sends a signal to students of how their studies are guided by an intention of obtaining marks for evidence purposes.

5.1.4 Control and monitoring

Evaluation of achievement of course objectives

Other participants explained their experiences of assessment in a different way from those presented above. They seem to regard assessment as a means of evaluating a number of issues including: the teacher's work, students' understanding and also gauging how relevant the students have considered the course to be. I regard these ones to fall into the category of those who perceive assessment to serve the purpose of controlling and monitoring both teachers and students:

I consider assessment to be a means by which a teacher establishes how the teaching has taken place, if students have understood the course and if they have internalised it. Also, if they [students] realise how helpful, it will be in their future lives. (B3:F4)

The course objectives are set by the teacher, so some students consider assessment to be carried out to evaluate whether the teaching has achieved the course objectives, through the assessment of the teachers. The students in this category also see assessment as serving the purpose of evaluating students' comprehension of the course. The example indicates that students

consider their appreciation of the course to be another purpose of assessment. Appreciation in this sense is how students realising the relevance of the course for their future lives. Thus assessment is regarded as serving a developmental purpose of the students. Nevertheless, in both sites there are other participants who argued that assessment appears to serve the purpose of evaluating the achievement of course objectives:

There are course objectives set by the teacher, so assessment is carried-out to establish whether they have been achieved or not. I feel the students should also be entitled to know those course objectives otherwise they [students] follow the course not knowing the relevance of the course in their future lives. I think if students are made aware of the course objectives they might participate in evaluating themselves, and find out if the course objectives have been achieved. (B3:M8)

I find it easier to study in the few courses where we are told exactly what the course teacher regards as the objectives of his course, unlike in those courses where the objectives are written in general or at times in unclear terms. (A3:M4)

Students observed that assessment in their courses seems to evaluate their achievement of the course objectives, in this particular case only known by the teacher and not by the students. Furthermore, some students expressed their desire to be made aware of course objectives early enough for them to appreciate participating in the course. Students felt that they could participate better in assessing themselves (self assessment) as far as evaluating the extent to which they have achieved course objectives only if they were made aware of them from the onset.

Evaluation of achievement of teachers' objectives

In contrast to arguing for course objectives, some students drew attention to the relation between assessment and the type of questions asked by the teacher. The following is an example of how it was explained:

When you compare course objectives as they are usually written in most of our course compendia, and even in some of our course outlines, to the kind of questions we are at times asked in exams, you wonder whether those questions are meant to assess the achievement of course objectives or if they are assessing the extent to which a student has crammed what the teacher gave in his notes! (A3:F22)

Assessment was seen by some of the participants to be used by teachers to evaluate the achievement of the teachers' own objectives, as opposed to assessing the achievement of course objectives. The participants noted this discrepancy between the course and assessment goals and hence reported their scepticism about the validity of the assessment of their courses. The basis of the students' claim is the disparity they find between what examination questions are demanding and what is spelt out as course objectives in the course compendium.

5.1.5 Assessment for authority and selection

There were some respondents, who claimed that the purpose of assessment is teacher oriented. Such claims were raised in a manner that assessment might sometimes be used by some teachers to prove how difficult and important their courses are. For instance, one of the students said that:

... you might think that when a teacher sets a very difficult examination and many students fail, it is a sign of how well the teacher knows a lot of material which students do not know and some teachers seem to be proud of it. (A3:M7)

Assessment in this case is interpreted by some participants as providing a platform for some teachers to display their superior possession of knowledge through setting questions, which students fail to answer correctly. The same students reported their interpretation of this state of affairs of assessment practice as giving teachers the authority to use assessment outcomes as a benchmark for promotional purposes. In this manner a decision is taken on individual students, as explained in the following examples:

I find the assessment done here [at site B] aiming at getting every student's marks, which are used to decide on the promotion and discontinuing of students. (B3:M9)

Through the way we answer the questions, both in the partial and final exams, a teacher can tell whether a student has achieved course objectives or not and that is how I think he selects those who have passed the course from those who have failed it. (A3:M12)

Higher education opportunities in public institutions, like the ones the respondents in this study were selected from, have become very competitive as the enrolment has increased without a matching increase in funding. Drawing on the participants' explanations, they seem to suggest that some

teachers' decisions, which are based on assessment outcomes (marks in this case), influence students' future lives. Consequently, students seem to regard assessment as a process that empowers teachers with authority over students' future lives.

5.1.6 Multipurpose assessment

Some respondents from both sites pointed out their concerns about the simplification stated by their classmates when explaining the conceived purpose of assessment in all geography courses. The explanation given by these few participants, who were not concurring with the rest, was that assessment styles varied a lot and, as such, it was difficult to put their purposes in a single group. One student explained how they hade experienced different forms of examinations. For example, as explained under 'Assessing performance' (see sub-section below) when applying both knowledge and skills they appreciated such forms of assessment. However, the same student said:

But in most other course exams we are asked to reproduce what was given to us in our notes. So that is why it is difficult to say exactly what the purpose of assessment in our geography courses is. (A3:M7).

Another student summarised the topic by saying that:

I find it difficult to generalise to what extent the purpose of assessment in geography is this or that, because we are assessed differently, especially if one considers how foreign teaching staff assess differently from the local staff. The foreign staff usually gives us a variety of questions almost covering the whole course and we choose a few to answer, while the local staff, most of them give us questions based on few topics and we choose from them. So you wonder if their assessments tasks are serving the same purpose! (A3:M4)

Contrary to those students who see assessment in their courses to be for the selection of students, there are other students who view it differently and do not reflect on assessment in their courses as a homogenous phenomenon. These students seem to base their argument on the variations they claim to be practised within the methods of course delivery and ways of assessment. The differences seem to lie mainly within the assessment scope, which students see as opportunities given to them as they could choose questions to answer. That explanation was based on the work of some teachers, whose assessment style cover all course materials and give a student an adequate choice of

questions. This in contrast to those teachers who focus their tasks on a few parts of the course material limiting what choice students can make. This is what makes some students claim that the purpose of assessment is similar in all their geography courses, while others regard it to be overgeneralizations of the situation.

The participants linked variations in styles of assessment to undefined purposes of assessment. Their argument was that they commonly found a big disparity between what is asked for in their exams and the stated course objectives. This is shown in the following example:

It is a common practice to find that when answering a question that requires more than one explanation and you give some which have not been included by the teacher in his course compendium, but which you might have read somewhere else, like on the internet or from another teacher's notes, you do not get marks for that initiative. I consider this to be an indication that the teacher is using assessment to evaluate the achievement of his own objectives and not course objectives. (A3:M10)

The majority of the participants argued that, in most of their course compendia, the course objectives spell out how a student is expected to perform. Yet, at times the assessment questions look for something totally different, like whether you can recall what you were given in the course notes. The claim made here puts emphasis on the disparity between course objectives and assessment.

5.1.7 Assessing performance

In contrast to all examples provided on summative assessment, there are a few of the participants from site A whose explanations displayed a keen appreciation of the kind of assessment that offered them an opportunity to apply what they learnt, that is knowledge and skills:

In some courses it is easy to see what the questions we are asked are targeting. They establish if you can perform some activities expected of someone who has studied a course. For example, in the Geography Information Systems [GIS] exam we wrote last week, it was clear that we were asked to portray our level of applying both knowledge and skills, which we gained from the course. (A3:M7).

Here the student seems to appreciate performance (authentic) assessment and that the examination task was constructed in a way which made it easy for the students to see the target of the assignment.

In the category of the purpose of assessment, we have seen the participants observations regarding the use of double standards by teachers in the assessment practices. They claim that this affair confuses them to an extent that it becomes difficult to know the exact purpose of assessment. In contrast, in the same department where assessment is serving the purpose of assessing the level of performance of students' coursework, in other courses it is serving something that is unclear to them. The variations shown on the purpose of assessment and students' reasoning about their experiences indicate that focus is mainly laid on summative assessment. I will in the following sections examine how students conceive assessment procedures and their views on alternative modes of assessment.

5.2 Who carries out assessment

As part of finding out, who the assessors are, three alternatives were provided in the questionnaire: self; peers and teacher. The results based on both sites did not differ concerning self and teacher assessment as almost all stated that self assessment is never practised, while assessment by the teacher is frequent.

However, results on the issue of students assessing their fellow students showed some disparities between the two sites as reflected in Table 5.

Table 5. Distribution	of frequencies	of peers as assessors
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	Don't know	Never	Sometimes	Frequently	Total
Site A Count	5	4	18	2	29
% within site	17.2%	13.8%	62.1%	6.95	100%
Site B Count	2	27	5	1	35
% within site	5.7%	77.1%	14.3%	2.9%	100%
Total Count	7	33	23	3	64
% of total	10.9%	48.4%	35.9%	4.7%	100%

Nearly half of the participants (48.4%) said that they never were marked by their fellow students. Here, the two sites differed as slightly more than three quarters of the participants at site B said that assessment by peers is not practiced in their geography courses. In contrast, just above one tenth of the participants at site A responded that it was never used. Almost two-thirds of the participants at site A claimed that assessment by peers is sometimes practised in their geography courses. This is to be compared with the fact that

just 14.3% at site B made a similar claim. Results indicate that the claims made by the participants at site A and site B about students being assessors are far apart especially on how often it is practised in their respective institutions. The difference is statistically significant, $\chi^2 = 25.695$, d.f. 3, p< 0.01% level, with regard to peer assessment in the two settings. Some participants, though in small numbers, did not know if their peers ever participate in marking. Even smaller percentages of participants from both sites refuted the claim of assessment by peers to be frequently used as a method in their courses.

5.3 Modes of assessment

Out of eight alternative modes of assessment in the questionnaire (Appendix 1) the participants had to react on one alternative by stating whether they were assessed through presentations made by a student to fellow students as one of the modes of assessment in their courses. The results are based on the two sites. There were no recorded significant differences or even close similarities between the two analyses. However, the exception is how the percentages of those who claimed it is sometimes used differed by one forth on presenting to peers as an alternative mode of assessment as shown in Table 6 below.

Table 6. Presentation to peers as mode of assessment

	Don't know	Never	Sometimes	Frequently	Total
Site A Count	3	7	17	4	31
%within site	9.7%	22.6%	54.8%	12.9%	100%
Site B Count	2	5	2 9	0	36
% within site	5.6%	13.9%	80.6%.	0%	100%
Total count	5	12	46	4	67
% of total	7.5%	17.9%	68.7%	6.0%	100.0%

The distribution of number of responses regarding presentation to peers reflects how the participants at both sites rated almost equally that they don't know if presenting to peers is practiced as a way of assessment in their geography courses. Similarly, participants who claimed this mode of assessment is never used in their course did not differ significantly between the two sites. However, a difference is firstly noted between how respondents answered to whether presenting to their peers is used frequently or not, as a way of assessing. Also, more than three-quarters of the participants at site B indicated that they sometimes present to their peers as a way of being assessed in their geography courses. It is only slightly more than half of the

participants who answered likewise at site A. Secondly, the views of the participants differed on the same issue when at least a small number at site A claimed that they are frequently assessed through presentations to peers, while none at all at site B made a similar claim.

5.4 Time of assessment

The participants were asked when they were assessed in the whole teaching and learning process of the geography course. The results from the analysis of views about assessment being carried out at the end of the course are reflected in Table 7

Table 7. Assessment made at the end of the course

	Don't know	Never	Sometimes	Frequently	Total
Site A Count	0	1	3	28	32
% within site	0.0%	3.1%	9.4%	87.5%	100.0%
Site B Count	0	1	10	25	36
% within site	0%	2.8%	27.8%	69.4%	100%
Total count	0	2	13	53	68
% of total	0%	2.9%	19.1%	77.9%	100%

The results show that slightly more than three quarters of all the participants claimed that assessment is frequently carried out at the end of the course. On the basis of the two sites (Table 7) the analysis indicates that all the respondents located the time of assessment activities in the teaching-learning process. Only one student in each group stated that assessment is never carried out at the end of the course. Interestingly, among those participants who claimed that assessment is sometimes carried out at the end of the course were 9.4% from site A while 27.8% were from site B.

Regarding time of assessment it is worth highlighting that a vast majority (77.9%) of the participants responded that assessment was frequently made at the end of the course, which is strengthened by one fifth (19.1%) of the participants who pointed out that it was used sometimes. Hence, summative assessment was at the time of the data collection the most common mode of assessment.

5.5 Assessment and feedback

With an interest to gain information about participants' views about the value of receiving feedback from the assessment processes an analysis of this issue was made at both settings (Table 8).

Table 8. Feedback based on the assumption that assessment improves learning

	Don't know	Never	Sometimes	Frequentl	y Total
Site A Count	0	2	10	19	31
% within site	0.0%	6.5%	32.3%	61.1%	100%
Site B Coun	t 1	2	14	19	36
% within site	2.8%	5.6%	38.9%	52.8%	100%
Total count	1	4	24	38	67
% of total	1.5%	6%	35.6%	56.75%	100%

For the purpose of this study, the focus was put on aspects of how assessment improves learning, which is in line with the ideas elaborated in the theoretical part of the present work. The findings at the two sites show rather close similarity in the participants' views on assessment. The majority claimed that feedback improves learning and this is strengthened by an almost zero percent in the cluster of those who claimed that they don't know whether it improves learning or not.

The fact that feedback was marked on the levels of 35,6% for sometimes and 56,75% for frequently reflects somehow that the students valued this aspect of assessment as useful for their learning. However, when summative assessment is the most common mode there is less opportunity of getting feedback and make use of it within the course under study. Further on, when the students were asked about alternative modes of assessment they brought up quite a few suggestions, which are elaborated below.

5.6 Alternative modes of assessment

In the questionnaire the participants were asked to suggest which mode of assessment they would recommend to be used in their geography courses. The findings of the survey have influenced the questions used during the follow-up phases of data collection. For example, in the focus group guide it was brought up how students would have preferred to be assessed if the existing rules and regulations governing assessment in their institution were not there. In response to this question the participants suggested a variety of

alternative modes and types of assessment, which are examined below after the students' more general views of assessment.

5.6.1 Students' views on modes of assessment

Some participants gave more than one mode of assessment and went even to the extent of suggesting how the modes should share the weight of the assessment. Below is one example of their suggestions:

Essay: 50 percent, it enables us to get a chance of looking for more information; Presentation to peers 20 percent. You cannot explain to others what you don't understand, so you get encouraged to understand more, Short-answer questions 30%, so that one can show his memory capacity. (A3:M25)

This suggestion was shared by another participant, when he suggested that:' I would recommend a presentation to peers and essays because it makes someone 'think a lot and be creative' (B3:M7). According to the respondents the suggested modes of assessment cover a wide range of levels of knowledge and the participants advocated engaging students in the search for information and also sharing with other students by attending their peers' presentations. The first respondent even concludes his suggestion by proposing that even short questions will require that recall should be given consideration in the assessment. Furthermore, some participants suggested what mode of assessment to use and which ones should be replace as explained in the next excerpt:

I would recommend using the method based on presentation to peers, or assessment through discussion because at [site B] we don't apply our knowledge nor express our knowledge. We study to gain marks and grades due to the way our examiners assess us through blocus, literally meaning 'give me my notes'. (B3:M7)

The above example is one of those where participants suggested alternative modes of assessment, as presentation to peers or discussion based assessment, to replace the existing ones in their courses. The issue of wishing a change of modes of assessment and applying a critical approach was suggested as the following excerpt shows:

Assessment that aims at testing our knowledge (...). I can't tolerate the current system of assessing where we are asked to reproduce. I say this because it is obvious that when you change the teacher's words into yours,

you don't get the same marks as someone who reproduced. This makes one get higher marks. (B3:M16)

Moreover, there are participants who suggested that the mode of assessment should combine theory and practice:

The mode of evaluating knowledge in geography courses would be formative and continuous based on practice rather than on theory since there is need to understand the geographical facts and explain them by giving tangible examples. Formative and continuous assessment inspires students to work hard for them to understand more and succeed as a result. (B3:M16)

The mode of assessment suggested in the above example is the one that gives students a chance to combine practical and written assessment (pen and paper) tasks. The participant also raised the issue that the assessment be based on formative and continues modes, which can lead to improving teaching and learning. Continuous assessment in the Rwandan higher education context implies, among other things, that the assessment is not only done at the end of the course but also at regular intervals during the course mainly for formative purposes.

5.6.2 Performance assessment

After the students had explained the different purposes and modes of assessment as shown in the first section of the findings, in the focus groups (Panel wave II) they were asked to reflect on how they would have preferred to be assessed if the existing rules and regulations had not been there. Their suggestions included when they wished to be assessed and under what regulations. I will in this section examine students' suggestions made under such assumed conditions with the purpose to gain more information about their views. First, I will start to shed some light on the proposals of those who emphasised the 'how' aspect of assessment.

More than half of the respondents wanted to be assessed, either individually or in groups, in a manner that would enable them to demonstrate how things happen in a relevant context. It was elaborated by one of the students:

If only our teachers could give us a chance to be assessed in the real environment where the features and processes we have studied do exist. For instance, at times we go to visit different parts of Rwanda to study different geographical features and processes but when it comes to the time of the examination we are not given a chance to demonstrate these

things in the real setting. Instead we are asked in a manner that we reproduce the notes of what the teacher had said about those similar features. I would prefer to be assessed throughout the course and in situations where the phenomenon I am being asked exists or is represented so that I display my understanding. (A3:M14)

In students elaborations various modes of preferred assessment were suggested. They were keen to explain how they wish to demonstrate the knowledge and skills they have acquired from their geography courses. They pointed out their desire to have continuous, formative assessment, which means that it is situated and oriented toward performance. In that way their understanding could be enhanced. Moreover, they underscored their desire to be involved in assessment activities, that is to spend time on self and peer-assessment activities as a complementary way of assessment.

5.6.3 Self- and peer- assessment

While expanding on the discussion about alternative modes of assessment, there were respondents who proposed to participate in assessment activities in the following ways:

Personally, I agree with my classmates who are suggesting that since we study together, at times even in groups when we are in the fields and study different processes and observe features together, I feel we should be given a chance to participate in assessing our classmates and even ourselves with the assistance of our course teachers. Why are we involved in other activities of the course but when it comes to assessment we become excluded yet we know better what we have gained from the course. (A3:M9)

Besides underscoring their desire to have performance assessment that is formatively oriented, a few students showed interest in participating actively in self and peer assessment, complemented by the assistance from the course convener. Their explanation depicts keenness among them to have an active role in course activities as a whole.

5.6.4 Problem-solving assessment

Some of the respondents at site A challenged the suggestion of having all the assessment tasks done in real situations or going back to the field where they were taught the topics which were covered in the assessment tasks. Instead they suggested an alternative as proposed in the following examples:

As it would be difficult to have a real situation for every topic covered in the exam, I would suggest that we be given questions based on imagined situations requiring us to imagine possible real solutions in such situations by answering those questions with imaginary settings in our minds. I think this would make us more creative and critical. (A3:F4)

Modes of reflective assessment that could be used in their geography courses were based on imagined situations and imagined possible solutions as alternatives to authentic assessment. The students expressed their optimism as to how this mode of reflective assessment would improve their learning. They said it would probably make them be 'more creative and critical' and, in this way, there would be a connection between assessment and learning. Re-emphasising the importance of role-play situations, a student explained his preferences in terms of imaginary scenarios:

The setting of exam questions should emphasise some imaginary scenarios in life that would make us think of how we would tackle such problems if they were real. For example, if we think of how soil erosion is becoming a serious problem to the Rwandan population, an imaginary scenario would be used and questions set based on it, and then we can suggest how to solve those problems without necessarily going back to the field from where we studied the topic of soil erosion. I think this can make us reflect on what we saw in real life and relate that to our answers. (A3:M21)

An assessment mode associated with problem-solving in imaginary scenariosettings was mentioned not as a contradiction to reflective assessment but as a complementary mode. It can be regarded as a theoretical elaboration instead of a more concrete way of returning to the field. Some participants considered this to be another strategy in which assessment could be carried out to link assessment to problem-solving in real life.

5.6.5 Variation in modes of assessment

The modes, related to both form and timing of assessment, was at the beginning of the focus groups discussed in general terms (Table 9).

Table 9. Students' views on when assessment was conducted

When assessment is carried out	Examples of students' statements
 Usually at the end of the course On arbitrary date set by the teacher 	 We are usually assessed after completion of the course. It is a common practice to have both partial assessment and final examination conducted when the teacher has completed teaching.

The examples shown in Table 9 were in line with what was drawn from panel wave one. During the focus group discussion (panel wave 2) it developed into more rich data both in comparison with what was achieved at an early stage of the focus group discussion and in the questionnaires. Variations in modes of assessment evolved in the process of data analyses in terms of: early involvement, middle of course and end of course assessment and ongoing integrated assessment.

Early involvement

A majority of the respondents were of the opinion that if they were allowed to participate in planning the schedule for course activities including assessment, the problem of getting too many exams in one week could be solved:

As my colleagues are saying, if we are allowed to participate in writing the timetable of the whole course, the issue of when to write exams would not be a problem because we would make sure that we have time for revision for it, unlike now when we are at times faced with three exams in one week in addition to the ongoing lectures. (A3:M5)

Almost all respondents concurred on their desire to be actively involved in timetabling course activities at an early stage. They contend that their involvement would take care of their concern about when assessment should be conducted

Middle of course and End of course assessment

There are other students, though a minority, whose views on the issue of when they would prefer to be assessed opted for having the assessment carried out halfway through and at the end of the course. It should be carried out on the condition that the assessment was done to serve different purposes from the ones currently operating in their courses:

I think if one of the purposes of assessment is to help us as students to improve on weak areas, then we should have part of it carried out in the middle of the course so that we get feedback in time to improve. This would reduce the risks of failing a course completely and also reduce the amount of content we have to cover in the final exam. (A3:M11)

Students expressed their desire to have feedback on their work so that they use it to improve their learning. In this way, their wish seems to have formative assessment practiced in their courses, especially in the middle of the course. Their contention is that formative assessment, carried out in the middle of the course, would be multipurpose in a sense that they would manage the course load and also have a better chance of passing.

Throughout the course-'On-going integrated' assessment

Again, variation was obvious, as there were a few respondents whose arguments were different from those of the other participants. They expressed their keen desire for assessment to be fully integrated into everyday teaching and learning activities in an on-going process:

In a way exams scare me, I feel if they could be integrated into the whole teaching-learning process and not be given the status they have today, and instead be conducted in a manner that they are simple exercises, probably I would enjoy my studies and even perform better. (A3:M31)

The desire reported by students in this category is in line with formative assessment, which is proposed to be implemented as an integral aspect of everyday teaching and learning activities. This suggestion is put forward in contrast to the conception students generally seem to have of the current assessment in their courses, which can be defined as summative, and is commonly carried out at the end or after a course.

5.7 Assessment regulations

The participants showed great interest in relating their assessment experiences to existing rules and regulations as exemplified in Table 10.

Table 10. Assessment regulations under discussion

Assessment regulations	Examples of students' statements
• (5.7.1) Focus on assessment regulations and implementation	- Make them [regulations] cover assessment issues to a point of providing feedback to students
• (5.7.2) Students' involvement and a need for a change of regulations	- If we were allowed to participate; Assessment regulations are not fully followed; There is a need to strengthen existing regulations

As shown in the examples in Table 10 the participants reflected on the existing regulations. They wished to be involved, pointed out a need for change and they were sceptical when they focussed on assessment regulations. In the following sections these issues are elaborated further.

5.7.1 Focus on assessment regulations and implementations

Some of the students argued that their concern was on regulations that are less focused on the process of assessment. They suggested that focus is more on promotion, based on assessment outcome, and less on the process of how and when assessment tasks are conducted, as pointed out by a student at site B:

For instance, we have fieldwork and we go out to see some of the features that are in books and some other physical features and processes. Unfortunately, we do such visits when we have completed the theoretical part of the course including the assessment. However, when we come back we are told to write a report to be assessed and one wonders if that assessment is regarded as part of the teaching and learning of the course and if the marks from the report are ever considered! To me assessment in our geography courses is something on its own done at the end. (B3:M2)

Likewise, the discussion at site A had some respondents who were sceptical about the respect given to assessment regulations:

I agree with my colleagues who say that assessment regulations are not fully followed. For example, it is common in our department for students to get marks and not scripts on which they answered questions and even the marks are disclosed long after we have written the assessment task. This is true for both partial and final exams. So that is why I am also saying, like those who talked before me, that there is a need to strengthen the existing regulations and make them cover assessment issues to the point of providing feedback to students. Personally marks alone don't tell me much. (A3:M2)

According to students' views, assessment regulations should cover a wider scope and even address course issues like, how and when setting of assessment tasks and marking them are carried out, not forgetting the relevance and scope coverage of the assessment content. Nevertheless, provision for students to receive feedback on their scripts is regarded to be more meaningful in terms of helping them to improve in their weak areas and making a connection between assessment and learning. It seems as if the scheduling of assessment tasks is an important part if it is used properly and in a timely fashion in order to improve learning.

The above line of argument of having specific regulations governing assessment was challenged by the few respondents who claimed that they were engaged in reading the teacher and the context with the aim to pass the assessment task, as reiterated in the following explanation:

I beg to disagree with previous colleagues. If one considers how much effort we put into studying our teachers, so that we pass their assessment tasks and get marks, which are also used by the department in verifying whether the course has been taught and who has passed or failed. I think even teachers are evaluated on the basis of the marks obtained from their course for purposes of promotion, and thus assessment can be regarded as part of the teaching-learning process. (B3:M21)

Though claimed by a minority of the respondents, the effort used by students to score high marks required through teachers' purposes of gaining promotion make students become sceptical. Students view such moves to mean that teachers have some vested interest in the students' marks for staff evaluation purposes. When I probed to verify whether there was profound evidence of teachers at the site being evaluated on the basis of the marks their

students obtain, the claim was immediately challenged by another group of students:

I: Are teachers also evaluated on the basis of the marks of their students in this institution?

B3:M16: Although I have no proof of this but I don't think teachers in this institution are evaluated on the basis of the marks their students obtain. Why I am saying so is because if that was the case there is no way a teacher, like one of our teachers, would ever dare to say that if he wanted he would make all his students fail. Indeed at the end of the year you find that most of the students in his course have failed his course and nothing is done about it. If his promotion was linked, among other things, to the marks of his students, I think he would try hard for his students to obtain better marks.

The cited student experiences of their teachers expressed both verbally and in other forms of action that these students have no reason to suspect that teachers are promoted on the basis of their students' marks. Students argue that if that was the case, then there would not be any cases of failure.

5.7.2 Students' involvement and a need for change

Nearly all the respondents underpinned the need for reformulation of the existing assessment regulations and that both students and teachers should be involved in the exercise of doing it, as explained in a dialogue between one of the students and the focus group convener:

B3:M24: There should be assessment regulations that have been formulated by both students and teachers. No party should be inconvenienced by such regulations. Setting of dates for assessment tasks should be agreed upon by both parties long before, so as not to affect the earlier set dates for other courses.

I: Do you mean the regulations should emphasise the time of assessment tasks?

B3:M24: I am saying that assessment should be carried-out on dates, which have been agreed upon by both students and teachers earlier. A

teacher should not come and tell students that they are going to write a test on such and such a date without consulting with them before.

This student and others reported that assessment regulations do not seem to be adhered to, especially on the issue of when assessment tasks are supposed to be conducted, and the assessment regulations ought to be settled between students and teachers. Further probing was done to understand better what would make students prefer to have both formative and summative assessment tasks carried out at the same time:

I: Please can you explain what would make students prefer that kind of arrangement?

A3:M7: There are various circumstances, which might compel us to opt for doing all the assessment tasks at the end of the course. For example, when we know that we have other assessment tasks scheduled for the same dates. In such a case, we negotiate with the course teacher for postponement of his examination, until a later date or even when he has completed teaching us.

The above example is one explanation behind the circumstances that would compel students to negotiate with their teacher for combining what ought to have been continuous tasks with end of course summative tasks. Students negotiate for a convenient time for assessment with course teachers so that writing of assessment tasks do not collide and as a result the profound value of feedback from formative assessment in improving learning is reduced. In cases where the new agreed date for postponed assessment tasks is after the teaching of the course, the value of assessment is completely lost, as revealed through the next probe:

I: Is the department involved in such negotiations?

A3:M7: ... Oh no. It is an affair between students and their course teacher. What the department is interested in is getting the marks as a proof that we have completed the course and then decide on who has passed and who has failed the course, but not investigating whether the assessment has been progressively done as spelt out in the academic regulations. That is why I am saying that the department itself is not strict on some regulations.

Weak adherence to assessment regulations in the department, coupled with attention to obtaining marks mostly for summative purposes rather than paying attention to the progressive process of the teaching and learning activities seems to be the basis for students to claim that the department itself has a role in the whole state of affairs.

5.8 Summary

A major aim of the present study was to investigate geography students' conceptions about assessment. The findings from both the quantitative and qualitative parts of the responses suggest that the participants look at assessment as an activity imposed on them, by the system, through course teachers. Furthermore, they seem to regard assessment as an activity performed at a particular time in the teaching-learning process, mostly at the end of the course. However, the findings reflect variations in students' views on aspects of assessment (purposes, timing, roles of students and teachers, regulations and modes of assessment). In the following paragraphs identified variations are highlighted.

Experienced modes of assessment

Some students identified the generating of marks as one purpose of assessment to be used as evidence that a course is taught by a course teacher of the department. Other students' views considered requirement of marks from course teachers, to serve the purpose of controlling teachers' work and monitoring students. Nevertheless, students viewed monitoring different ways. On the one hand, there are those who are convinced that the monitoring is done by the teachers to establish whether their objectives are achieved or not. On the other hand, others feel it is an evaluation of course objectives and not teachers' objectives that are targeted in the assessment. Moreover, some students point out their difficulty in knowing what the purpose of assessment really is.

The participants suggest that the reason for the variation is the disparity between the stated course objectives and the course assessment tasks. However, they all concur in viewing assessment as a means of generating marks that are used by the teacher to select those who have passed from those who have failed. Eventually, this provides the records that are used by the department for deciding on promotion, repeating or even expulsion. In all the above mentioned different purposes of assessment, they are considered to serve a summative role which might be reinforcing surface learning and there are vague or no connections to in-depth learning.

The fact that students conceived assessment as mainly summative raises the question as to whether this conception has a link with the finding showing that assessment is largely perceived to serve the purpose of ranking students. So, I wonder if these students' conceptions about assessment have any influence on their study strategies, which I will analyse and describe in chapter six.

Preferred modes of assessment

When the participants were asked what modes of assessment they wished to be used in their courses the findings reveal their desire to have assessment conducted at various times during the course, that is, an on-going activity; in the middle of the course and at the end of the course. All these are possible occasions indicated by different students, provided that they have been involved in the planning of the timetable of course activities. The findings reflect how students were attaching great importance to streamlining assessment regulations in order to cover individual course activities, so as to avoid the current situation characterised by discrepancy between what is written about the objectives in the course compendia and what is done during the course delivery and assessment.

Regarding alternative modes of assessment findings reflect that the participants were aware of various ways of assessment. The students would prefer to have more alternative modes, which could support their learning. Hence, they suggested that the traditional assessment conducted at the end of the courses should be supplemented by some unconventional modes. With an emphasis on more process-oriented modes they suggested self- and peer-assessment as well as performance assessment, which can be seen as a kind of authentic and problem-solving assessment. These modes were rarely used in their courses at the period of data collection. However, the students emphasised that these ideas were regarded as complementary as they suggested them to be integral parts of their teaching-learning process.

6. Students' conceptions of study strategies

The findings in this chapter are based on analyses of data regarding the second research question: How do students determine study strategies adopted in geography courses? The findings are drawn from panel waves one to three and are organised under the following major headlines: considerations made in choosing a study strategy, adopted study strategies, information sources, and influence of course value.

6. 1 Considerations before choosing a study strategy

At the end of the questionnaire in the first panel wave I added a part with two sub-sections of open-ended questions that required the participants to elaborate their views in writing. The first part with seven questions concerned study strategies adopted in geography. The following analysis is based on data collected through the foresaid sections of the questionnaire (Panel wave 1, Appendix I). Explanations given by participants are presented under subheadings, made from the descriptive vocabulary used in their own explanations. After the section on their considerations, various study strategies are explained (approaches, methods or styles). I have not 'split hairs' by going deep into grammatical issues, for the sake of easing communication with the respondents, to whom English often is their third language after Kinyarwanda and French. The chapter goes further and gives the participants' descriptions of their study strategies. I kept the language used in their descriptions as close as possible to the original version, so that a better understanding of the responses of the two sites is achieved, thus increasing credibility.

There is a similarity in the manner geography students from sites A and B make considerations before deciding on which study approach to use, although there can be variations to what extent the factors are considered (Figure 3).

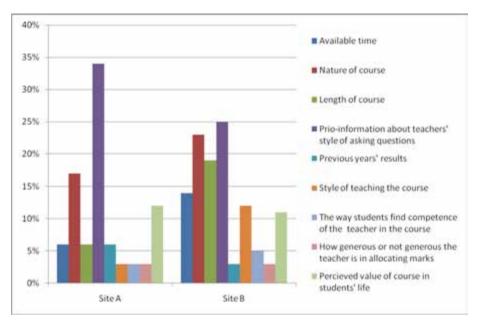


Figure 3 Factors considered by students before adopting a study strategy

Out of a broad repertoire of considerations some factors were ranked much higher than others. For instance, prior information about how the teacher marked and the nature of the course were predominant. It is not an indication that these factors are used in isolation at any one time. As reflected in the next sections, students at both sites seemed to consider the same factors but in varying sequences and combinations, and this made a difference in the choice of what study strategy they adopted.

6.1.1 Prior information about the teacher

Almost one third of all the participants shared the view of giving first priority to gaining information about the course teachers. They seek information regarding teachers' style of setting questions; marking style; course delivery style and at times the consistency or lack of it, in performing all these activities. Once such information about the teacher was found, or was in the process of being sought, then the students gave other factors a chance to be considered before deciding on which study strategy to use. An example of a systematic way of considering one issue at a time is cited below:

When I am to choose a certain approach, I start by considering the teacher's style of asking questions and the kind of responses he prefers. In

case it is a teacher I have no information about, I study by cramming everything and putting emphasis on those points the teacher spent more time explaining. (A3:M11)

This is one example where the participant distinctly seeks information about the teacher as a starting point in the process of strategising his studies. The participant reveals that in the absence of information about the teacher, he opts for cramming everything covered and putting emphasis on those points the teacher spent more time explaining during the teaching as they are considered to be important. There are other participants who specified which prior information about the teacher they are most interested in getting. One participant from site B was adamant enough to numerate them in the following manner:

(i) The way the teacher has examined previous students, because sometimes the questions do not change; (ii) The way the teacher taught the course: Sometimes a teacher who says many things, asks many things. (B3:M16)

The explanations given in the above citation was commonly raised by participants at both sites. However, they used different phrases like: The way of setting questions; the style of asking questions; style of examining or even method used to formulate questions to explain the kind of information they revealed that they looked for. It should be mentioned though that some participants make prior information about the course teacher part of what they look for but it is not their first priority.

Statements of studying the teacher also appeared in most of the responses during the focus group interviews, at both sites. Therefore, follow-up questions on the same issue were conducted by using an open ended questionnaire in panel wave 3 with the purpose to gain clarifications on what the students meant by stating that they study the course teacher before they studied the actual course content.

6.1.2 Cue-seeking and fear-driven strategies

In response to what students mean by saying that they study the teacher first, the majority of the respondents explained that it is a way through which they gather information about a course teacher. Then they used it for cue-seeking to strategise how to study the course, to be assured of passing the assessment tasks. According to the proponents of this line of reasoning, the success in obtaining information about the course teacher before proceeding too far with the course is considered to be vital in guiding the students to decide which

appropriate study strategy to adopt in achieving their goals. One respondent makes a connection between studying the teacher and what he conceives as the benefits of doing so:

It means when I get to know how a teacher of a given course sets questions it either relieves me of the fear for the exams in that course or it gives me a reason to be extra careful in studying the course. Otherwise, without that I can easily fail the exam and get expelled. (A3:M31)

Three-quarters of the participants reported how the act of studying the course teacher before studying the course content is necessary to avoid failing, getting good marks and avoid expulsion. The following is another answer I consider represents what seems to be the underlying reason for studying the teacher:

The target is to score marks. If you establish how the teacher asks questions then you study the course accordingly with a hint on how to pass on and score good marks from that particular teacher. (B3:M5)

The nature of fear the geography students mentioned in their responses are: fear of getting low marks; fear of failing the exam; fear of being expelled from the university or institute and fear of being labelled as a weak student, both at school and in society.

6.1.3 Fight against 'fear'

The ultimate fear raised in the responses is the fear for not getting a job in the future, as the following response explains:

There are two reasons why some students prefer to study the teacher: (i) Passing exams enables one to get promoted and later get your degree which will later enable you to get a good job. (ii) Another reason is because in a job one tends to use less knowledge and skills than studied at school. So you have to fight for marks first. (B3:M14)

The issue of marks has been a crosscutting aspect in almost all the responses to question one. Variations, however, were on whether marks were represented as the primary aim of studying the teacher or just one of the benefits before concentrating on the course. The message from the responses is that, irrespective of the time framework, marks seem to remain central issues in the students' study strategies.

6.1.4 Need to categorise the teacher

The style of asking questions is regarded as one of the key factors in categorising the course teacher, as explained by one respondent:

It means that it is important for the students to know whether the teacher belongs to the category that expects students to reproduce the notes during exams or the category that asks questions which demand to explain and give one's own views. If the teacher is found to be in the former category then all the students are doing is to 'kumira', to cram the entire teacher's notes from the course and wait for an opportunity to reproduce them during the exam. But if the teacher belongs to the latter category, students study the course, paying special attention to the course objectives. Therefore, it is wise for a student in our university to study the teacher first before anything else. (A3:M7)

The finding reflects a situation where some geography students seem to be aware and capable of adopting a surface learning or a deep-learning strategy, depending on what the circumstances in the course dictate. These circumstances are defined by students based on the findings they come-up with about the teacher of a particular course. Furthermore, the explanations given show that the students find it crucial to categorise their teachers not on their teaching styles but assessment techniques. Students' findings about the teacher seem to be helpful for them in deciding their study strategies.

6.1.5 Guard against failure and expulsion

More than half of the responses to the question about the phenomenon of studying the course teacher before the course give hints why this is commonly practised. The participants considered it as a move taken by a student who thinks there is a gap between what teachers ought to do, in facilitating the teaching and learning process, and what they actually do. One of the participants explained it in the following words:

It seems there is no university pedagogy that gives guidelines to our teachers or if there are some, it must be few of our teachers who bother following these guidelines. As a student, it is my responsibility to avoid being expelled from our institution and the only way I can do is to study the teacher; get to know how he asks questions and which questions he is fond of asking and then I practise them. This helps in ensuring that I score good marks and pass. (A3:M15).

The example reflects an initiative by students to strategise and take precaution against what might befall on them as a result of non-pedagogical

practices in the institution. The practices referred to are assessment practices and students seem to notice some inadequacy in the teaching and assessment skills of their teachers. As a result the students have adapted a way of surviving under such study conditions.

The participants gave a similar explanation from the different research sites regarding compelling circumstances that required them to take own initiatives. One female student used the following words in expressing her perception about the phenomenon:

It seems in our university the value attached to marks by our teachers in deciding how well or poor a student is in a course causes all this issue of studying a teacher first. Our teachers expect us to reproduce [at the end of the course] what they gave us in [their] course notes if we are to score good marks. (B3:F6)

In general, the findings indicate a situation in which much value is attached to summative assessment for judgmental decisions like 'how well or poor a student is'. The geography students' studying of teachers, according to the above response, seems to be related to the conceived great value the institute attached to marks. It is not stated as a cause-effect situation but it appears, according to the explanation in the above response, to be done circumstantially. Students suggest that this state of affairs influences the way they choose what study strategies to adopt in their courses to achieve good marks.

6.1.6 The nature of the course

As earlier shown, the nature of the course was ranked the second most important factor (Figure 3) that the participants reported in the questionnaire regarding what to consider before adopting a study strategy. By the nature of the course, aspects noted are whether the course concerns physical or human geography; the weight the course carries in terms of credits; the length of the course in terms of the number of pages of the course compendium; and also students' conceived value of the course. The participants reported the aspects to be considered either singularly or in combination. The following explanation is one example where a participant highlighted some aspects he considers:

What I have been told about the teacher; the value of the course I attach to my future life; and also the extent of trust I have for the teacher's competence in the mastery of the course content. (A3:M32)

Here, the participant underpins how he combines all the foresaid factors when deciding upon study strategies and it seems no single factor overrides the others, unlike what we have seen in the earlier examples. Next example shows how a student combined two aspects of a course to select study approach:

Toughness of the course, when the course seems to be difficult, so many sources of information are used: Length of the course helps me to choose, either to summarise all the lecture notes or read additional books. Type of evaluation: when the assessment is done by essay type of questions I will force myself to read and understand, otherwise cramming is the best way. (B3:F16)

The uniqueness in the above-cited explanation is that the participant explains his preferred combination of factors considering how two aspects of a course (toughness and length) seem to influence the adoption of a study strategy. Furthermore, the explanation suggests that under 'normal' circumstances cramming would suffice. This kind of consideration based on more than one factor about a course and the course convener were also revealed in the explanations given at site A. Here, the aspects of a course were subdivided into yet more detailed attributes. For example, in the earlier examples the course type was handled at the level of weight, length and toughness of the course, yet in the next example the respondent brings up an element of language in which the course compendium is written. According to the respondent he prefers to consider the following factors before adopting any study strategy.

My choice depends on the following: time available for preparing of the examination, it could be two days, three days or even one week, etc.; It also depends on the nature of the course compendium, that is, how many pages it has and in which language it is written, whether it is in English or French; My choice further depends on the teacher's style of asking questions. Some teachers test for general knowledge while others require you to have crammed. The type of course is another factor I consider in terms of how many credits the course has and how difficult or simple I find the course. (A3:M17)

In the above excerpt, the participant touches on many aspects (time available, course convener and the course itself) for immediate consideration. Furthermore, he claims that the language in which the content of the course compendium has been written matters.

After responding to the question about the factors students consider before adopting study strategies, they proceeded to explain what strategies they actually use.

6.2 Adopted study strategies

In this section, an account is made of how the participants explained their study strategies. An overall picture of two study strategies and their explanations is narrated along the lines of how each approach is organised, what takes place in it and what it targets, all based on the participants' views during panel waves 1-3. There are some common activities that appeared to be repeated. They include activities like: summarising own notes, reading text books, internet surfing, concentrating on teacher's explanations in class, and cramming course compendium and own course summary. These are activities reported by those who use an individual study strategy, a group study strategy or even a combination of the two. However, it should be noted that the order in which these activities were reported to be performed varied from one participant to another, as indicated in the following findings.

6.2.1 An individual study strategy

I have constructed this category to represent those who reported to be predominantly engaged in self-directed study activities and less of group work. However, it does not in any way exclude a possibility of an individual from embarking on some group work activities as pointed out in the following excerpts:

First, I start by reading all notes, secondly, I summarise them and thirdly I read and memorise my summary. When I have read it three times in that case I can do the exam properly. And sometimes I associate with other students for a group discussion. (B3:M27)

Teacher's lecture notes and course compendium guide me in selecting which parts of the course to memorise, especially after I have got access to the previous questions in the course set by the same teacher. If there is some time left I can contact my classmates and find out what previous questions they might have had and attempt them either with them or on my own, although it requires a lot of energy. (A3:F1)

The above examples are used to represent similar cases where the students reported to be mostly occupied by study activities that are individually planned and executed. The cited examples underpin how activities are

conducted consecutively, and also specifying what comes before the other. It is one of those examples where the participant can spell out systematically what step is taken and when it is taken.

Students also attested that the same study strategy helps them memorise the notes in a relatively short time. However, they criticised the study strategy on grounds that it requires a lot of energy and on some occasions more time than is available. The participants' explanations give an impression that students concentrate on using individual efforts in organising their work, improvising the appropriate strategies and get ready for examinations without relying much on their fellow students discussions. However, students in the same category also suggest that when necessary they abandon going through the rigorous phases of synthesising the course content and just memorised for the sake of scoring marks.

6.2.2 A group study strategy

Unlike in the case of the individual study strategy, which was organised and conducted on individual initiative, the group study strategy was organised and conducted on mutual understanding. Students reported that group discussions activities were organised collectively. Participants choose who will meet with whom, where and when as explained in the next excerpt:

When we have group discussions we sit somewhere in a group of five or more and we discuss on the course already studied. Everyone shows to others the part of the lesson that can be a good question [for the exam]. We respond to it seriously and we continue in such way. But when it is time for concentration, I sit somewhere alone and try to memorise the lesson. I try to avoid any kind of distraction. (B3:M31)

The participant explains how he combines group discussions with an individual study strategy. He elaborates how he goes in for the group discussion first and later retires to individual study where he needs a lot of concentration. It is worth noting that he defines the role of each member of the group during the discussion, as contributing on the topic the member understands best. Nevertheless, the group study strategy was also reported to be accompanied by an individual study strategy. In the following excerpt, a participant explains how he goes about it: 'In studying for geography courses, I spend more time alone and I have to join others for a short time' (B3:M11). Hence, there is also an aspect of time budgeting, that is, deciding on how much time to spend on individual work and how much to spend on group work, so as to make maximum utilization of the available time.

The findings seem to suggest that the students are familiar with a variety of study strategies, and they decide which one to use after getting, or having failed to get, information about the course teacher and previous examinations in a particular course. This might be part of the explanation as to why the strategy of looking for prior information about the course teacher was reported to be frequently used at both sites by both female and male students.

In the following section study strategies are once again elaborated on the basis of the findings from the focus-group discussions (panel wave II), which allowed the participants to negotiate consensus and variation of strategies adopted in their geography courses. The participants stated that the choice of study strategy depended on how they know the teacher. That is the reason why I had to start probing them concerning what they meant by knowing the teacher.

6.2.3 Teachers' styles of asking questions

The discussion on this issue focused on several ways of knowing the teacher, how students get to know the teacher and what the aim of knowing the teacher was. At both sites, the respondents reiterated that it is important for them to start by getting prior information about the course teacher. In the following sections, the respondents' explanations of their experiences when searching for prior information about teacher's style of assessing are addressed:

You look for his past question papers and consult with some students he taught before and on the basis of that you decide which strategy to use in studying for his course. Otherwise, if you read things which are outside his notes, you find yourself sent home. (B3:M14)

Students reported having a systematic way of establishing information regarding the course teacher's style of asking questions. They consider this to be vital in deciding which study strategy to adopt in a particular course. Results indicated that this can be done individually or in a group as deemed appropriate for a particular course, for example,

To add to what my colleague has just said, you have to look for the past question papers and also the previous students and ask the exact style the teacher of that course is fond of using in his questions. Then you decide whether it is necessary to study alone or you need others and discuss. Or you might find that you need to study alone first and go to the group discussion later. (B3:M7)

The study strategies students reported to adopt in their courses were not fixed as their choice depended on the information they got. When I asked them what made them trust information from their sources, they affirmed how it is mostly based on comparing information of what is seen in the past question papers and information from senior students who passed the same course, as explained below:

For example, in most cases what they tell us is supported by what we find in past question papers. You might find that if you take past question papers of five consecutive years you find some similar questions, which have been asked in three different years. For sure you consider that to be true and if the senior students also had told you that, such questions do not miss, then the information acquired is right to a reasonable extent. This is to say; in most cases what senior students tell us is supported by what we find in past question papers. (B3:M1)

Hence, a point of departure is to systematically find out possible core questions from examination tasks and make use of those questions as a guide to their preparation for examination.

6.2.4 Common study strategies

The respondents were also asked how they translate the information gathered from the sources they had received about the teacher and made use of that when they took action. Their explanations included varying strategies as the majority of the respondents explained how gathering information about a course teacher is done either by way of an individual student's efforts, or through collective efforts of students doing the same course. This was usually the first strategy in the reported approaches used by students.

Below, three identified strategies of how to use acquired information about the teachers are explained. The first strategy represents the views of those respondents who claimed to be attending to more than one thing at the same time as they were not confident when preparing for the course.

B3:M7 Personally I study both the teacher and the course concurrently.

I: How long does it take you?

B3:M7 It can be a long time. At times, you go for an assessment task, like an examination, and feel that you are not confident yet. Before you

thought you knew the teacher's style of asking questions. At other times it can take you about four weeks before you master a teacher's style of asking questions.

The respondents who claimed to use a strategy based on more than one source of information had much in common with those using other strategies, for example, the aspect of relying heavily on the information from students who were ahead of them in the same course, especially if they were taught by the same teacher. About half of the participants seem to be using the second strategy, in which each step is carried out at a time and is followed by another, all done systematically, as shown below:

I first study the course, go through all my notes for that course and then look for the past question papers, look for five different questions out of all the question papers and get at least three which have appeared several times. With these three questions I contact those students who are already my friends and with whom we studied different tasks and we attempt those questions. They also have to come with other questions and we form a set of questions, which govern our discussions. When we go for examination we are sure of passing highly irrespective of how difficult the course might be. (B3:M7)

Respondents who used the second strategy emphasised in their explanations the phase at which an individual student starts by organising himself. The student identifies what to take up for consultation in the collaborative study.

A third strategy was claimed by the majority of the respondents. It is explained to be a circular process, organised with a variety of consultations. It starts with an individual task and progresses towards a dynamic group process of searching and negotiating information:

We could be five for example, doing the same course in geography and each one having collected past question papers, then we attempt all the questions. We manage some and others we might fail. Then each one of us moves on to a different group and tactfully verifies the correctness of the questions we have attempted because we cannot trust one another fully. The task of identifying which questions and their solutions you consider to be correct rests on the individual student's head. (B3:M4)

In the above strategy, the participant indicates that there is a phase of individual responsibility where each student has to identify questions

followed by collective work answering previous questions. This is followed by a group verification phase and, finally, the student goes back to individual work. The circular process indicates various stages of a study approach, when an individual student applies different strategies. The whole process seems to be strategically organised with a major aim to score high marks.

Also, the findings reflect a contextualized way of sharing information about assessment among geography students. Findings indicate a situation where students seem to have developed mechanisms of gathering information from senior students and past questions papers about the assessor's style of assessing and use it diligently to decide which study strategy to adopt in a particular course. The point of departure seems to be based on the meaning an individual student makes of the information gathered and that is how they adopt different ways of going about their studies. In general, the results indicate that the strategies commonly used can be described as achievement strategies. In sum, the students mixed individual work and work in groups in a constructive process of learning as shown in Figure 4.

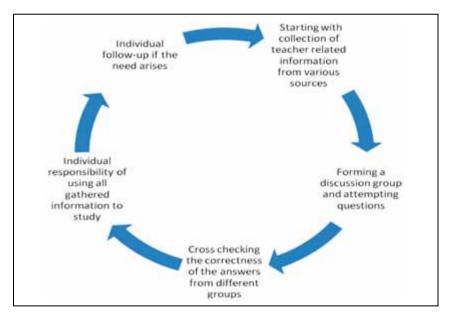


Figure 4. Summarised study approach combining individual and group responsibilities

Students purported the use of various strategies, which seem to have a common element of being designed to maximise chances of achieving their overall goal of passing their examination. Cramming teacher's course notes

(course compendium) is one such strategy students reported to be commonly used. This is coupled with keen studying of course teacher's style of asking questions and his previous questions for the same course. All these strategies seem to be heavily embedded in their study approaches. Some of the descriptions students used in talking about their study strategies evoked the need to have a follow-up (Table 4) so as to further clarify certain aspects of the learning task, especially regarding the meaning of some expressions used in the student community.

6.3 Information Sources

Students were also asked to explain how they acquire information regarding the adoption of study strategies in their courses in the individual follow-up questionnaire (Panel wave 3). In these sections various tactics and strategies used by students in acquiring, sharing and implementing information regarding study strategies are analysed.

6.3.1 Influence from senior students

Slightly above half of all the respondents explained how students share information about how a particular course is taught and assessed and which study strategy would be appropriate to adopt. As explained by two of the respondents, it is the influence of their community that plays a big role.

I got most of the study strategies from those students who are ahead of me in the same program. I did acquire them as means of ensuring that I pass the exams in this program. (B3:M12)

The issue of strategising for passing is our every day topic and that is how, through interacting with other geography students I got to know how other students managed to study and pass. We live in a community that shares the same tasks, so we exchange information on how to solve our daily problems including fears of failing. (A3:M13)

Here, the finding reveals how students seem to see the community of students in which they operate as being one of the sources of information on which they base their decisions in adopting particular study strategies. In the first response above, the student goes further and mentions to what extent he received strategies for learning from senior students in the program. Nevertheless, the explanations show how the community of students share general information related to assessment and particularly strategies for passing.

6.3.2 Influence of other courses

Some students mentioned more than one source from where they acquired information about study strategies. The following explanation given by a male student spells out specific courses from which he learnt about study strategies:

From the course 'Guidance and orientation' which we studied in this programme and also 'Comment étudier éfficacement' I learnt how to improve learning approaches based on the specific reality I am facing. (B3:M6)

Some other students also explained the influence of some courses in addition to what senior students in the same programme recommended. One female student elaborates it by stating:

I got them from Guidance and Orientation sessions given to us during our first days in the institute and also from different books. However, they are those study strategies I specifically got from those who were ahead of us. I mean those students who did the same course as we are doing. They told me what they did to pass and I do likewise. (A3:M9)

Again the above example explains how the student uses knowledge from other students with the purpose of improving the study strategies she is familiar with and come up with one that is relevant for the course at hand. The influence is described in a manner that reflects some sort of initiation of beginners into the culture of assessment at their institution.

6.3.3 Influence of teaching and assessment culture

There were students, though a minority, who mentioned that their adoption of study strategies was built on experiences of having been assessed many times:

It was through trial and error that I learnt the study strategies I am using. I have done exams in many courses taught by different teachers, so gradually I came up with a variety of study strategies depending on how I find the teacher. (A3:M14)

From the above statement, it is evident that the student developed his study technique/ strategy through writing a number of exams on a trial and error basis. He claims that experience has taught him the current study strategies he is using for different teaching and assessment styles. On a more general

level, another student (A3:M13) suggests that the assessment culture has influenced students in adopting study strategies, which they are using currently. The same student believes that the teaching staff has had some influence in determining which study approach to adopt in his courses, as he explained it in the following way:

The circumstances through which we study at [site A] are the ones that they have taught us. It is as if our teachers have trained us to cope with their habits of assessing irrespective of the fact that different courses have different objectives. (A3:M13)

Beyond coping with teachers' habits the students listen to other students and gain information about the culture.

After you have heard how other students study so as to pass and realize it is commonly done in the whole department, you also consider it as a culture of the institution and do likewise to avoid failing. (A3:M15)

These examples bring up yet another source from which students consider to have contributed to the information about some of the study strategies they use. Some students believe that their teachers have contributed to the acquisition of the study strategies although they do not attribute the influence to a single course teacher but rather to the assessment culture of the institution

6.4 Influence of course value

The final responses in the third panel wave concerned whether the value students attach to a course influence their study strategies. The outcomes are organised into three sub-categories: existing influence, conditional influence and no influence of course value.

6.4.1 Existing influence of course value

This category explains how students who believe that the value they attach to a course influence the way they study. Among the responses are those qualifying to be categorized as admitting the existence of influence of the conceived course value in adopting a study strategy, for example:

I consider the two [course value and study strategy] to have a relationship since those courses I consider important in my life, I study them with extra care and effort. I do aim at passing them and gaining knowledge from each one of them. However, it is very taxing, actually, much more than when I study only for passing the course. (A3:M8)

According to this student, he views the amount of energy used in studying a course as a measure of conceived course value. He relates the amount of effort and attention put into his studies to the value attached to the same courses. In a rather similar line another student explains 'There is a strong relationship because it influences the amount of energy and attention I give to a course. Again, I always want to see my efforts rewarded' (A3:M14). Furthermore, some geography students see the influence of conceived course-value in adopting a study strategy from the angle of how regularly they attend classes:

Yes, the influence is there. For example, if it is a course I value, my class-attendance is regular, so that I do not miss any explanation the teacher gives in class. To those courses I give little value, all I need to know is how the lecturer asks questions, copy notes and practice on past examination questions. (B3: F11)

The explanation given considers class attendance as an effort that is influenced by the conceived value the student attaches to a course. As explained by another participant:

No particular person taught me the different study strategies I use, but it all depends on the way I conceive a course in terms of its possible value to me in future life. It also depends on how much time I have to study for the assessment tasks in that course. (B3:M20)

The above quotations are examples of responses from geography students who conceive course value to play a major role for the decision of which study strategy they would adopt for a particular course. The explanations show that some students were not necessarily keen to use information about the course teacher but rather considered the value the course would have for them when strategising their studies.

6.4.2 Conditional influence of course value

The second sub-category deals with the views of those students who think that the value they attach to a course may have some influence on the way they study provided that some other conditions prevail. Approximately less than a third of the responses indicated that the influence may depend on additional information about the course, as the following respondent explains:

There can be or cannot be a link between the study strategy and the value of the course. But this depends again on how the course is taught and examined. At times I value a course by looking at its objectives, but because of information I might have on how the teacher examines it, I resort to the strategy that will earn marks for me irrespective of being aware of the course objectives. (B3:M24)

The findings on this issue indicate how students at times adopt study strategies that they consider to be appropriate, and not necessarily the most preferred ones, under certain circumstances. Such responses say that the course value has influence in deciding which study strategy is to be adopted but they are adding some conditions that have to be considered at the same time. It seems to reflect that the students can, at times, attach value to a course but the choice of study strategy ends up being influenced by the information students have about how it is taught and assessed.

6.4.3 No influence of course value

The third sub- category includes those students who do not see any influence of the value they attach to a course and the ways they study. One student explains how focusing on the course value at the expense of how it is assessed can be detrimental.

There is no relationship between the two. Because if you base your study strategy on the value the course will give you in future, you will fail the exam even if you understand the course content and the value it has for you. You must know how it is examined. (A3:M11)

Findings of this kind show that some students refrain form applying study strategies according to their conceived value of the course. This reflects how students are weighing priorities in terms of needs, those which are immediate (passing the course and get promoted to the next level) as opposed to reading along course-content objectives and risk that they do not meet the expectations of the exam.

6.5 Summary

The explanations of what students mean by saying that they study the teacher before studying the course, reflects the heaviness of the statement. The statement implies making choices and knowing the appropriate priorities. Instead of starting by studying the course, the students start by engaging in searching for information about the course teacher. The scope of the sought information covers a wide range of issues like: style of asking questions;

marking styles and which questions the teacher usually asks. The explanations given by students indicate how the immediate use of the acquired information is to address their fears, for example: fear of scoring low marks; fear of failing; fear for being labelled weak and fear of expulsion. Further analysis of the explanations given by students show that the phrase is applicable in situations where they tend to safe guards themselves from getting low marks. They explained how marks are instrumental, both for their short and long term goals and, as such, their priority is geared toward anything that would contribute to their success in getting high marks. In general, students' strategies employed in their geography studies are shown in Table 11

Table 11. Students' study strategies

Theme	Sub theme	Example of explanation	
Studying the teacher first	Fear-driven prioritisation	I get to know the teacher of a given course, it either relieves me of the fear or it gives me a reason to be extra careful in studying the course.	
	Fight against fear	Fear of not being promoted and not getting a degree.	
	Need to categorise the teacher	Important to know whether the teacher belongs to the category that expects students to reproduce notes or the category that expects students to explain and give their views.	
	Guard against failure and / expulsion	It is my responsibility to avoid being expelled.	
	Heavy reliance on summative assessment	Our teachers expect us to reproduce what they gave us in notes, if we are to score good marks	
Source of information	Influence of senior students	from those students ahead of us	
	Influence of other courses	From the course Guidance and orientation' and 'Comment étudier éfficacement'.	
	Teaching and assessment culture	I have done many exams in many courses so gradually I have come up with a variety of study approaches	
Influence of course value	Existing influence	Courses I consider important in my life: I study them with extra care and effort	
	Conditional influence	At times I value a course by looking at its objectives but because of the information I might have about how a teacher examines it, I might resort to the strategy that will earn marks for me.	
	No existence of influence	No there is no relationship between the two. Because if you base your study strategy on the value the course will give you in future, you will fail the exam ever if you understand the course content and value it has for you. You must know how it is examined.	

The explanations given by the students reveal how information linked to the use of different study strategies have influenced them. Moreover, teaching

styles and assessment culture prevailing in the respective institutions are shown. The findings indicate that information about teachers and their assessment history and assessment habits is freely available in the community of learners and is shared by students for the common goal of passing exams.

Finally, the findings reveal a variety in views about whether students' conceived value of a course had any impact on their adoption of study strategies. Although some students agreed that they consider the value of a course when deciding which study strategy to adopt, there are those who seem to do it conditionally. Those in the latter category, consider the course value only if factors like information about the teacher's style of asking questions and available time do not require a particular study approach. Moreover, there are those who made it clear that they value course marks more than the course because passing exams enable them be promoted and later get a job.

7. Students' retrospective reflections on assessment and study strategies

The findings in this section are based on individual interviews held with former geography students (Panel wave 4). During the interviews, the participants were asked to reflect on how they had experienced assessment throughout the programme (Appendix IV). At this stage, I assumed that the participants would find it easier to talk more freely than when they were still students. Furthermore, the fact that some time had elapsed since they were involved in previous data collection exercises, there were chances that some new reflections on assessment could have cropped-up. These arguments motivate why I conducted the in-depth interviews after the students had completed their study programme. In this chapter, I describe and analyse former students' expressed ways and visions about assessment and study strategies.

7.1 Descriptions of ways of assessment

The participants were asked to reflect on the ways of assessment they experienced both in geography and non-geography courses. It appeared during the interviews that students seemed to describe their reflections as course-oriented or teacher-oriented.

7.1.1 Course oriented descriptions of assessment

Some of the participants described their experiences of assessment with the courses as points of departure. The following examples are clarifications made by respondents on this issue:

Well, one thing which I noticed in most of the geography courses, especially physical geography and geography information systems (GIS), was an opportunity of expressing my views basing these on the experience I had when we were out doing fieldwork. This gave me an advantage of linking theory and practice in our assessments, in particular and my learning in general. (A3:M2)

In geography courses, generally there was always a theoretical and a practical part of the course and during assessment each part would be assessed separately, and at a different time. This would give me an

advantage of making-up for the loss in one part in case I had not performed well in the part written first. Also, the practical part of the assessment was good because in most cases questions would be based on things we experienced in real life and this made it easy for me to answer and pass examinations in such courses. However, in other courses that were not geography the practical part was missing and things were abstract and difficult to comprehend. This meant that if you failed the only examination of such a course you would have failed the whole course. (B3:M26)

In this category former students explained their reflections on how they were assessed in geography courses that were different from how it was done in non-geography courses. Here, the description of assessment was done by using the nature of the course as the central criterion. The examples also reflect how the nature of geography courses at times has offered students opportunities to express their thoughts, in relating theory to what they would see during the fieldwork. The practical part of geography exam also seems to serve the purpose of supplementing the theory part.

Likewise, another participant who used aspects of theory and practice in geography in his comparison of ways of assessment in geography and non-geography courses also expressed some reservations on the same issue when probed further:

B3:M26: But to some extent the differences in the ways geography and non-geography courses were assessed depended largely on how teachers handled their courses and not on whether the subject was geography or not.

I: Can you explain more on that?

B3:M26: Different teachers both in geography and other subjects would give us materials including compendium and other handouts to read. This was done mostly by teachers who had done adequate course preparations. Contrary to this, there were some teachers who never gave us adequate course materials to read and instead expected us to write notes as they would be dictated to us in class. This would affect their ways of teaching and even assessing.

This example reflects an overlap between descriptions of ways of assessment of geography and non-geography courses. The explanations given suggest

that irrespective of the fact that assessment in geography courses were course oriented, one could still encounter a geography course that was assessed in a similar way as a non-geography course and vice versa.

7.1.2 Teacher-oriented descriptions of assessment

Some participants described their experiences with ways of assessment in different courses with focus on the teacher, for example:

It all depended on the teacher and not on the course. For example, different courses would be assessed in the same style and it was also common to have geography courses assessed differently depending on those who teach them. This meant that in adopting study approach I would not consider much whether it was a geography course or not but rather who teaches and sets questions in that particular course. (B3: F10)

Oh yes, it was the teacher's marking, not the nature of the course, that determined how the course was assessed and that is why actually if you wanted to pass a course highly you had to study the teacher's style of assessment. (A3:M2)

The reflections about how students compared their assessment experiences in geography and non geography courses indicate that the majority of the students oriented their descriptions on the teacher's style of assessment instead of the content of the course. In emphasising their basis for comparison, the former students used the same fore-mentioned two phrases, teacher and course orientations, of assessment styles for making a central aspect of their arguments, as shown in the following excerpt:

My reading style was heavily dependent on the way I perceived the lecturer's style of asking questions in a particular course. (A3:M18)

...[I]t all depended on the styles our teachers used in setting examinations, the information they [students] have about different teachers and their favourite styles of asking questions... (A3:F1)

It was a kind of prejudice about the teacher and his ways of assessment that influenced my choice of studying. (B3:M13)

The participants who argued along this line of reasoning used phrases like 'assessment styles of a teacher and teacher's style of asking questions' to mean the same thing and hence former students used them interchangeably. It was further generalised and linked to the course lecturer's background as depicted in the next excerpt:

I: Ok, can you compare how you were assessed both in geography and non-geography courses?

A3:M1: One thing I can say is how most of the teachers are products of our university education system and their style of assessing was the same.

I: You mean all your lecturers in geography department graduated from the same university?

A3:M17: Apart from a few lecturers from Holland whom we used to get under the cooperation between our university and Holland. The Dutch lecturers had different assessment approaches from our permanent lecturers.

I: How different? Can you give me some examples?

A3:M17: Yes, the Dutch lecturers who used to come for some specific courses, of which some were geography courses and others were not, used to involve us in decision making processes concerning our own assessment. For example, at times we would be given topics and reading references to refer to and research and after a given period of time each one of us would write a short paper and present to the whole class. There were even times when we would do the task in small groups. The marks would be decided upon by the lecturer but students would give their views on the quality of the paper and presentation. These views would influence the mark you score, (pause) and at the same time one would understand the outcome of the assessment done to you. I would remember what I learnt in such a course for a long time and at the same time I would enjoy it.

The example reflects how some students are able to identify which lecturers gave students opportunities to be involved in their course activities. The same

finding reveals how students are able to enlist various approaches of teaching that are used by a few lecturers. It also indicates that feedback from formative assessment is regarded to be understandable and the whole teaching approach seems to have resulted in meaningful learning.

7.2 Ideal assessment

The participants were also asked to explain their visions about ways of assessment considering that the institutions were not governed by the existing rules and regulations. Analyses of their visions are grouped in two domains of assessment: (i) when assessment should be carried out and (ii) who plays which role in the assessment process. Four categories of explanations of alternative ways of assessment are reported under this topic. The first two categories, continuous and end-of course, concern when assessment is expected to take place while the third category, participatory assessment, is about the role students would like to play. They are all about the planning of the assessment process. The fourth category, authentic assessment, is about the quality of assessment regarding the process of conducting it and the content. Each category is discussed in the next sections.

7.2.1 Continuous assessment

Most of the participants reported their desire to have assessment integrated in the whole process of teaching and learning throughout the course as suggested in the following excerpt:

B3:M8: Personally, I would have preferred to be assessed continuously.

I: What do you mean by that? Can you explain?

B3:M8: All I am suggesting is that assessment should have been incorporated in the teaching and learning process of the course and be done after completing every unit or two units of the course. This could have made studying the course easier for me and more manageable than when it is all examined at the end of the course.

In concurrence, one participant explained how continuous assessment would have provided him with better chances:

I would have wished to be assessed in a manner that gave me a chance to be assessed continuously and let a course last for sometime not rushing and leaving no time in-between for us to go and search for information in the library, internet and come and participate in the discussion with the course teacher. It would have been better if we were given topics to research on and write short papers and present them to the whole class for them to participate in assessing the quality of the work. Here I am not advocating for removing final examination but it should be one among others and should carry fewer points than continuous course work assessments because it is written in a short time. (B3:M13)

The excerpts above are examples of utterances that reflect students' interest in being assessed throughout the course. A number of issues were raised in such utterances and the participants gave various reasons for their advocacy of continuous assessment. The participants articulated their wish to have courses to last for some time and also offer opportunities to students to contribute with information search on their own. Furthermore, the utterances indicate that students would like continuous assessment to be rewarded more marks than the final examination. This reflects a need to be rewarded on the basis of how much effort and time students spend on a task.

Nevertheless, cautionary remarks were also given by some participants about the practice of continuous assessment in their department. For instance, in the following excerpt the participant explains how they had a kind of continuous assessment but the outcomes were not given the weight they deserved because of the existing assessment policies.

Okay, we had partial exams and final exams and the mark you got in both would constitute the course mark for the year. However, the regulation is that if the course final mark is less than 10/20 then you would either re-sit or repeat the course depending on how low the mark is below ten. But the partial exam mark would not change even on second sitting and this could at times make it difficult to get a pass mark even on the second sitting. So my wish would be that if one is to re-sit for an exam, the partial exam mark ceases to be considered. (A3:M16)

The desire reflected in this explanation is that having continuous assessment in combination with final exams can be problematic if present regulations are employed. That is, the rules have to be revised as there is a need to have policies that do not disadvantage the students in the computation of the final mark, when they take part in a second sitting. This is yet another indication of how different participants, for varying reasons, view continuous assessment as an alternative way of being evaluated.

7.2.2 End-of-course assessment

Continuous assessment was not viewed from one and the same perspective by all participants as reported in the following excerpt:

B3:F10: I would have loved to have assessment at least one week after the completion of the course.

I: Can you explain why?

B3:F10: You know when assessment is done during the course, you do not get adequate time to read for it and also when it is assessed a long time after you have completed it [the course] you tend to forget because inbetween there would come other demanding courses, so that is why I would suggest that assessment be done a week after attending course lectures.

The above utterance was from a participant whose wish diverged from the rest of the participants on the use of continuous assessment. While others thought continuous assessment would be advantageous, the above participant (B3:F10) sees it differently and would prefer to be assessed after the teaching was completed. However, in rather similar suggestions as stated in the example above, other participants in the same category added that they would not wish the assessment to come a long time after the completion of the course, so as to reduce chances of forgetting what was taught.

7.2.3 Participatory assessment

When describing how students could have a role to play in the assessment activities, the participants used varying vocabularies and phrases but in their explanations the dominating ones were 'participating' and 'deciding the ways of assessment'. The explanations also called for a change in attitude of the assessors if the requested participation of students were to be meaningful. Examples of the explanations of extended participation and the anticipated positive results it would give are shown in the following utterances:

Like I have just said the agreement between the assessors and assessed should be clear. For example, the teacher and I would agree that assessment questions would only be based on those areas, which have been taught well as defined by both of us. In such circumstances, my studying would be more focused and I would read other additional materials related to the course and have deeper learning. I am sure if it was

like that I would have found studying easy, especially because I would have participated in deciding how I would be assessed. (B3:M26)

I would not mind any way of assessment, it can be an essay, or short questions or paper presentation or even demonstrations provided I am given an opportunity to participate in planning what method will be used. (B3:M1)

The message on the issue of students' participation in course assessment was mentioned by some participants. Also, they indicated the need for clarity on what course activities students and teachers are supposed to focus upon, so that the participation of students would be effective. Still on the issue of seeking participation in the course activities including assessment, the participants' explanations indicated a desire for change in the way assessors regard students as partners in course activities and instead engage them actively as suggested in the next utterances:

B3:M13: my wish would be that course teachers change the attitude they generally seem to have of not considering their students as people who could contribute with ideas regarding their own learning, if involved actively.

I: What do you mean by involving students actively?

B3:M13: For example, teachers in the department should stop regarding students as empty vessels to be filled with voluminous course compendia information expected to be reproduced at the end of the courses. Instead teachers in the department should open up for students and regard them as partners in course activities, including assessment. This would definitely improve the relationship and reduce mistrust and hostility which at times exists between teachers and students.

In participatory assessment, former students indicate the need for teachers to change their attitudes towards students in terms of thinking that the latter can only serve the purpose of being fed with information. The participants argued for the need to involve students in their studies and also play an active role in deciding assessment issues.

7.2.4 Authentic assessment

Some participants gave explanations to their wishes for alternative ways of assessment that emphasized quality and relevance. The following examples give a picture of how they explained it:

Ahh, my wish is that assessment tasks would be organized based on materials taught and also leave room for what I had learnt from the course. Something from my understanding of the course, not just reproducing everything my lecturer had given us in the notes. (A3:M15)

Aligning assessment with the taught and learnt content was one of the issues the participants wished to be agreed upon by both teachers and learners before they were assessed. That would give the students a chance to show their understanding and their reflections. In what seems to be an attempt to pursue relevancy and democracy in the ways of assessment, the participants further expressed their wishes:

As I said the assessment in geography should be based on the issues of life in the environment we live in and students should be given an opportunity to express what they have read beyond the teacher's notes. (A3:F1)

You know as I was trained to become a geography teacher I would have preferred to be assessed in a way close to the real situation so that I could develop more relevant knowledge and skills that I would need for my future teaching job. Furthermore, I would have wished to have more school practice and even more assessment tasks based on real classroom situations and not writing about them while I am at the institute in lecture rooms. I found this to be a mockery of the whole process of training us as teachers. (B3:F4)

The indications raised in these findings are that the participants are advocating that students undergo assessment that covers the course content taught. Furthermore, the excerpts reflect students' desire to have authentic assessment tasks or problem solving tasks that are relevant to their future profession. Their wishes correspond with performance assessment that gives them a chance to display what comes from their own initiative and is related to authentic situations

7.3 Reflections on study strategies and study conditions

The former students shared their reflections on various study strategies adopted in geography and even in other courses in their undergraduate programme with me. The following sections cover their accounts of the strategies they adopted to cope in different situations, that is, how they experienced the study environment, the initiation of newcomers, contextual pressures and survival strategies.

7.3.1. Study-environment

Most of the interviewed participants regarded their study environment as a community of students and teachers and in their utterances these two parties are frequently mentioned. However, they gave varying descriptions of their experiences when they were pursuing their undergraduate programme:

All I am trying to say is that the whole situation that surrounded our education at [Site B] did influence my decisions of adopting study strategies. (B3:F1)

What influenced me to study the teacher first was the information I would gain about that particular teacher, even before he would teach me. (B3:F10)

The first example indicates that the exact nature of the contextual influence the participants are talking about is not specified but the utterances explain the magnitude, the whole situation and the role it played in the adoption of study strategies. The second example reflects how there was a contextual influence behind the choice of study strategy, 'studying the teacher first....'. Still on the topic of explaining the contextual conditions under which the participants studied, there are some of them who described it in concrete terms as illustrated in the next excerpts:

The situation in which we were taught was difficult. Teaching was done in a hurry to complete courses and this compromised on assessment and it was mostly done at the end of the courses and yet part of it would still be called course-work or partial-exam. (A3:M7)

Based on what one had experienced on arrival in the department, you would be compelled to cram the entire notes within the available time, and

if possible leave some little time to meet other students and attempt some questions together, but this would be done if time allowed. (A3:M5)

The analysis of these utterances, which are a representation of many others in the same category, shows a situation where the teaching was done in a rush. It seems there was little or no time given to students to reflect on what was taught and search for further information on their own. It seems as if this aspect has not been considered in the planning of the study programmes. Furthermore, the explanations of the students indicate a situation where students, even if they seem to be aware of formative assessment, did not benefit from it because they claimed it was done after teaching, regardless of being referred to as a partial exam. Consequently, it appears as though students resorted to a surface study strategy as they claimed to cram the entire notes

7.3.2 Initiation of newcomers

In contrast to the descriptions above, some students preferred to describe the condition under which they studied from a community point of view, indicating how old-timers (senior students) related with the newcomers, as articulated by one respondent:

You see, the situation in the institution in general was such that during the first days of the commencement of studies, members of the student community, especially those in the same department, would initiate you gradually into how to survive in the university community. Senior students were always willing to initiate newcomers into the community by briefing them on how to cope with the pressures at the institution because it was not easy at all. (A3:F3)

It is evident from the explanations, like the foregoing one, that some working relationships were established between senior students and beginner students as members of the same community, sharing the same experiences. Furthermore, it seems that the working relationship between newcomers and senior students, included among other things to pass on knowledge and skills of survival in their study settings, from one cohort to the other. The finding on this issue of initiation of newcomers reflects cooperation that aimed at encouraging them to become part of a community of practice as part of their study tasks.

7.3.3 Contextual pressures

The description of experienced conditions of study as highlighted in the above utterance (A3:F3) contains aspects, which raised questions like what kinds of pressures the former students talked about and what they meant by 'initiate you gradually into how to survive'. In this category, the focus is on how the participants shared their experiences of socio-economic problems that exerted some pressure on them. The same participant explained the kind of pressures in the following manner:

You know when I was admitted to the institute I was given a government bursary, which I hear that we are to refund over a period of time. This bursary took care of my stay at the institute and I had to save some little money for the upkeep of my family. This means that my family was eagerly waiting for my successful completion of the programme, so that I could get a job and provide for them. Failing would have been regarded as a betrayal and their future hope would have been shuttered. So, I had this pressure at the back of my mind not forgetting the academic pressure because of doing so many courses in a short time. At times, in an unfair manner. (A3:F3)

The pressure to meet the expectations of her family of passing examinations was tough because failing would limit future hopes of the entire family. This was in addition to the academic pressure. In the case of this particular former geography student the meaning she is giving to the pressure in the world she studied goes beyond mere time-tabling of assessment tasks mentioned by others. These included socio-economic pressures, '... save some little money for the upkeep of the family...'. However, irrespective of the type of pressures described above, the students had a primary goal of passing assessment tasks as an assurance of surviving possible expulsion and continue their university studies. In the next paragraphs, attention is turned to the meanings the participants attach to the various strategies they used for studying.

7.3.4 Survival strategies

The participants were asked to explain how they experienced the ways they were assessed and also the ways they studied. In response to those questions, they raised various aspects in the descriptions of survival strategies used. Descriptions brought up had similar meanings:

Apart from accepting and following the departmental daily activities, including attending lectures, participating in answering assessment

questions and sitting for examinations without questioning any of the activities, there is no other role I had in the ways I was assessed. (A3:F1)

I don't think I played any role in the ways I was assessed because I would study according to how I considered the course and the teacher and then get ready to respond to what I was asked. I never negotiated nor suggested how I should be assessed. (A3:M21)

According to the utterances in this category, the role of the students appears to be characterized by minimal involvement and maximum compliancy to the existing conditions. One of the prominent aspects the participants used in describing the strategies used in coping with conditions was submissiveness, which was explained in terms of:

Ahhh!!! (pause), the course teacher was the master planner of the three processes I mentioned earlier: teaching; learning and assessment and as students we had to "kubyina imbyino nyir'urugo ateye" [dancing to the master's tune]. (A3:M7)

The participant gives a description of an experience where the teacher was the determinant of how the students responded to the expectations of the course. Yet, another participant clarifies this perspective of defining the experience:

Like I have just explained everything regarding the ways of assessment, were in alignment with the ways we were taught. Most of the time [it was made] in a hurry rushing to complete the course and give the class to another teacher, [all] was in the hands of teachers. So, as a student I considered my responsibility to be alert all the time and look for clues that would enable me to predict how the course teacher is likely to ask questions and study accordingly. (B3:M13)

The finding about the possible role of students in assessment and other course activities reflect a situation where former students perceive themselves to have been made circumstantially passive participants 'I never negotiated nor suggested how I should be assessed'. Nevertheless, the same participants seem to have been aware of what ought to have been their roles 'negotiating and suggesting to the teacher how to be assessed' for them to enjoy more democratic learning. Furthermore, the findings indicate that students opted to adopt those study strategies, which they regarded as appropriate.

7.4 Accounts of the strategies adopted

The former students explained how the information they had about their teachers' styles of assessment had influenced their choices of study strategies. Their explanations were dominated by how they were gathering information from different sources like senior students, peer classmates, past examination papers and how they strategically used this information to adopt what they considered to be an appropriate study strategy for a particular course. The following example throws more light on how the participants described their experiences of using second hand information and putting it into study-use with a primary objective of passing.

On arrival at the department, the first thing you would work on is to establish information students ahead of you in the programme have about different teachers and their favourite styles of asking questions. It was on the basis of what I got from them that I started strategising how to study the courses. (A3:F1)

The example shows how seeking for information was a major strategy by some participants and the information was generally considered to be true. Nevertheless, there are other aspects of description of strategies experienced by the participants that would combine the sought information with the value they attached to the course.

I would adopt an approach of studying in a particular course after considering all the information I have about the teacher's style of teaching including the style of asking questions. But also the weight of the course and the time I have to prepare for the examination. (A3:M7)

This is an example of an utterance in the category that describes a combination of information from different sources and the conceived value of the course as a basis of adopting a study strategy. Still the interest of students seems to be invested in managing course examination demands and little is mentioned about acquiring the intended knowledge.

7.5 Summary

Twelve former geography students from the two earlier settings were asked about their reflections on their experiences with assessment and study strategies. The findings confirm how they associated study strategies with their previous conceptions of assessment. My assumption that they would talk from a relatively better position than when they were still pursuing their

undergraduate programmes, more specifically because they had all successfully completed was also confirmed.

The former students raised various issues, which are central for pedagogical activities. Different kinds of pressures, both internal and external, are used to describe the circumstances under which they studied. Moreover, descriptions of a variety of study strategies students deemed appropriate for adoption in their courses are also explained. Their ways of soliciting information about the teacher and how they sought information became important in their study strategy adoption.

The earlier findings on their suggestions for alternative ways of assessment are confirmed and strengthened. The former students provided a repertoire of ideas which they suggested could be regarded as supplementary to the employed summative assessment modes. Their ideal modes of assessment are formative and can be seen as continuous, participatory and authentic assessment. However, one participant expressed confidence in end-of-course assessment.

In the following chapter I will use these findings to discuss different views on the challenging task of assessment and study strategies related to processes of teaching and learning.

8. Discussion

In the previous three chapters, findings on students' conceptions of assessment in geography courses and the study strategies they adopted are presented. The aim was to gain deeper understanding of the experiences of assessment and study strategies from students' perspective. The discussion revolves around three research questions, which governed the study, i.e. how do geography students conceive assessment in their courses, how do students determine their study strategies and how do students reflect on alternative ways of assessment. This chapter aims at summarising, interpreting and discussing the main findings by using the theoretical frameworks and related findings of earlier studies in the same field.

8.1 Students' conceptions of assessment

This section addresses findings based on the first research question that was set to investigate how students conceive assessment in their courses. The discussion is divided into two sub-sections: purposes of assessment, where I discuss the roles of students and teachers, and ways of assessment. I also discuss how students understand the link between the ways they are assessed and what they suggest to be the roles of assessment.

8.1.1 Purposes of assessment

Assessment information and its conceived use are central issues of the findings. Throughout the four panel waves the majority of the students have conceived assessment as a way used by course lecturers to collect information from students. Major findings on this issue are described in terms of when the assessment information usually is collected and what they consider to be the main purpose of collecting it. Providing information as one of the purposes of assessment is widely recognised in the literature reviewed (e.g. Gipps, 1994; Boyle & Bowden, 1997; Black & William, 1998b; Biggs, 2003; Harlen 2006; Gardner, 2006). The mentioned authors concur on the aspect of collecting assessment information from students about their learning as a benchmark at course level. In a similar vein, other authors (Ramsden, 2003; Boston, 2002 and Harlen, 2007) concur on the contention that it is what assessment information is used for that qualifies it to be either formative or summative

According to the students in my study the information served various roles. For example, the recorded marks were used as proof of a completed course as well as for promotional purposes. Seen from the students' descriptions of their experiences they are in a context in which there are other actors at department, faculty, and quality assurance offices, to whom the teacher has the responsibility of reporting. The reporting referred to here is twofold. Firstly, the teacher is supposed to report to the department on students' academic performance at the end of a course. Secondly, the teacher is supposed to report on the course progress in terms of numbers of hours taught, hours remaining and number of assessment tasks done. This reporting is done through the department to other afore mentioned levels. Hence, besides acting as assessment, it acts as a way of monitoring course activities. Students conceived the use of assessment to be a way of monitoring and controlling both students and teachers. When students' arguments are developed further I see a situation where they do not seem to consider themselves to be active participants in the assessment process but instead used for providing evidence.

Drawing on theories of social constructivists as presented by Pollard (1990) and Driver (1994), emphasis is put on recognising learning as a socially situated phenomenon. The teacher in such settings is expected to be a reflective agent. Contrary to this line, the interpretation some students gave to the teacher's purported reflection was limited to assessing them for the sake of generating information, required by the departments. Such students' meaning is likely to have had influence on the ways they studied. Other students' conceptions of assessment were partly about teachers' and departments' exercising power and authority over them through the awarding of marks and promotion, where some are successful and others are discontinued. Also, students claim that some teachers were proud to show their power by their display of knowledge. However, there is more than one way these findings can be interpreted and for the purpose of this thesis I will discuss them from traditional and socio-cultural perspectives.

On the one hand, by referring to how the promotional activities are conducted, that is, by separating individual students who have scored the required marks from those who have not, it reflects a situation where the assessment practised encourages competition among students on an individual basis. Also, considering that it was only the teacher who conducted all the assessment activities, with little or no involvement by students or other teachers, the teacher of the course became the unilateral assessor which gave him or her power and authority to influence the decision

of who should move to the next educational level and who should not. This agrees with findings of Connell (1993).

On the other hand, socio-cultural theories of assessment provide another line of reasoning. This perspective encourages collaborative assessment involving active participation of students with their teacher in the whole process of learning (Falchikov, 1986; Garcia & Pearson, 1994). Active participation of individual students in course activities, assessment inclusive, sometimes in collaboration with peers, would not allow the above conceived purpose of assessment to be dominated by the competition aspect only. In collaborative assessment, where members of the same community or groups conduct tasks, focus is not merely on an individual student's performance but rather on group efforts in specified contexts, which are put under consideration (Lave & Wenger, 1991). Here, collaborative learning and assessment can be discussed with regard to the positions of teachers and students and their roles in different learning contexts.

In my interpretation, the findings in the present study show that the unilateral role of the teacher is clear. However, students' great emphasis on how to 'read the teacher', talk to former students and in general being cue seekers reflect that they are not sure of how to approach their studies when they are at an early phase of the study programme. Nevertheless, whatever clarity the teacher will provide, questions will be raised about assessment issues. When I interpret the assessment procedures the participants have conceived in the present study with what Fejes at al. (2005) suggest for participating in seminars I recognise some similarities between the study situations. In the two studies the activities were found to be complex because the teacher has to pay attention both to the students learning and at the same time he or she has to satisfy the requirements of the university assessment system. The findings in the Swedish study on students' involvement in seminars also indicate that students are encouraged to think critically and in spite of the fact that they share ideas with their peers and the teacher it is concluded that the teacher is still positioned as the unilateral assessor.

Regarding the students experiences of the teacher/student collaboration in my study the participants never question the authority of their teachers. Instead they show that they acknowledge the role of the teacher. However, the participants' emphasis is on demanding some space for everybody's participation. In a rather similar way as the Swedish students are asking for more influence on the seminar activities the students in the present study express a vision to be allowed to be actively involved in the whole learning process.

As expected, the findings reveal that assessment targets to establish individual student's level of performance. A common thread to geography courses is that they, beside theoretical courses include hands-on, practical courses. Here students were asked to attend to both knowledge and skills questions, which they found relevant if the issues were experienced in real life. Stensaker (1999) advocates taking the perception of relevance seriously on the grounds that it influences the connections students make between assessment and the real world they live in, an argument that is shared by Unwin and Caraher (2000) and Huff and Sereci (2001). Also, it agrees with findings in an investigation of the factors influencing the assessment perceptions of training teachers in an Australian university, where Crossman found that the students' perceptions of assessment relevance influenced their learning to a great degree (Crossman, 2004).

Questions on what was conceived to be the purpose of assessment raised yet another category that was opposing the idea of attaching just a single purpose of assessment to all geography courses. The argument in this category was that there are numerous purposes, which depend on assessment tasks and teachers themselves. The argument behind this view can be explained in more than one way. Firstly, the learning contexts referred to by the students do not seem to have used collaborative assessment approaches as suggested by Falchikov (1986). Such approaches emphasise active participation of students in their own assessment activities and as such students would have prior knowledge of any goal targeted by the assessment. Secondly, freedom of involvement of students in course activities that would make them aware of the purpose of the course assessment is also advocated by Ramsden. In his 4th principle of effective teaching, clear goals and intellectual challenge (Ramsden, 2003) explains how the control of learning has 'to reside with the teacher and with the student' (Ramsden, 2003:96). If such joint understanding of course activities is practised for instance in the two institutions where the study was conducted, students would know the purpose(s) of assessment in their respective courses. Students' requests to know course objectives show, in my interpretation, that they found it difficult to attribute a particular purpose to the assessment of the courses and that they probably were not conversant with all the course activities. This suggests that in the context, learning and assessment of the courses were unilaterally the duty of the teachers to determine. On the same line of argument, the problem that the students conceived in knowing the purpose of assessment may suggest that there is a discrepancy between the assessment goals and the course objectives reflected in the course compendium, which were accessible to the students.

Yet, in another line of reasoning, Biggs' et al. (2007) suggests that there can be contradicting opinions between the teacher and students on how they conceive the purpose of assessment. In situations similar to the ones reflected in this study the reasoning is twofold. On the one hand, the teacher's point of view about a course, as expressed in the course outline, seems to be comprised of activities of teaching, learning and assessment. This is also emphasised by students' in their conception of assessment as an activity usually conducted at the end of a course. On the other hand, it is likely that students' interpretation of this kind of course organisation has influenced them to put assessment in the forefront of any other course activity. However, according to the students' interpretation, the teachers seem to have a hidden, intended curriculum which students suggest carried a different meaning from the one visible to them, an issue also noted by Snyder (1971).

8.1.2 Ways of assessment

Findings based on questions that solicited students' experiences with assessment produced two categories of descriptions: course-oriented and teacher-oriented assessments. In this section I discuss salient concepts used to describe each category and in the same vein the discussion elaborates what seems to be common aspects' underpinning the two categories.

Course-oriented assessment: Some students described their experiences with assessment by emphasising how geography was taught and assessed. They explained that it was taught both through hands-on laboratory tasks coupled with fieldwork, and through classroom lectures. Furthermore, they explained that it was assessed through pen and paper method, something they commonly referred to as theory method and their explanation included how the two aspects, practice and theory, offered more chances of passing. The students described the nature of the course, where the score in the practical part complemented the score in the theory part. Such complementarities seem to have supported students in passing the course. In line with socio-cultural ideas of using external tools to support learning, the use of fieldwork and hands-on laboratory tasks seem to have lifted the level of passing and were appreciated by the students. Some researchers (Havnes, 2008; Boud, 2001; Mercer, 1995) have lifted the discussion on the role of external tools, which can be used for the improvement of learning. The place of peers and context in which the learning is situated is considered to be vital in knowledge production. Hence, the argument for their experiences of linking theories with practice in field-works can be seen as an example of making use of external tools that improve learning. In Rwandan institutions of higher

learning where pedagogic resources are not adequate, the use of field-work in teaching geography seems to facilitate interaction of different contents and the relevance is likely to be noticed by the students. The level of abstractness is likely to be reduced as some of the features and processes taught become visible.

Teacher-oriented assessment: Some students opted to describe their experiences of assessment with focus on their teachers. The key words in their descriptions were how the teachers handled the course, which encompassed both delivery and assessment. In this category the information about the teacher's style of assessing was central. According to the students' priorities the motivating aspect of acquiring information about how a teacher of a particular course assesses seems to have replaced the motivation of knowing what to gain from the course. This agrees with what Entwistle (1988) found when he studied styles of learning and teaching.

Notwithstanding the differences between the salient features used in the two categories, and at the same time basing the argument on Biggs' (2003) classification of types of motivation, I see that in both categories (course-oriented and teacher-oriented) a common aspect of passing examinations is implied. There is a priority link drawn between describing the experience with assessment and passing examination. Irrespective of the category used, the students' descriptions seem to be driven by an extrinsic motivation of passing the course at the end of assessment rather than being motivated by the act of assessment as a component of learning. The implications of this are discussed in detail under study strategies adopted by the students.

Again, the experiences cited by students give an impression of assessment as a phenomenon done on them with a primary purpose of using information from the assessment for judging their eligibility of passing. On the basis of this line of thinking (Harlen, 2007; Brookhart, 2005) the use of assessment information is what qualifies the assessment as either formative or summative. It is likely that a combination of what students conceived as the primary purpose for assessment in the courses and the common practice of conducing assessment after other course activities were completed made students view assessment as not being part of the teaching-learning process. However, as mentioned above, such conceptions seem to have created a hidden curriculum (Biggs et al., 2007) that brought about discrepancy between how the teacher and students view the same course. Students acted in a strategic manner. They used cue-conscious strategies, a practice Miller et al. (1974) associates with a motive of scoring highly in assessment tasks, without necessarily having comprehended the course. Students' reflections

indicate how they capitalized on the obtained information, through fellow students ahead of them in the same study programme. As members of the same community, working towards the same goal of passing, the information about the teachers' styles of assessment was reported to be readily shared. Some sort of community of learners (Lave & Wenger, 1991) seems to exist to initiate newcomers to know how to survive in the system.

The overall finding on the question of how students conceived assessment in geography courses is that of a threat to be expelled from the institutions if they fail. As such, passing examinations is seen as the only way to survive within the study programme. This conception is expressed in more than one way. Irrespective of the category of the students' conception of the purpose of assessment it is again purported to be a teacher dominated activity. Students are conceived to be on the receiving end of the decisions based on teacher collected and judged assessment information. There is also a contention about the purpose of assessment, which is inconsistent since it varies from teacher to teacher and also from course to course. It is worth noting that both according to earlier research (e.g. Fejes et al, 2005) and to the findings in this study, and irrespective of the level of student participation in learning activities, an active teacher is always valued by students as he/she plays a focal role in the students' discussion and meaning making process. Although I have in the above reasoning problematised different roles of students and teacher, in my view, it is always the teacher who is responsible for the assessment and to ensure academic standards and quality of the courses he/she is teaching.

8.2 Adoption of study strategies

The discussion in this section is based on findings from the second research question that focussed on establishing how students determine the study strategies adopted. The discussion covers how learning contexts are described in terms of variables like contextual pressures and survival strategies, which they consider to have influenced their studies. I further discuss how and from where information that students consider in their adoption of study strategies is drawn. The central part of the findings on the second research question is the employment of individual and group study strategies, which are discussed in terms of theories of learning and teaching and are looked upon in relation to earlier research findings.

8.2.1 Influence of study context

In discussing the findings about students' conceptions of their study contexts. I start by giving recognition to those whose works have been influential, that is Kember and Leung, (2005a,b) and Vermeulen and Schmidt (2008). These works concur on the existence of links between benchmark components of learning contexts such as constructive interactions between teachers and students, a context that encourages learning through having an organised curriculum, peer interactions and quality oriented collaborative learning and assessment. It is generally argued that a favourable learning context encourages interaction between students amongst themselves and also with their teachers. Lunt (1994) contends that study contexts allowing students active participatory roles, make assessment more dynamic. In contrast to the fore mentioned favourable qualities, the descriptions students gave of their learning contexts were motivated by assessment activities that were largely used for promotional functions. This is in conformity with what they conceived to be the purpose of assessment as can be inferred from their claims saying that they are studying under contextual fears of failing and getting expelled.

Students used such descriptions of the study contexts even when they had successfully completed their programme. It is most likely that these conceptions were generally accepted as the state of affairs and to some extent explains why they described the study strategies they adopted as survival strategies. It is equally possible that the metaphor could imply that students regarded the study context they faced as a threat, which they had to fight against and defeat despite the fact that their teachers may have been open to questions and encouraged co-operative learning. The same tendencies appear again in the nature of the strategies considered.

8.2.2 Considerations of study strategy adoption

The discussion under this section is about adoption of study strategies, believed by students to be appropriate in their study contexts. This part of the discussion deals with considerations made by students before they adopt any study strategy. When discussing the dynamics involved in the adoption of study strategies I take the purpose the information would serve as a point of departure.

The findings have shown that throughout the study, the conceived assessment purpose was considered to be influential, especially in deciding how students studied. This is also recognised in the work by Boud, Cohen and Sampson (1999). In their theoretical paper on peer learning and assessment, they

cautioned against using assessment as a device for students to comply. Their reasoning concerns how 'assessment is the single most powerful influence on learning in formal courses and, if not designed well, can easily undermine the positive features of an important strategy in the repertoire of teaching and learning approaches' (Boud, et al. 1999:413). If one considers the students' conceived role of assessment, it can be interpreted as a situation where the course goals have been compromised and assessment has taken over the attention and motivation. Extending the discussion on this assumption, the students seem to start courses by focussing their attention and motivation on strategising for passing assessment tasks of the course, which can have some backwash effects on learning. Ramsden's conclusion from the same phenomenon is that 'From our students' point of view, assessment always defines the actual curriculum' (1992:187). This link between students' ways of studying, their motivation and study context is also explained by earlier research works (Boud, Cohen & Sampson 1999; Biggs & Moore, 1993) in their descriptions of learning approaches. Furthermore, the findings indicate that the context in which the students studied was conceived to be heavily summative. Besides, they seem to be convinced that they are expected to learn more theoretical knowledge than is requested at their future workplaces. The findings further indicate that the students find it crucial to pay attention to teachers' strategies if they are to succeed.

The students' application of study strategies seem to be influenced by the conceptions of assessments they had to undertake. This is consistent with earlier research studies by Entwistle and Entwistle (1997), Scouller (1998) and Crossman (2004), which recognise students' perceptions of assessment to have a link to their choices of approaches to learning.

Influenced by their interpretation of the situation, students developed ways of coping with the contextual demands. It is in this regard that I use the phrase 'study strategy' to explain the activities students carried out in their studies. Picking on the students' use of the phrase 'studying the teacher' the findings reveal that in the context the phrase means looking for information about the teacher's past record of assessing. The reason for looking for the fore mentioned information is to speculate on the kind of questions the same teacher is likely to set in the examinations. The activities of gathering information about the teacher and the previous examinations of the course seem to be driven by the primary goal of passing, with fear of failing. This agrees with previous research by Gibbs, Morgan & Taylor (1984); Entwistle, (1987) and Biggs (2003) who describe students' study strategies to be motivated extrinsically by passing the examination.

The activities of gathering information about the teacher and the course are motivated by the general conviction held by students that some of their teachers rarely change the style of setting questions. Students gather such information through various ways: searching for previous examination papers, asking senior students taught by the same teacher in the same course and looking for clues during the teaching of the course. The findings reflect an organised way of collection and triangulation of the collected information, and in most cases, what senior students tell is supported by what is found in past question papers. This can be interpreted as a situation where the demands of the hidden curriculum (Snyder, 1971), specifically information about how the assessment in a particular course was previously done, are considered to be of particular interest. As reflected in Figure 3, this information ranked highest in both sites among those which students reported to consider before choosing which study strategy to adopt. Students' strategies reflected by the findings have in common seeking cues about the assessment styles of a particular teacher (Parlett, 1969). Depending on the information, students either crammed the course content and aimed at passing the assessment task, or interacted with the content to the point of understanding it deeply. Nevertheless, as portrayed in Figure 3, other factors are considered in combination with the collected information about the teacher and the course, though not given the same weight before adoption of study strategy.

On the basis of various factors at the disposal of students, the study strategy adoption enters into another phase of either deciding to study individually or join study groups organised by students themselves. I consider such moments to be the points of departure between the identified individual and group study strategies. In the context of this study the terms individual and group as qualifiers for study strategies do not carry exactly their lexical meaning. For instance, both strategies were reported to depend heavily on information gathered and shared by students. This implies that even those students who later embark on using an individual study strategy have most likely worked collaboratively at an initial stage. Likewise, those students who study in groups for most of the time are studying individually during the last phases as reflected in this thesis. The two main strategies also reflect some aspects of peer collaboration but different from the one advocated by Falchikov (1986). The former is student initiated and mediated while the latter is organised and facilitated by the teacher. Another difference is that Falchikov advocates for collaboration that promotes learning while the one reflected by my findings put passing the examination as its priority. Students adopt the identified study strategies on grounds of what is considered to be effective in the situation.

My interpretation is that the strategies are adopted because they increase students' chances of passing rather than focussing on learning. Nevertheless, it could be that students adopt them because they are appropriate although not the most preferred way to study in the given circumstances. However, it is contrary to the idea of those who assert that students should go beyond the level of mastering strategies of how to learn and also develop a way they want to learn if they are to learn meaningfully (Hofer et al. 1998; Weinstein, 2002).

8.3 Students' proposed ways of assessment

In this section I discuss ways of assessment reported in the findings as students' suggested alternatives i.e. authentic assessment and self- and peer assessment. Each part is discussed by considering its theoretical underpinnings and related studies.

8.3.1 Assessment in authentic settings

The term authentic in this thesis implies that the assessment is done in a context where the topic under study is practiced. The findings show that students recognised advantages of such complementary assessment from some of the geography courses in which they were taught and examined through laboratory demonstrations and field excursions. Particularly those who were training to become geography teachers stressed such advantages. However, the students indicated that authentic assessment in their courses were seldom used, for instance one student-teacher explained that he would have preferred to be examined close to his future institutions to develop relevant knowledge. This is in line with the contention made by Boud and Falchikov (2006) that students should be assessed on what they are doing in practice and what they need to engage in later. Also the students who were majoring in geography related professions indicated that there was still room for improvement in the use of authentic assessment in environments where studied features and processes exist. These suggestions from students indicate that they have knowledge about the pedagogical advantages of authentic assessment. However, it is not always possible to find field situations for every topic and for every assessment task. Even though the findings do not reflect any attempt made in this regard students seem to be aware of this fact when suggesting that some questions could build on imaginary scenarios of relevant contexts requiring them to suggest solutions. This implies that where real situations are difficult to reach, students could be given problems that simulate actual problems in teaching. This idea is an idea elaborated by

Darling-Hammond and Snyder (2000) in their work that investigated how authentic assessment was used in teacher education programmes.

8.3.2 Self- and peer-assessment

The findings indicate that students wanted to participate in assessment in terms of collaborative self- and peer-assessment. Motivation for their suggestion is that they study together, do field-work, and observe features together which means that they could be given a chance to participate in assessing both classmates and themselves, with the assistance of their teacher. The suggestion is requesting more than participating in assessment. It even raises the reason why it should be done by arguing that assessment should be aligned with teaching goals. This is something Stefani emphasises in his theoretical paper, written with the aim of 'presenting a case for academics to work in partnership with students, particularly in the context of assessment, for the purpose of enhancing learning and developing autonomous, independent and reflective learners' (Stefani, 1998:339). Boud and Falchikov (2006) made a similar proposal in their work, which was written to make students become assessors by participation in practice.

It is worth noting that when students made these suggestions it was coupled with aspects of making assessment continuous and formative. Even if they seldom used the term formative, they suggested in several ways that they should be assessed throughout the course, which is recognised as formative assessment. The suggestion of integrating assessment into the teaching and learning process has been advocated by other researchers. For example, Ramsden (2003) explains how a variety of assessment methods, integrated in the whole teaching and learning process are likely to produce more meaningful results than assessment carried out at the end of a course. Likewise, Harlen (2007) points out the possibilities of using both assessment evidence and criteria in making better judgements to improve learning.

The students' suggestions to participate go beyond assessment and involve all other course activities from the planning phase. Seen from a socio-cultural perspective, the idea students are suggesting is a kind of partnership with their teacher in the context of the course. As such both individuals and collectives of students would be part of task-constructing teams as argued by Cooper and Dunne (1998) and explored by Gahamanyi (2010). Such situatedness would make it easier to determine what the assessor requests.

The advocated collaboration can be discussed from a Vygotskain perspective where Mercer (1995) claims that collaboration for learning is not between the

teacher and students only but also among students themselves, which was clearly demonstrated by the students in the present study. The research on the relationships between participants in collaborative learning has involved studies both on asymmetrical (i.e. teacher-learner) relationship and symmetrical relationships (i.e. learner-learner). Regarding the latter, with support in other studies, Mercer (1995) points out that a more competent peer can give support to a fellow peer but there is a problem if peers are not more competent. In my interpretation, this reasoning leads to the fact that teachers' competences are of great value for students' learning processes. The participants in this study also support this when they pointed out the need for feedback in their courses. However, the possibilities for the students to be involved in assessment *for* learning increases when formative assessment is practiced and when students can be provided with feedback within the coursework as opposed to summative assessment when the feedback is provided at the end of the course.

It is also possible that the co-operation among students on the courses tasks, whether formally organised by the teacher or when done on the initiative of students could allow more opportunities for a better relationship between students and teachers. Also, the students conceived the creation of opportunities where they would be involved in explaining tasks, practicing assessment of themselves and their classmates, as a possible way of improving their learning.

8.4 Pedagogical implications

Here, I will reflect on the major findings of this study in the context of higher education in Rwanda. I will highlight the potentials of combined modes of assessment, and appropriate study strategies with the purpose of providing some suggestions for possible pedagogical implementation.

8.4.1 Backwash effects of assessment

Based on how students described their experiences with assessment, along with the nature of the factors they reported to consider during their study strategy adoption, the findings show a situation where assessment has been taken into excessive consideration, as a device a student must comply with, through its summative demands. Consequently, the attention and motivation of students were to focus on studying for passing. Such a stance among students leaves the good intended values of learning, in a precarious and disadvantaged position. The unilateral assessing position of the teacher has made the situation worse as students' participation in meaningful assessment and other learning activities are impeded. Assessing the achievement of

teacher-set goals that most of the time are not clear to students, combined with examination questions that require reproduction of taught course materials have contributed to the misuse of course compendia.

In the Rwandan context, at the time and places of this study, there were circumstances that reached beyond the geography classes. With an attempt to contextualise the findings, I will discuss the underlying condition. As cited in the background chapter of this thesis, the higher institutions of learning were seriously affected by the genocide and war of 1994 in the country. Both human and infrastructure were destroyed and the institutions are still rebuilding themselves. Among the implications of this tragedy is that after the resumption of operations there has been a drastic increase of student-intake in higher institutions, especially in public ones as they are sponsored by the government.

The rehabilitation of pedagogic infrastructure and provision for educational materials, however, has not expanded enough to accommodate such big numbers of students and there is still a shortage, as spelt out in National University Strategic Plan (NURSP) and National University Business Plan (NURBP) 2008-2012 (NUR, 2007). This kind of deficit has made teachers produce course compendia supplementing the few reading materials available to students as a way of improvising. At the same time a review of regulations governing the institutions do not seem to have addressed the course assessment polices adequately as it was done only on departmental level regarding promotional issues. It largely focussed on the summative roles of assessment, as the policy was to retain students in their programmes on academic merit based on assessment results and not according to a quota system.

A number of things have resulted from these institutional arrangements. Firstly, at course level the assessors are likely to have assessed in a manner that encouraged students' heavy reliance on the course compendium when studying a course. Secondly, the assessment might have sent a message to students, who regard themselves to have been among the lucky few who made it to the university that the purpose of studying is to pass examinations instead of stressing learning as the central goal or risk being expelled from the university. A combination of the aforementioned factors in a context where there has been a high teacher-turnover, whose available time did not necessarily suit students' study activities, seem to have left students to conceive assessment as serving a purpose of generating information for teachers, departments and faculties to be used in deciding who should stay

and who should be expelled from the institution. Hence, studying is conceived by students as studying for survival.

8.4.2 Combined modes of assessment

Findings regarding modes of assessment are interpreted with support of Harlen's suggestions that they can be looked upon either as assessment *for* learning as a cycle of events or as assessment *of* learning at the end of a course (Harlen, 2007). As said before, students experienced most modes of assessment as summative. This means that assessment was not used *for* learning but rather *of* learning and to a great extent the summative assessment was not necessarily connected to authentic situations. Moreover, students claimed that assessment had generally failed to encourage them to learn the intended objectives of the geography course content, even if they managed to score the required pass marks. Secondly, the students suggested, what I interpret as democratic modes of assessment, that they wished could be used to encourage them to participate in all course activities from planning up to the assessment stage. That would make assessment more related to learning and relevant to their lives.

On the basis of suggestions made by the participants, students in the two institutions seem to be aware of new modes of assessment, which can be looked upon as assessment *for* learning. Hence, findings reflect that students are quite aware of various alternative modes of assessment (self; peer; performance (authentic) and problem-solving) that are hardly used in their courses. The findings further show students' desire to participate in assessing their fellow students (peer-assessment) and assessing themselves (self-assessment). Also, through performance assessment they claimed to be in a better position to show what they know and what they are capable of doing. This is contrary to the current assessment modes, which pose questions set by teachers and in most cases make students reproduce teachers' course notes. The findings indicate that the students wish assessment to be integral parts of their teaching-learning process (formative assessment) and help them reflect on real life situations (authentic assessment).

Students suggestions that the traditional assessment should be supplemented by some unconventional modes, provides some arguments for possible pedagogical implication. Hence, the students' proposal prepares the grounds for potential changes, which can be of value in the future when reforms in higher education are to be developed. That is when students can learn to become active partners in forming their learning activities, where assessment is one important part.

8.4.3 Use of appropriate study strategies

With students' conception of assessment shown in the previous section, they seem to have developed a variety of strategies that increase possibilities of passing assessment tasks as a way of ensuring success and stay in the programme. The findings on ways of adopting study strategies indicate that studying the teacher is central.

The nature of motivation reported in the study seems to be influenced by dominating summative assessment. Subsequently, students have developed peer-mediated collaboration as one of their study strategies so as to cope with the situation. It seems as if students can easily switch from the use of one strategy to another depending on the task and if that ability is well guided, there is a strong potential for meaningful learning. Students have also recognised advantages from courses, which are taught and assessed through practical tasks and written examinations.

However, the teacher's style of assessing is seen as the most influential factor. In the Rwandan context the course convener is conceived to have absolute authority in course activities. At the same time, students have identified a close link between the assessment styles of individual teachers and their respective course compendium. Self-selected study strategies are organised as individual work and work in groups but none is purely individual or group oriented in the true sense of the words.

Another possible pedagogical implication is the need for changing the approach of designing, delivering and assessing courses in Rwandan institutions of higher learning. The findings reflect that students would prefer to have a collaborative learning approach rather than the traditional one. Moreover, such changes are in line with those recommended by the Rwanda National Qualifications Frame work (HEC-RNQF, 2007). It follows the general trend of changes in models of teaching, learning and assessment. The changes go from traditional ways of teaching that are teacher—centred to ways that go beyond being learner-centred would allows students to be partners with teachers in their learning, thus making the education become learning-centred instead. Possible consequences of such changes would be that the institutions have to open both their academic and administrative space to accommodate students' active participation as the changes will have consequences for the overall management of the courses.

8.5 Methodological reflections

The methods adopted in this study were dependent of external influences like time, finance and administrative issues. Otherwise, a longer period for the longitudinal study might have revealed more process-oriented findings. Furthermore, if other conditions were permitting, a wider sample of participants, at various levels of the programme and possibly in more departments could have been invited. That might have catered for the small number of female representation. Despite these limitations an effort was made to validate the findings by returning to the participants and allow them to reflect on their experiences of the programme. The fact that the participants had completed their studies made the establishing of their whereabouts difficult so I did not manage to contact all of them. However, the ones I managed to contact provided valuable data and my assumption that they would be more free to talk was verified.

The adopted methods of data collection focused on assessment and study strategies as experienced during a whole programme. This means that this study focused mainly on the experiences of a group of students at program level and might have missed some details at course level. Yet, it is possible that the latter could have contributed to a deeper understanding of the phenomenon under investigation.

The fact that no students that had failed were included in the study sample created a situation where the views were from those students who had succeeded in their exams only. This means that the critical reflections of those students who did not benefit from their study strategies were missed out. If the method of data collection had involved close and continuous monitoring, like participant observations by the researcher, it is possible that some students failing some early course tasks could have been captured.

Regarding discussions on transferability to other settings, I am critical to doing so without taking the sending and receiving contexts into consideration. In order to make transfer possible I have described the context and the underlying circumstances of the present study. By making use of these descriptions it can be possible to transfer the findings to contexts which are similar to those presented in this study. That is, focus of attention is laid on similarities between contexts (e.g. Larsson, 2009).

8.6 Possible areas for further research

In view of the findings of this study and regarding the time and context in which the study was performed I see some areas that would be interesting for future research. The discussion of the findings reflects how crucial students' conceptions of assessment are in their courses. Considering that the findings are based on data collected from students who had succeeded in being promoted, it would be interesting to find out how those students who had to repeat a year or got discontinued conceive assessment. Furthermore, as part of the actors referred to by the students in this thesis it could also be interesting to investigate how teachers describe assessment in their courses. Moreover, if more students from both public and private institutions, different departments other than geography, and from different years of study would be involved in a similar study, a broader picture of students' conceptions of assessment and study strategies would be established in higher education in Rwanda. Considering the government's persistent work on gender equality it would be interesting to investigate whether there are any gender differences in the way participants conceive ways of assessment.

Since the study started, a modular system was introduced in higher institutions of learning in Rwanda, hence the courses that used to be conveyed by a single lecturer are being phased out. It would be of interest to investigate how students have translated these developments in their study strategies, whether they continue studying the teacher, even if a module is taught and assessed by more than one lecturer. It would equally be of interest to establish how assessment is conducted in a modular system by the same teachers who were reported to base their assessments closely to their course compendium, thus finding out how educational reforms may influence assessment.

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Appendices

Appendix I

Second semester, 2006

Questionnaire for third year geography students in Rwanda

Letter to Geography Student

Innocent Sebasaza Mugisha PhD Education Programme IB Dept. Linkoping

Dear Respondent,

My name is Innocent Sebasaza Mugisha and I humbly request you, as a student who has geography as one of the courses you are majoring in, to share your views about assessment and study approaches with me. I am also a student like you, studying at Linköping University in the department of behavioural studies. The required information through this questionnaire will be strictly used for the purpose of my PhD thesis. Furthermore, you are assured of the confidentiality with which the information will be treated. Thank you very much for your contribution.

Innocent S. Mugisha

Tel: (+250) 08506161 in Rwanda (+46) 073 68 57 140 in Sweden

Questionnaire for third year geography students in Rwanda (tertiary level): 2006

Section A: Instruction of how to answer the question: Please mark with letter (X) in the appropriate box that represents the rate you think your view is represented. (Remember it is only one box that has to be marked for each statement)

1. What do you consider to be the purpose of assessment in your geography courses

Assessment is used	Frequently	Sometimes	Never	Don't know
to:				
motivate students				
grade (rank)				
achievement				
diagnose strengths				
and weaknesses				

2. Who the assessors are:

Assessment is carried	Frequently	Sometimes	Never	Don't know
out by:				
self				
peers				
Teachers				

3. When assessment is carried out

Assessment is carried	Frequently	Sometimes	Never	Don't know
out				
at the start of the course				
during the course				
at the end of the course				
when students are ready				
with the course				

4. Mode of Assessment-Through what means is assessment done?

Assessment is done	Frequently	Sometimes	Never	Don't know
through:				
seminar contributions				
presentation to peers				
essays				
multiple choice questions				
short answer questions				
case and fieldwork notes				
reflective log and dairies				
participation in labs				

5. What do you consider to be the value of feedback?

Feedback	Frequently	Sometimes	Never	Don't
				know
is helpful in its				
details				
prompts				
discussion				
enables				
understanding of				
assessment				
improves learning				

Section B: You are requested to write your responses in the space for each question:

Part I: (i) Which study approaches do you usually adopt in studying geography courses? (Please give clear description)

(ii) Do you have any preferences among the study approaches you mentioned in (i) above? (Please specifiy and give reasons).

- (iii) What considerations / factors / conditions do you consider before adopting study approach(es) for a particular course? Please explain
- (iv) What are the strengths of the approach(es) you usually adopt?
- (v) What are the limitations and or weaknesses of the approach (es) you usually adopt
- (vi) If you were studying the same course but in different circumstances, would you adopt the same study approach?
- (vii) If you were given an opportunity to decide on which mode of assessment to be used in geography courses you study, what mode would you recommend and why?

Part II:

- (i) What are your views about assessment in your geography courses?
- (ii) Are there similar views in the entire geography courses? [Yes] or [No]

(Please explain in detail)

End of Questionnaire

Appendix II

First Semester, 2007

Guide for the focus group discussions

(Researcher's translated English version from Kinyarwanda)

Topic 1: Assessment in geography course (*Isuzumabumenyi mu bumenyi bwisi*)

Guiding questions:

- (a) What do you perceive as the purpose of assessment in geography courses in your university/institution? (Mutekereza ko isuzumabumenyi ryo mu masomo y'ubumenyi bw'isi 'geography' koba rigamije)
- (b) How do you think assessment in geography courses are conducted in your university/institution? (Mutekereza iki ku mikoreshereze y'isuzumabumenyi mu masomo y'ubumenyi bw'isi 'geography'm uriki kigo cyanyu?)
- (c) What do you think are the role(s) of the (i) lecturer and (ii) students in the assessment in geography courses in your university/institution (Utekereza ko uruhare (i) rw'umwarimu mu mikoreshereze y'isuzuma bumenyi mu masomo y'ubumenyibw'isi 'geography' aruruhe m uriki kigo cyanyu? (ii) rw'umunyeshuli mu mikoreshereze y'isuzuma bumenyi mu masomo y'ubumenyi bw'isi 'geography aruruhe muriki kigo cyanyu?)

(d) What modes of assessment would you have wished to be used in geography courses in your university/institution if the existing rules and regulations governing assessment, were not there? (Wakifuje ko hakoreshwa ubuhe buryo mw'isuzuma bumenyi mu masomo y'ubumenyi bw'isi muriki kigo cyanyu, niba amategeko abigenga nayarahari?).

Topic 2: Study approaches (Uburyo bwo kwiga)

- (a) Describe which study approach(es) you use in geography courses? (Sobanura uburyo ukoresha mu kwiga amasomo y'ubumenyi bw'isi 'geography).
- (b) Explain how you go about making decision (s) in adoption of study approach (es) to be used in a particular geography course(s). (Sobanura ukuntu uhitamo uburyo ukoresha kwig' isomo runaka cyangwa amasomo runaka, yo muri 'geography').
- (c) Explain which parties and what role they play in influencing how you decide which study approach(es) to adopt for a particular or courses. (Sobanura nibande bagira uruhare, usobanure nuruhare rwabo mumihitiremo yuburyo ukoresha mukwiga isomo rukana cyangwa amasomo runaka)

End

Appendix III

Second Semester, 2007

Interview Guide for Individual follow-up tasks For geography 4th Year students in Rwanda (tertiary level)

Questions 1: Explain in detail what it means to you in the context of your university / institution community if a student says that 'I study a teacher before paying attention to a course'. (Sobanura muburyo burambuye icyo bimenyesha iyo umunyeshuli muriki kigo cyanyu avuze ati mbere yokwiga isomorunaka mbanza kwiga mwalimu wiryo somo).

Question 2: Explain in detail, from where you gather information you use to adopt which study approach you use in geography courses. (Sobanura m'uburyo burambuye aho uko ubona amakuru y'ukoresha muguhitamo uburyo bwo kwiga isomo runaka cyangwa amasomo runaka y'ubumenyi bwisi 'geography').

Question3: Explain how your perceived value of a course influences or does not influence how you decide which study approach to use in a particular geography course. (Sobanura uburyo agaciro uha isomo runaka kagira uruhare cyangwa se kagurira, muburyo uhitamo uko wiga iryo somo)

End

Appendix IV

Ist semester 2008

(English version)

Interview Guide for former Geography Students Information

- Reminding interviewee that the interview is a continuation of the same data collection exercise in which they have participated last year (a reference to be made to the questionnaire, focus group interview and the follow-up session conducted in 2006 and 2007).
- Explaining why I conduct individual interview (emphasis to be put on soliciting their perceptions when they have completed the programme now when they are out of the system);
- Explaining why we did not invite very participant in the earlier data collection exercise to participate in the last phase: Participating in the individual interview (selection done on the basis of engagement of responses given before, hence the selected ones being considered as key informants.
- Reminding the interviewee of her/his rights in participating in the interview (right to participate or not; right to answer those questions she/ he comfortable with; right to know what the outcome of the study will be used for).
- The interviewee will be assured of the confidentiality and that the information collected will be used to this study only.

Interview topics and guiding questions

- Part I: Reflections on assessment in geography courses; study approaches used, and learning
- Part II: Reflections on assessment in geography courses in relation to assessment in other courses which were not geography that you studied during the programme you have just completed.

Guiding questions

- 1. Reflecting on the undergraduate programme which you have just completed where geography was one of your majors: How did the assessment in geography influence your study-approaches; the way you learnt? (Possible follow-up questions: explain in detail; give examples.
- 2. Explain your experience with assessment in courses other than geography in relation to your experience with geography courses? (Please give examples where possible)
- 3. If you were given an opportunity to make recommendations, which modes of assessment would you recommend to be used in geography in your institution and why?

End

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