

**PUBLIC UNIVERSITY EDUCATION: AN ANALYSIS OF
CAPABILITY EXPANSION AMONG STUDENTS IN UGANDA**

by

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Declaration

I declare that *Public university education: an analysis of capability expansion among students in Ugandais* my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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This thesis is submitted to the University of South Africa with my approval as supervisor.

Signed:Date.....

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Dedication

This thesis is dedicated to my wife Josephine and
to our children, namely;
Olive, Christina,
Rita and Victoria
who should be inspired
by this work

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Researcher

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Table of Contents

Declaration	ii
Approval	iii
Dedication	iv
Acknowledgments	v
List of Tables	xii
List of Figures	xiii
List of Abbreviations	xiv
Abstract	xv
Chapter One	1
Introduction	1
1.1 Introduction	1
1.2 Background to the Study	2
1.2.1 Formal education in Uganda	3
1.2.2 Public university education in Uganda	4
1.2.3 University education administration and design in Uganda	6
1.2.4 University education and education capabilities expansion in Uganda	8
1.3 Statement of the Research Problem	10
1.4 Objectives of the Study	11
1.5 Research Questions	12
1.6 Scope of the Study	13
1.7 Importance and Justification of the Study	14
1.8 The Research Process and Motivation for the Study	17
1.9 Research Design and Methodology	19
1.10 Organisation of the Thesis	20
Chapter Two	23
Human Capability Expansion: A Theoretical Review	23
2.1 Introduction	23
2.2 Human Capital Theory	23
2.3 Human Development Paradigm	27

2.4 The Capability Approach	32
2.4.1 Theoretical and practical relevance of the capability approach	42
2.4.2 Capability approach and education	47
2.5 Summary.....	52
Chapter Three.....	54
University Curriculum and Education Capabilities Expansion	54
3.1 Introduction	54
3.2 Formal education and capability expansion	54
3.3 University Education	56
3.4 University Education and Capability Expansion.....	59
3.5 University Curriculum Content and Education Capabilities Expansion.....	63
3.5.1 Theory-practice integration of university curriculum	68
3.5.2 Professional relevance of university education curriculum.....	71
3.6 Summary.....	79
Chapter Four.....	81
University Pedagogies and Education Capabilities Expansion	81
4.1 Introduction.....	81
4.2 University Teaching Processes and Capability Expansion	82
4.2.1 University lecturers' teaching strategies and approaches	82
4.2.2 University teaching quality assurance systems	90
4.3. Learning Processes in the University and Education Capabilities Expansion.....	94
4.3.1 Students' learning strategies and approaches	98
4.3.2 University teachers' and students' involvement in research.....	107
4.4 University Education in Context: 'Conversion Factors'	110
4.5. Conceptual Framework: A Synthesis of Theoretical and Literature Review	113
4.6 Summary.....	117
Chapter Five	119
Research Design and Methodology	119
5.1 Introduction	119
5.2 Research Design	119
5.3 Study Population.....	121
5.4 Sample Size and Selection	122

5.5 Data Collection and Data Sources.....	126
5.6 Data Collection Methods and Instruments.....	128
5.6.1 Interviews and interview guides.....	128
5.6.2 Focus group discussions.....	130
5.6.3 Document review.....	132
5.6.4 Questionnaire.....	132
5.7 Validity (Credibility) of Research Instruments.....	134
5.8 Reliability (Dependability) of Research Instruments.....	135
5.9 Analysis of Data.....	136
5.9.1 Qualitative analysis.....	136
5.9.2 Quantitative analysis.....	138
5.10 Measurement of Variables.....	139
5.11 Limitations of the Study.....	141
5.12 Summary.....	142
Chapter Six.....	144
Presentation, Interpretation and Discussion of Results: University Curriculum Content	144
6.1 Introduction.....	144
6.2 Characteristics and Backgrounds of Respondents.....	146
6.2.1 Interviews with respondents.....	147
6.2.2 Focus groups with respondents.....	147
6.2.3. Questionnaires with respondents.....	148
6.3 Curriculum Content and Higher Education Capabilities Expansion among Students in Uganda: An Overview.....	151
6.4 Theory and Practice Integration in Public University Education Curriculum.....	153
6.5 Relevance of Public University Education Curriculum Content.....	158
6.6 Correlation Analysis of Curriculum Content and Higher Education Capabilities Expansion..	166
6.7 Regression Analysis of Curriculum Content and Higher Education Capabilities Expansion.	167
6.8. Summary.....	169
Chapter Seven.....	170
Presentation, Interpretation and Discussion of Results: University Teaching Processes	170
7.1 Introduction.....	170
7.2 Teaching Processes and Higher Education Capabilities Expansion: An Overview.....	170

7.3 Teaching Strategies in Public University Education in Uganda	171
7.4 Teaching Approaches in the Public University Education System in Uganda	178
7.5 Quality Assurance Measures in Public University Education in Uganda	194
7.6 Correlation Analysis for Teaching Processes and Higher Education Capabilities Expansion	214
7.7 Regression Analysis for Teaching Processes and Higher Education Capabilities Expansion	215
7.8 Summary.....	216
Chapter Eight.....	218
Presentation, Interpretation and Discussion of Results: University Learning Processes and Extraneous Factors.....	218
8.1 Introduction.....	218
8.2 Learning Processes in Public Universities in Uganda and Higher Education Capabilities Expansion in Students: An Overview	219
8.3 Learning Strategies and Approaches at Public Universities in Uganda.....	219
8.4 Level of Research in Public Universities in Uganda.....	228
8.5 Correlation between Learning Processes and Higher Education Capabilities Expansion	237
8.6 Regression Analysis for Learning Processes and Higher Education Capabilities Expansion	238
8.7 Extraneous Factors Affecting the Influence of University Education Processes on Higher Education Capabilities Expansion	240
8.7.1 Social characteristics	240
8.7.2 Personal characteristics	245
8.7.3 Environmental characteristics	247
8.8 Summary.....	258
Chapter Nine.....	259
Summary, Conclusions and Recommendations.....	259
9.1 Introduction	259
9.2 Summary of Major Findings	259
9.2.1 Curriculum content of public university education in Uganda and education capabilities expansion	262
9.2.2 Teaching processes in public university education in Uganda and education capabilities expansion	265
9.2.3 Learning processes in public university education in Uganda and education capabilities expansion	268
9.2.4 Opportunities for capability expansion in public university education in Uganda.....	270

9.2.5 Some constraints to higher education capabilities expansion among students	272
9.2.6 Performance of public university education in higher education capabilities expansion	274
9.2.7 Higher education-related capabilities developed by public university education in Uganda	275
9.2.8 Higher education-related capabilities not well developed in public university education in Uganda	277
9.3 Lessons from the Capability Approach for Public Universities in Uganda.....	278
9.4. Emerging Higher Education Capabilities for University Education	281
9.5 Conclusions of the Study.....	282
9.6 Recommendations for Higher Education Capabilities Expansion.....	286
9.6.1 Improve curriculum content to match higher education capabilities expansion	287
9.6.2 Modernise university teaching processes to enhance higher education capabilities expansion	288
9.6.3 Exploit opportunities for student learning to enhance capability expansion.....	291
9.6.4 Develop the neglected capabilities in the public university education system.....	293
9.7 Contributions of the Study.....	293
9.8 Areas for Further Research.....	295
Bibliography	296
APPENDIX A.....	313
APPENDIX B.....	314
APPENDIX C	315
APPENDIX D	316
APPENDIX E.....	318
APPENDIX F.....	320
APPENDIX G	322
APPENDIX H	324
APPENDIX I.....	328
APPENDIX J	332
APPENDIX K.....	333

List of Tables

Table 5.1	Selection of sample of respondents.....	125
Table 6.1	Respondents covered in the survey (questionnaires).....	148
Table 6.2	Year of graduation by questionnaire respondents.....	149
Table 6.3	New graduates' perception of the curriculum content as integrated.....	155
Table 6.4	New graduates' perception of the curriculum content as relevant.....	158
Table 6.5	Correlation between curriculum content and higher education capability expansion.....	166
Table 6.6	Regression analysis for curriculum content and higher education capability expansion.....	167
Table 7.1	New graduates' opinion on whether lecturers were interested in imparting relevant skills in students.....	175
Table 7.2	New graduates' opinion on teaching methods used by lecturers as being effective.....	189
Table 7.3	New graduates' response on university teaching as a source of computer skills.....	191
Table 7.4	New graduates' opinion on whether lecturers are supervised.....	205
Table 7.5	Correlation between teaching processes and higher education capability expansion.....	213
Table 7.6	Regression analysis for teaching processes and higher education capability expansion.....	214
Table 8.1	New graduates' view on whether students revise notes when there is no examination in the offing.....	223
Table 8.2	New graduates' opinion on whether they were interested in acquiring knowledge than high grades at university.....	226
Table 8.3	New graduates' response on whether their bachelor degree studies involved a research study course.....;	230
Table 8.4	Correlation between learning processes and higher education capability expansion.....	237
Table 8.5	Regression analysis for learning processes and higher education capability expansion.....	238
Table 8.6	Perception of new graduates on the university environment as appropriate for learning.....	253

List of Figures

Figure 2.1	Trends and issues for human development theory.....	30
Figure 4.1	Conceptual framework for understanding the influence of university education process on higher education capabilities expansion.....	114

List of Abbreviations

HD	Human Development
HDI	Human Development Index
HEC	Higher Education Council (Australia)
HEQC	Higher Education Quality Council (United Kingdom)
GDP	Gross Domestic Product
ICT	Information and Communication Technology
IT	Information Technology
IUCEA	The Inter-University Council for East Africa
Makerere University	Makerere University Kampala
MUK	Makerere University Kampala
Mbarara University	Mbarara University of Science and Technology
MUST	Mbarara University of Science and Technology
NCHE	National Council for Higher Education (Uganda)
NBEET	National Board of Employment Education and Training
NG	New Graduate (2001-2010)
NGs	New Graduates (2001-2010)
UNDP	United Nations Development Programme
UPE	Universal Primary Education

Abstract

University education is ideally expected to significantly expand higher education capabilities among students. Yet, if left unchecked, university education processes can under-equip students in terms of higher education capabilities. In the last one and a half decades, public university education in Uganda has been rapidly growing in terms of student enrolment and course completion. However, the higher education capability levels among students and consequently new graduates (2001-2010) have apparently been declining, especially in terms of practical reason, sociality and participation, learning dispositions, and science and technology. The current study analyses why the new graduates of public universities in Uganda are seemingly deficient in higher education capabilities. Data for analysis were mainly collected from 221 stakeholders of two public universities, namely Makerere University and Mbarara University. The analysis focused on respondents' perceptions of the three sub-variables of university education, namely curriculum content, teaching processes, and learning processes. Through regression analysis, it was established that these sub-variables jointly predict higher education capability expansion among students in Uganda by 81.2%. Meanwhile, results from qualitative analyses suggest that the curriculum content of public university education is at an acceptable standard and, therefore, a minor cause of higher education capability deficiency among students. However, the teaching processes are perceived as ineffective since lecturers mainly use non-participatory approaches, teach fewer sessions than timetabled, and engage 'liberal' quality assurance measures that are open to abuse. Moreover, the learning approaches of some students seem to be surface in nature and the students' levels of research learning and practice are low. Hence, the study conclusions suggest that low levels of higher education capabilities among students or new graduates in Uganda are largely due to ineffective teaching and learning processes at the two public universities studied. Consequently, the study recommends that, in a bid to enhance higher education capability expansion among students, public universities should focus on improving teaching processes and learning processes, particularly on staff pedagogical skills, commitment, quality controls, and reducing the number of students enrolled in most university courses.

Key words: University education; public university education; capability approach; higher education capabilities; higher education capability expansion; curriculum content; teaching processes; learning processes; Uganda.

Chapter One

Introduction

1.1 Introduction

Education has overtime been accepted as one of the most effective interventions for improving wellbeing through imparting knowledge, skills and attitude(UNDP 2006: 267; World Bank 2001:15). Higher education improves individual capabilities that may translate into human wellbeing. It has also been established that “education constitutes a part of human freedom and human capability” (Tilak 2002: 196). However, the rapid increase in the number of degree holders from public universities in Uganda has not been matched by overall expansion in higher education capabilities among students. Indeed, employers and university lecturers attest that many new graduates (2001-2010) of public universities in Uganda do not have the requisite higher education capabilities expected of a typical bachelor’s degree holder (see also Appendix A and Figure 4.1). Thus, this study embarked on finding out why the graduates of public universities in Uganda over the last decade are seemingly deficient in higher education capabilities.

The current study analyses the perceptions of respondents on the role public university education in higher education capabilities expansion among students in Uganda. Public university education is the most dominant form of university education in Uganda in terms of student population (Kagolo 2011:1). A public university is one that is predominantly funded with public resources through a national or sub-national government. In the context of Uganda and of this study, public universities are the government-funded bachelor’s degree-awarding educational institutions above advanced secondary school level (see also 1.2.1 & 1.2.2). Meanwhile, the term *capability* refers to opportunities plus skills and capacities that can be enhanced (Gasper 2002: 446). The focus of the study is limited to the analysis of the education processes and higher education capabilities among students from the two oldest public universities in Uganda, namely Makerere University Kampala and Mbarara University of Science and Technology.

The study uses different methodologies to assess the functioning of the education processes in different courses at public universities in Uganda. Attention is paid to the curriculum content, teaching processes, and learning processes and how these sub-variables of university education affect higher education capabilities expansion among students (see also 2.4.2). The study considers selected programmes at public universities in Uganda and explores how the various education processes have either facilitated or failed to facilitate higher education capabilities expansion among students. The data used are from selected lecturers, new graduates, senior public officials from government line ministries, and general literature. In essence, this study focuses largely on perception and, therefore, reflects the feelings and views of respondents on university education and higher education capabilities expansion that are discussed in this research.

1.2 Background to the Study

Education provision is one of the key social services and it is a necessary development intervention that all countries in the world ideally provide to their citizens. This is a necessity because “education is supposed to liberate man, both physically and mentally” and helps men and women be “skilled users of tools” (Nyerere quoted in Nwonu 2008:138). Education empowers people through the process of knowledge, skills and attitude development. For example, university education facilitates the acquisition of private benefits for an individual such as better employment prospects, higher salaries, and a greater ability to save and invest. These benefits may result in improved human welfare (Bloom, Canning and Chan 2006: iii). Therefore, education develops people’s capability and consequently enhances their possibilities for living useful and productive lives. But education that transforms individuals should be well organised or formalised so that knowledge and skills are obtained systematically. In fact, many countries all over the world, such as Uganda, invest in formal education as part of developing the knowledge and skills of their citizens.

1.2.1 Formal education in Uganda

As Liang (2004:23) shows, Uganda's formal educational structure is a four-level single-track system of 7-4-2-3. These figures represent years of schooling but exclude the first (unofficial) level. The first level is pre-primary education (kindergarten and nursery) which is basically private education and is only available to 5-7% of three- to five-year-olds. The second is primary education that consists of a seven-year course. The third level is secondary education. There are two levels of secondary education: four years of lower secondary (Ordinary level) and two years of upper secondary (Advanced level). There are also technical schools and farm schools that run parallel to Ordinary level secondary school education. These schools offer craft certificates in various disciplines. Similarly, there are technical institutes, primary teacher training colleges, commercial colleges and several other specialist institutions that run parallel to upper secondary education. The fourth and last level of education is university and other higher education institutions such as technical colleges; colleges of commerce; national teachers' colleges; agricultural colleges; paramedical schools and a myriad of private institutions. Universities and higher education institutions offer degrees, diplomas, and certificates.

In Uganda today, government is starting to focus on business, technical and vocational education and training through increased funding. However, in the last one and a half decades the government has put a lot of emphasis on primary and secondary education, for example through introducing universal free primary education in 1997, and later on universal secondary education in 2007. Access to education and the transition rates to different levels consequently increased. For example, "transition to post primary education...increased from 35% in 1997 to 50% in 2002" (Uganda 2004: xxiv) and transition rates have continued to grow. Similarly, enrolment in university education grew very fast, both in the number of institutions and the size of the total student enrolment. Its structure has since evolved to become more complex as the system increasingly allow for all types of public and private universities to emerge (Liang 2004:31). However, this growth has been happening when development of higher education capabilities in public universities in Uganda seems to be decreasing or at best stagnating.

1.2.2 Public university education in Uganda

In this sub-section, the researcher presents the background to public university education so as to show to the reader the context in which the study is anchored. Universities exist in almost all countries of the world and they (universities) are the centres of knowledge and research. Universities in Uganda provide both undergraduate and postgraduate education. University education in Uganda started in 1949 when Makerere Vocational School was converted into a university. Since then, university education has expanded in all aspects such as student and staff numbers, nature of programmes and teaching and learning resources (see also 1.3).

Makerere University Kampala

Makerere Vocational School was established in 1922 with a population of 16 male students. It was opened as a skills training centre for the people of East Africa. It offered courses in medical care, agriculture, veterinary science, elementary engineering, surveying and teacher training. It later expanded in capacity and enrolment. In 1937, Makerere Vocational School developed into an institution of higher education offering post-secondary certificate courses (Sicherman 2005:22). In 1949 Makerere became a university college affiliated to the University of London that awarded general degrees of the university. It is at this stage that real university education started in Uganda.

Uganda became politically independent from British rule in 1962. One year later, in 1963, when the University of East Africa came into being, Makerere College ended its special relationship with the University of London and became a constituent college of the University of East Africa. Other constituent colleges of the federal University of East Africa were University College Nairobi in Kenya and University College Dar-es-Salaam in Tanzania.

In July 1970 Makerere University Kampala (Makerere University) became an independent national university offering undergraduate and postgraduate studies in a variety of disciplines. As Sicherman (2005: 57) notes, during the seven years of its membership of the University of East Africa (1963-1970), Makerere underwent a rapid

and intense evolution in terms of course development, multi-racial staff engagement and quality of teaching. The growth and development of Makerere University continued in the 1970s. Indeed, notable growth was experienced in student population from the early 1970s and onwards. Kasozi (2003: xiii) indicates that Makerere University grew “from about 2,500 in the latter part of the 1970s to about 25,000 in 2001”. Equally, Liang (2004:29) explains that at Makerere University (the largest public university in Uganda) enrolment increased more than four-fold from about 7,000 in 1993 to about 30,000 in 2002. The growth continued throughout the years that followed. By the beginning of 2010, Makerere University was estimated to have a population of 38,000 students.

Makerere University remained the only university in Uganda until 1989 when other universities opened and since then more than 30 universities have emerged in a period of about two decades. Of these new additional universities, four are public, namely Mbarara University of Science and Technology, Kyambogo University, Gulu University and Busitema University. The current study covers only Makerere University Kampala and Mbarara University of Science and Technology.

Mbarara University of Science and Technology

Mbarara University of Science and Technology (Mbarara University) was founded in 1989. It was the second public university to be opened in Uganda after Makerere [University] (Mbarara University of Science and Technology 2011:24). It was established to teach natural science disciplines, especially medical-related ones. It later on expanded to include a Faculty of Science and a Faculty of Development Studies. By the end of 2010, the university had three faculties, namely: a Faculty of Medicine; a Faculty of Science; and a Faculty of Development Studies. Today, there are also two institutes at the university, namely the Institute of Computer Science and the Institute of Tropical Forest Conservation. These two institutes teach specialised programmes in computer science and forestry, respectively.

Mbarara University of Science and Technology started with an enrolment of 43 students, who were admitted to the Bachelor of Medicine and Surgery programme. By the end of 2010 the entire student population was 3,180 (Mbarara University of Science and Technology 2011:24). This growth by over 700% in a period of 21 years is high and is partly a result of additional courses dealing with computer science, development studies, and tropical forest conservation. In fact, some of these non-medical faculties have been growing rapidly and have overtaken the Faculty of Medicine in student enrolment. All these developments at Mbarara University, just like at Makerere University, are largely related to the administrative systems and structures at the university.

1.2.3 University education administration and design in Uganda

This sub-section reveals the administration processes and structures of universities in Uganda that constitute the framework within which public university education is offered. Public university education in Uganda is a continuation of secondary school education, which in turn builds on primary education (see also 1.2.1). The university education system in Uganda was modelled on the British system, although some changes have occurred in both systems. A bachelor's degree course in the humanities or business studies lasts for three years and a general degree (non-professional) course, whether in the natural sciences or the humanities, is covered in three years. On the other hand, the natural physical and biological professional courses last for four to five years, depending on the specific area of specialisation.

Each university is differently structured, but most of the universities in Uganda, at a strategic level, have: a council or board of trustees; a visitor; a chancellor or rector; a vice-chancellor or vice-rector; deans of various schools or colleges; and heads of department. Universities are generally divided into a number of academic departments, schools, colleges, institutes or faculties. Public universities in Uganda are regulated by government-run higher education boards or councils, under the direct supervision of the Ministry of Education and Sports. This structure is meant to ensure that the university education processes and outcomes measure up to the required standards.

The ministry reviews financial requests, policies, and budget proposals and then allocates funds or approves policies for each university in the system. The boards or councils approve new programmes of study and either cancel or make changes in existing programmes, before seeking clearance from the National Council for Higher Education (NCHE). In addition, the NCHE plans for the further coordinated growth and development of university education in Uganda. Nonetheless, public universities in Uganda have a considerable degree of financial, research and pedagogical autonomy. For instance, public universities in Uganda are permitted to run private academic schemes that generate funds to supplement government subventions in university budgets. The private schemes admit privately-sponsored students who study in the same classes with government-sponsored students.

Regarding the education processes, public universities in Uganda design their own curriculum content using their technical teams. College or departmental teams at each university determine the appropriate mix of theory and practice teaching, the professional relevance of a course or programme and the curriculum focus in terms of student needs. This autonomy creates room for weaknesses in the university education processes regarding what is taught, how it is taught and what the students learn. In effect, the capabilities developed are basically at the discretion of the technical teams at the university. Public universities offer courses in subjects ranging from the natural sciences, to leisure and hospitality, the social sciences, law or the humanities. Public universities in Uganda also determine their own way of managing the learning processes in terms of styles of learning that they prescribe for their students and the quality assurance measures that they institute in different university programmes. Incidentally, the level and quality of research and publications made by a university are the key determinants of its quality ranking. To this end, public universities in Uganda are expected to emphasise research and advanced training in their education processes.

In Uganda, public universities go beyond academics. They offer some amenities to their student population, including a variety of places to eat, banks, bookshops, print shops and bars. In addition, universities have a range of facilities such as libraries, sports

centres, students' unions, computer laboratories, hospitals and research laboratories. Externally, universities participate in different national programmes and even engage in corporate social responsibility activities. The universities, for instance, engage in national policy guidance, influence the behaviour of neighbourhoods, undertake consultancy assignments, and participate in designing national policy content packages. Such interventions are effected through various programmes and projects designed by the universities themselves. Therefore, when there are quality problems in the universities the negative effects will spill over into the labour market, the neighbourhoods and national policy arenas. The spill-over appears to be resulting from the relationship between university education and student capability expansion.

1.2.4 University education and education capabilities expansion in Uganda

University education processes include the development of the curriculum content which the lecturers teach to students. University education also covers teaching processes that include lecturers' teaching strategies, approaches and quality assurance measures and evaluation of the teaching processes. In addition, there are learning processes that include the strategies or styles of learning and research.

It is possible that effective university education processes can contribute significantly to improvements in students' education capabilities (Billet 2009:827). Such university education processes would be characterised by relevant curriculum content, well-managed teaching processes, research, and well-guided learning processes. A country can develop and operate university education systems which align their curriculum content, teaching and learning processes with students' learning intentions. When the education processes are rigorously operated they significantly contribute to education capabilities expansion.

In Uganda, the government holds that "education contributes to the accumulation of human capital, which is essential for higher incomes and sustained economic growth" (Uganda 2004:153). Actually, there is a realisation that investment in education benefits both the individual and the society at large (Todaro 1999; Uthoff and Pernia 1986:39).

Hence, government has been allocating resources to the education sector at all levels, from primary through to university. Ideally, the allocated resources should have, inter alia, been channelled by universities to facilitate the university education processes so as to improve on the education outcomes. Key education outcomes include the enlargement of education capabilities and the general capabilities that may enhance individual agency development and nationwide human wellbeing (see also Figure 4.1).

A capability can be regarded as a person's ability to perform important acts or reach states of being or as the different combinations of things a person is able to do or be (Walker and Unterhalter 2007:2). Capability, inter alia, connotes knowledge, skill, learning, importance, and a need for individual promotion (Gasper 2002:446). The process of educating people is a process of building or expanding capabilities. Therefore, education at all levels, including university, ideally enlarges people's capabilities (see also 2.4). In the context of university education, first degree holders are expected to have higher education capabilities such as those listed by Walker (2006:128-129) and Terzi (2007:37), namely: practical reason, sociality and participation, learning dispositions, and science and technology (see also 5.10). These capabilities can be instrumental in an individual's success at the workplace. This is because, as Billet (2009:2009:827) indicates, the workplace responsibilities quite often require a new graduate worker to possess such capabilities that enable him to handle work competently. Hence, one of the ways to understand the linkage between university education and human capacities development can be through the *capability approach*.

The capability approach was developed and continuously improved by Amartya Sen in the 1980s and 1990s. It was developed as a conceptual framework for evaluating social conditions in terms of human wellbeing. As Robeyns (2001:3) explains, "the capability approach is primarily and mainly a framework of thought, a mode of thinking about normative issues" and by implication "a framework of thought for the evaluation of individual advantage and social arrangements". Hence, education can be analysed in terms of contributions to capabilities development. For example, education has a causal relationship to freedom; "because freedom is a social *product*, education (a social

arrangement) is implied to have a decisive link to freedom” (Unterhalter 2008:493). The capability approach, therefore, can be used to analyse university education outcomes because the approach has “the plurality of purposes” for which it can have relevance in different fields (Sen quoted in Robeyns 2001:3). And, as a framework of thought for the evaluation of individual advantages and social arrangements, the capability approach focuses on *functionings* and *capabilities*(see also 2.4).

University education provides an opportunity to a student to develop multiple capabilities which can be educational or general in nature. University education capability, inter alia, covers: learning dispositions; sociality and participation; practical reason; and science and technology. On the other hand, the general capabilities include: independence; freedom; rights and employment (see also Figure 4.1).At university level, most students are adults and therefore study for a purpose. One of the rational purposes for study at university is to develop high-level knowledge and skills (capabilities) in a given area. Ideally, the university alumni should exhibit multiple and high-level(complex)education and general capabilities. However, it appears that many new graduates from public universities in Ugandahave not acquiredreasonable highereducation capabilities that can facilitate the achievement of functionings such as human agencyand wellbeing.

1.3 Statement of the Research Problem

Although education is widely accepted as one of the key instruments for promoting human agency and wellbeingbecause it provides knowledge, skills, and learning(Terzi 2004: 9; Gasper 2002: 445; and Walker & Unterhalter 2007:7), it is not clear whether rapidly increasing levels of enrolment in university educationprogress in tandem withhigher education capabilities expansion among students. In Uganda, for example, higher education capabilities among first degree graduatesareapparentlydeclining or stagnant in spite of a rapid increase in enrolment at university level since 1970s. In fact, university enrolment grew by about 1000%from 5,900 students in 1975 to 58,100 students in 2001 (Kasozi 2003:1). This growth has continued with the opening of more universities, especially in the 1990s. Moreover, as Liang (2004:29) notes, at Makerere University, in one decade alone, student enrolment increased more than four-fold from

about 7,000 in 1993 to about 30,000 in 2002. At the same time other public universities had about 5,000 students and, as Kagolo (2011:1) shows, by the end of 2010 the level of university enrolment in Uganda was estimated at 82,000. Of these, about 63,000 students belonged to the five public universities combined and over 93% of them were envisaged to complete their first degree studies.

In spite of this rapid growth in university enrolment in Uganda, the extent to which public university education affects the expansion of higher education capabilities (for instance practical reason, sociality and participation, learning dispositions, and science and technology) among students is not clear. What seems to be known are the signals from the labour market that indicate average levels of new graduates' productivity at the workplace. For example, Wiegratz (2009:40-41), Asimwe (2011:7) and Uganda (2011:8) provide evidence that the new graduates in Uganda have low labour productivity due to, among other things, deficiencies in knowledge, skills and attitudes. Besides, the World Bank (2004: 29) and Muwonge (2009: 62) reveal that Uganda's new graduates are taught at the workplace what to do instead of them working and that they lack skills which they should have obtained from university. Yet, as Billet (2009: 827) asserts, "graduates are expected to have the capacities to engage immediately and effectively in the professional setting where they secure employment". However, these capacities are seemingly missing among the new graduates (2001-2010) of public universities in Uganda. Therefore, the focus of this study is to examine why the new graduates of public universities in Uganda over the last one decade or so are seemingly deficient in higher education capabilities.

1.4 Objectives of the Study

The main objective of the study is to analyse the role played by public university education in expanding higher education capabilities among students in Uganda. In effect, the study analyses how the curriculum content, teaching processes, and learning processes influence the expansion of higher education capabilities among students.

The specific objectives are:

- i. To examine the contribution which the content of university education curriculum in Uganda makes to higher education capabilities expansion among students. In effect, to examine whether the curriculum content facilitates the development of education capabilities such as learning dispositions, practical reason, science and technology, and sociality and participation.
- ii. To analyse the extent to which the university teaching processes in Uganda contribute to higher education capabilities expansion among students. In essence, to analyse how the teaching processes contribute to learning dispositions, sociality and participation, practical reason, and science and technology capabilities.
- iii. To assess the contribution which the university learning processes in Uganda make to higher education capabilities expansion among students. Basically, to assess how the learning processes contribute to education capabilities enlargement such as learning dispositions, sociality and participation, science and technology, and practical reason.

1.5 Research Questions

Arising out of the problem statement (in 1.3), the central research question is: Why are many graduates of public universities in Uganda over the last one decade (2001 – 2010), or thereabout, apparently under-equipped in terms of higher education capabilities?

The specific research questions are:

- i. What contributions does the curriculum content of public university education in Uganda make to higher education capabilities expansion among students?
- ii. To what extent do the teaching processes of public university education in Uganda contribute to higher education capabilities expansion among students?
- iii. What contributions do the learning processes of public university education in Uganda make to higher education capabilities expansion among students?

1.6 Scope of the Study

The current study is limited to public university education in Uganda and its influence on higher education capabilities expansion among students (see also 5.12). The general capabilities and the achieved functionings are not analysed because, from the literature review, the researcher conceptualised them as *outcomes* of higher education capabilities. Hence, in order to focus the analysis, general capabilities and achieved functionings were deemed to be outside the purview of this study (see also Figure 4.1).

Public university education is analysed only in terms of curriculum content, teaching processes, and learning processes. On the other hand, higher education capability is considered in terms of skills, learning, knowledge and capacities that can be developed (Gasper & van Staveren 2003; Gasper 2002: 446). Hence, higher education capabilities expansion means increasing opportunities, skills, learning, knowledge and individual capacities. In this study, the selected higher education capabilities are: learning dispositions; sociality and participation; practical reason; and science and technology.

Public university education is chosen because it is the most popular form of university education in Uganda, enrolling over 80% of the total university student population in the entire country. Public university education is limited to that part of tertiary education above Senior Six (A level) that offers bachelor's degrees and is government-funded (see also 1.2.1). The study explores two out of five public universities in Uganda. The universities selected are Makerere University and Mbarara University. The focus is only on the undergraduate/bachelor's degree programmes. This is because the majority of the graduates in Uganda possess only a bachelor's degree. Moreover, there is a reasonable and known level of education capability development the researcher can anticipate to find at this level of education (see also Appendix A).

The respondents of the study were limited to three categories, namely: new graduates, lecturers in the undergraduate programme, and senior public (government) officials. The government officials were from three line ministries that are concerned with

university education, skills development and new graduate employment in Uganda, namely the Ministry of Education and Sports; the Ministry of Gender, Labour and Social Development; and the Public Service Commission (see also 5.4).

The period covered by the study is 2001 to 2010. This period was selected because 2001 marks the beginning of a new millennium that was internationally received with a lot of political hype, including the formulation of the Millennium Development Goals in September 2000 that were launched with many development targets. Meanwhile, 2010 was the year when the last batch of new graduates (2001-2010) finished university just before the data collection exercise commenced. For example, qualitative data collection started in June 2010 and ended in April 2011, and then quantitative data was collected in May 2011.

In the current study the researcher places the capability approach to development at a higher level of education, namely university education. The aim is to demonstrate that the capability framework can be used to interpret a body of complex capabilities in university education. In the process, the capability approach is used to explain the curriculum and pedagogies of university education and their effects on enlarging student capabilities, thereby making the approach a valid framework for the evaluation and promotion of university education.

1.7 Importance and Justification of the Study

In this study, the researcher argues that public university education processes in Uganda have inadequately equipped the new graduates in terms of higher education capabilities expected of a typical university first-degree graduate (see also 1.3; 5.10; & 9.2.6). To this end, the apparent higher-education-capability deficiencies among new graduates (2001 – 2010) of public universities in Uganda are mainly due to weaknesses inherent in the university education processes particularly in the curriculum content, teaching processes and learning processes. It is, therefore, imperative that the university education processes are analysed to unravel the intricacies of why new graduates are seemingly deficient in higher education capabilities.

Education is one of the key components of the wider discipline of development studies. In fact, educational progress is part of the human empowerment interventions (UNDP 2006: 267). And, as scholars point out, the economic progress of a nation has a bearing on the knowledge levels and the types of capabilities the workforce possesses (Kember, Leung & Ma 2007: 610). To this end, loopholes in education processes pose the risk of disempowerment and consequently curtail human progress. Therefore, the scenario of the apparent higher education-capability-deficits among new graduates in Uganda quietly presents a socioeconomic development risk to the country's economic development; hence the importance of this study.

The study contributes to the expansion of knowledge in the area of higher education capabilities, public university education reforms and overall development theory and practice. This study, therefore, becomes critical as it unveils the linkages and/or limitations of Uganda's public university education processes in the expansion of higher education capabilities among students. This contribution is important because the study further exposes the functioning of university education processes and highlights the public sector officials' reservations about public university education in expanding higher education capabilities among students.

The current study also reveals the context within which curriculum content as well as the teaching and learning processes of public universities in Uganda are designed and implemented. For example, the study highlights: the limited learning resources; the neglect of the use of the most pedagogically-popular methods; the incongruent perception of the curriculum content among lecturers, students and employers; and the students' relaxed approach to studies (see also Chapters Six, Seven and Eight). In essence, these limitations of public university education to higher education capabilities expansion are revealed.

Hopefully, this study provides valuable information to the 'advocates' of public university education and higher education capabilities expansion. Using information generated

from the analysis in this study, the Ugandan government might acquire a clearer understanding of the limitations of her public university education processes in developing the skills, knowledge and capacities of people, especially the young people who are the foundation of the 'future nation'.

Since the public universities in Uganda do not seem to have taken deliberate measures to refine or redesign public university education processes with a view to linking education processes to education capabilities expansion, it is possible for a mediocre form of education processes to continue unabated 'under the nose' of management teams at public universities. If this 'second-rate' education continues, the long-term deficiencies in higher education capability among an increasing number of public university graduates will have a negative impact on overall national socioeconomic development. The analysis in this study, hopefully, generates information that can contribute to an improved understanding of why the new graduates in Uganda appear to be deficient in higher education capabilities.

The data collected helped in verifying, developing, testing, confirming or even criticising theories or paradigms such as the human capital theory; the human development paradigm; and the capability approach to human wellbeing. The capability approach is the dominant framework used in the thesis because of its relevance to the study and because, as Robeyns (2005: 94) indicates, the capability approach embraces all dimensions of human wellbeing, whether social, political or economic. Moreover, as Schischka, Dalziel and Saunders (2008: 229-230) argue, although a development intervention such as education "may supply more goods, or may enable people to learn more skills, this is not necessarily progress unless there is an expansion of the participants' capabilities..." Therefore, there is need to provide not only university education but higher education capabilities among students that enhance the promotion of human agency and wellbeing.

Finally, it should be noted that there are many contributors to the expansion of students' opportunities, skills, learning and capacities, for example exposure and experience, but

university education should ideally be central to the development of these education capabilities. This is because university education is formalised, deliberate and takes three to five years, requiring a student to learn the various skills and knowledge and to develop capacities. Therefore, it is important to explain the role of public university education – which is separate from other human capability developers – in higher education capabilities expansion. What necessitates the documentation of this study is the fact that public university education in Uganda continues to be demanded, promoted, and financed by the public in spite of the growing evidence that the quality of higher education capabilities developed among students is questionable. In this chapter, the researcher also summarises the methodology that was followed to accomplish this study.

1.8 The Research Process and Motivation for the Study

The study progressed through a number of stages from conception to finishing. Firstly, the researcher is a lecturer at Uganda Management Institute (UMI). The institute admits students into post-graduate programmes, especially postgraduate diplomas, in which the researcher has been teaching. There are no undergraduate programmes at UMI. Secondly, overtime, the researcher observed that the quality of students admitted to UMI was declining in spite of the increasing student population. The decline in quality was more noticeable in coursework essays, tests and examinations. Thirdly, the researcher suspected a problem within the university education processes from where these students were coming and this raised the researcher's curiosity about the subject area. The interest in the study was also sparked off by the imagined poor service delivery in the public and private sectors which such new graduates were likely to be delivering. In addition, the imagined subsequent development repercussions of such an 'under-equipped' graduate population were undesirable, hence the motivation for the study (see also 1.7).

The study was conceived in January 2008 as "The role of higher education institutions in poverty reduction". Poverty was defined from the UNDP (2005:39) perspective as "the absence of some basic capabilities to function". This definition is in line with Sen's (1999a:87) description of poverty as deprivation that restricts the "capabilities that a

person has, that is, the substantive freedoms he or she enjoys to lead the kind of life he or she values”.

In August 2009, after discussions with the academic promoter in a departmental seminar, at the University of South Africa (Unisa), the study was narrowed down to the role of public universities in poverty reduction in Uganda. As the study progressed, especially due to insights gained from literature reviews on the capability approach, the focus was further narrowed down to the role of public university education in capability expansion in Uganda. The change from poverty reduction to capability expansion was also influenced by some readers in Unisa research workshops who repeatedly interpreted poverty reduction in employment and income terms and had great difficulty in appreciating that *poverty* can be synonymous with *capability deprivation* and, therefore, *poverty reduction* can be synonymous with *capability expansion*. The researcher opted for a more direct phrase, namely: capability expansion (instead of poverty reduction). Hence the topic became “Public university education: an analysis of student capability expansion among students in Uganda”.

The initial plan was to interview 80 respondents, namely 20 lecturers, 12 university administrators, 14 government officials, and 34 new graduates. These would be supplemented by 288 new graduates who would complete a questionnaire. However, as the research progressed through consultations with the promoter, it turned out that interviewing so many respondents was impracticable, even illogical. Moreover, the respondents completing the questionnaire were meant to provide supplementary data, and a smaller sample would still be scientifically acceptable in a highly qualitative study.

With the guidance of Unisa staff in departmental seminars, the number of respondents was adjusted to 178 new graduates (survey/questionnaire respondents), 18 new graduates (interview respondents), 36 lecturers (for both focus group and individual interview participants), and 11 government officials (individual interview participants). These were the respondents who were targeted; but, at the implementation stage of the study, the number slightly reduced. A total of 166 (out of 178) respondents returned the

questionnaires; 14 of the 18 targeted new graduates participated in interviews; 23 lecturers participated in focus groups and nine lecturers were interviewed individually, totalling 32 lecturers as opposed to the 36 targeted lecturers. Finally, nine out of 11 government officials participated in the interviews. In total, 221 respondents out of the targeted 243 participated in the study in different capacities (see also Table 5.1). Data from these respondents were scrutinised by the researcher and considered to be sufficiently credible, dependable and trustworthy to meet the objectives of the study. Eventually, data were analysed and this thesis was written.

1.9 Research Design and Methodology

This sub-section summarises the research design and methodology used in the study. The research methodology is, however, elaborated in Chapter Five of this thesis. The study is a case study in the form of an empirical inquiry and investigates public university education and education capabilities expansion within the context of Uganda. The case study design was considered as the most appropriate because of the need to undertake an in-depth analysis of university education processes and education capabilities expansion. As Yin (2003:2) and Amin (2005:195) recommend, the study used multiple sources of evidence to generate data for analysis.

The researcher used both qualitative and quantitative approaches. Emphasis was put on the qualitative research approach because, as Amin (2005:42) indicates, qualitative research promotes “greater understanding of the way things are, but also why they are the way they are”. Hence, qualitative research explains and reveals insights and an understanding of a given phenomenon such as university education.

As already indicated elsewhere in this thesis, the study covers two out of five public universities, namely Makerere and Mbarara universities. These two universities were selected because they are the oldest and most populated public universities in Uganda (see also 5.4). Using purposive sampling, two out of six colleges were selected and 36 lecturers at different levels at the two universities were selected. In addition, 196 new graduates from these two universities from 2001 to 2010 were selected using cluster

sampling. The new graduates are the major respondents, followed by lecturers and finally senior public officials from selected government ministries.

At the time of the study, there were 22 government ministries in Uganda. Of these, only three ministries were included in the study as data sources. The ministries were purposively selected on the criteria of being at the forefront of the design, development and delivery of public university education or being the immediate employers of new public university graduates.

The study used both primary and secondary data. Data collection was done mainly through short questionnaires, semi-structured interviews with lecturers and new graduates of public universities in Uganda, and interviews with senior public officials in the central government ministries. Three focus group discussions were held with university lecturers. The themes of investigation were curriculum content, teaching processes, learning processes and education capability enlargement.

The data were qualitatively and quantitatively analysed. They were coded and developed into broad themes that later facilitated a broad interpretation. Through thematic and content analysis the data were discussed and interpreted. The major themes of analysis were: how the curriculum content affects higher education capabilities expansion; how the learning processes influence higher education capabilities development; and how the teaching processes affect higher education capabilities expansion. The analyses were done in the context of public university education in Uganda, focusing on selected undergraduate programmes.

1.10 Organisation of the Thesis

This thesis is presented in nine chapters. The first chapter is the introduction, and it provides a background to the study, a statement of the research problem, objectives of the study, and research questions. The chapter also presents the scope of the study and the importance of the study, and ends with an outline of the research design.

Chapter Two discusses three theoretical paradigms relating to human capability expansion. The theories discussed are: the human capital theory; the human development paradigm; and the capability approach. The chapter pays extra attention to the capability approach where the theoretical and practical relevance of the approach are discussed. The chapter also analyses the educational aspects of the capability approach with emphasis on higher education.

Chapter Three presents a review of literature on conceptualisations of education, university education curriculum and capability expansion. The chapter further presents university education systems in terms of curriculum content. Curriculum content covers theory and practice integration of subject matter, and the professional relevance of the different education curricula.

Chapter Four presents a literature review of education processes, especially university education. Education processes are discussed in terms of teaching processes (strategies, approaches, quality assurance), and learning processes (strategies, level of research, learning environment). The chapter concludes with a presentation of the context within which university education is delivered. The context embraces societal structures, namely individual, social, and environmental characteristics. In addition, the chapter presents the analytical framework, putting together the ideas generated from Chapters Two, Three and Four under one illustration (see also Figure 4.1).

In Chapter Five, the research design and methodology are explained in detail. The chapter describes: the area of study; the population and selections of samples; the measurement of variables; the data collection methods and techniques; the data analysis processes and data presentation.

Chapters Six, Seven and Eight focus on the presentation, analysis and interpretation of the main findings. The findings are presented in three major themes, namely curriculum content (Chapter Six); teaching processes (Chapter Seven); and learning processes (Chapter Eight). The findings explain the role of public university education in higher

capability expansion processes, thereby revealing why university students are under-equipped in terms of higher education capabilities.

The study concludes with Chapter Nine, which synthesises the major findings as discussed in the entire thesis. The chapter presents a further discussion of findings. Finally, the chapter discusses the emerging capabilities that apply to university education and presents the study conclusions and recommendations. Since the study is mainly guided by the capability approach, the following chapter (Chapter Two) elaborates on this approach. Chapter Two also briefly reviews other two theories, namely: the human capital approach; and the human development paradigm.

Chapter Two

Human Capability Expansion: A Theoretical Review

2.1 Introduction

After Chapter One has provided an overview of and laid a foundation for the current study, the researcher now turns to a discussion of the dependent variable: *capability expansion*. This chapter presents a review of selected theories relating to human capacity enlargement and/or capability expansion. The chapter briefly discusses a neoclassical theory of human capital indicating its focus, propositions and weaknesses. A more elaborate review is made of the human development paradigm and the capability approach. The capability approach is further elaborated because of its centrality to the current study. This elaboration is because one of the underlying objectives of this study is to assess the potential for guidance that the capability approach presents to public university education so as to contribute to education capabilities expansion. In addition, the chapter provides a foundation for furthering and evaluating public university education from the capability perspective. In the capability approach, firstly the concepts of capabilities, functionings, agency, freedom and wellbeing are discussed; and secondly focus is put on the various broad categorisations of capabilities as basic, combined, and complex or higher. The final analysis pays attention to how the capability approach can be operationalised in the context of university education.

2.2 Human Capital Theory

The human capital theory explains the rationale for human capital development. The theory is one of the neoclassical or orthodox economic theories under neo-liberal development thinking. It was propounded after World War II by economists such as Milton Friedman, Gary Becker, Theodore Schultz and Jacob Mincer as “a theory to examine the benefits of education for individuals and society” (Bloom, Canning and Chan 2006: 1). It draws heavily on the theoretical framework of rational economics articulated by Adam Smith (Assie-Lumumba 2006: 43). In human capital terms, training and developing people are investment decisions due to the envisaged future benefits in

relation to the current and past costs of training. Human capital investment is, therefore, related to other investment decisions taken by an individual or a firm (Blundell, Dearden, Meghir and Sianesi 1999:1). Actually, the decision to invest in education is even a rational choice compared to other kinds of alternative investment taken by a person or a firm. This rationality is explained from the point of view that the returns from education investment are more valuable and more important than those from other investments (Cameron 1998:4; Jhingan 2007:388). The human capital theory is in effect concerned with education and earnings. Earnings are obtained from employment, which avails money for savings, investment, capital accumulation, thereby increasing individual wellbeing. The idea of human resource as capital is central to this theory; hence individuals are encouraged to invest in education, but only after considering the education costs and benefits compared to other alternative investments.

Investment in education is also considered to be empowerment. Empowerment is a positive step in improving human welfare (World Bank 2002b:132). In terms of human capital formation, education provides a nexus between equity and growth (Pieterse (2002:119), and these are necessary for human prosperity. Hence, education provides a critical input in the process of improving human capital or capacity enhancement.

At national level, economic growth is a precursor to human prosperity (Bloom et al. 2006:16) and education makes one of the easiest combinations for equality and rapid growth for an economy (Griffin quoted in Pieterse 2002:119), through developing people's knowledge and skills. Knowledge and skills enable people to contribute to total national output and improve on their individual lifetime earnings (Uthoff and Pernia 1986:39). Hence, economies grow and prosper "not from more capital investment but from investment in men and improvements brought about by improvements in men"¹(Galbraith quoted in Jhingan 2007: 388). Education is, therefore, a crucial input in economic development, social development and human capability expansion.

¹ Galbraith uses the word 'men' loosely to refer to people or human beings.

According to the human capital theory, the likely future benefits and the current costs of training are taken as criteria for investment in human capital. Potential contribution of one's output is measured and related to the lifetime earnings-increase due to one's additional education. Costs incurred by the individual and society during the educational training investment period are taken into account. This is done in order to identify which educational programmes are showing positive balances between costs and benefits so as to discourage those showing negative returns (Uthoff and Pernia 1986:39). Hence investment in human capital is undertaken by rational individuals or firms expecting positive net rates of return in the future (Blundell et al. 1999:1). This analysis underpins the criteria for investment in any form of education programme or project such as university education.

Jhingan (2007:392-95) offers criteria for investment in human capital drawing ideas from some economists. The propositions he recommends are: (i) *The rate of return criterion*: This is where education investment considers future consumption and future earnings in the belief that investment in education increases future earnings and education consumption leads to satisfaction. Hence, in "calculating the return on investment in education the future earnings component is considered discounted for interest to measure their present value". The value of a training programme in terms of earnings can therefore be estimated. However, other external economies of education are excluded. (ii) *The contribution of education to gross national income criterion*: According to this criterion, "investment in education is determined by its contribution to increase in gross national income" or other forms of economic physical capital formation over a given period of time. The calculations measure the impact of educational investment on the economy by estimating the opportunity cost of education and the expenditure incurred in formal education, taking care of depreciation. And (iii) *the residual factor criterion*: A measure is made of 'residual factors' which include "education research, training, the economies of scale and other factors affecting human productivity". The estimates focus on the proportion of increase in Gross National Product over a period of time and how much of this increase can be attributed to education research, training and other residual factors. However, the inclusion of other factors in the calculations could

make it complex and could result in measures of irrelevant or non-educational factors that increase productivity, such as improvements in physical facilities, thereby eclipsing the contribution of education and training to income.

It should be noted that from the foregoing criteria for investment in education used by economists, the first criterion reveals a narrow focus of the human capital theory as it is only on income and excludes other education benefits. In the same way, the focus of the second criterion remains on economic gains. Nonetheless, the last criterion takes into account additional factors besides income that can be obtained from education; although these (other factors) are downplayed in further elaboration of the third criterion by the same economists.

Furthermore, under the human capital theory, the benefits of a person's potential contribution to total output are estimated by assuming that future incomes will relate to those observed from cross-sectional estimates of age educational profiles. To obtain the data, population censuses and income surveys are used. Direct costs incurred by the family on a trainee, for example on food, clothing, housing, transport and scholastic materials are considered as social costs. Meanwhile the indirect costs include the opportunity cost of training programmes such as income forgone, value of tax exemptions by the training institution's structure, labour lost by government as a result of keeping energetic people at school instead of at work, and so on (Uthoff and Pernia 1986:39-41). In effect, as already indicated, all calculations of education costs and benefits seek to explore the economic viability of an educational or training project and not of any other criteria.

The human capital approach holds that a worker's human resource endowments determine his/her contribution to output. This argument ignores the fact that other factors influence individual output levels, such as on-the-job training, experience, motivation, tools and time spent on the job. The approach also ignores the fact that in some cases increased training does not necessarily translate into increased productivity; for example

training might be for coping with new technology. Besides, formal education is not the only source of skills because they can also be acquired at home and enterprises.

The theory, especially the method of cost-benefit analysis or the rate of return criterion that puts, at the forefront, the issue of profitability analysis of a training or educational programme might send negative signals to poor societies that still have many alternative investments to make. It is possible that, using the human capital theory, training and higher education investment might at some point be discouraged after being proven to be economically loss-making, yet education has benefits to society that cannot be reflected in economic calculations. For example, a better educated population might be easier to communicate to, might understand human rights better and is likely to be nutritionally conscious. This is because education enlightens people. Besides, as Dreze and Sen (1995: 184) indicate, “education is also of intrinsic importance in that being educated is a valuable achievement in itself, for its own sake”. Hence, to be educated is to have gained something of value.

Owing to the extensive focus of the human capital theory on monetary gain from education by an individual student or an economy, the human capital theory is considered inappropriate for providing a foundation for this study in the analysis of the role of university education in the education capabilities expansion of students. As Mehrotra (2005:301) observes, the human capital theory treats education as a closed container with “a technical relationship between inputs and outputs”, ignoring the many other components of the education system. However, in this study the researcher acknowledges that the human capital theory provides insights into understanding that efficiency in the education provision process is important in student capability expansion and the process should be rationally managed.

2.3 Human Development Paradigm

Human development is “the improvement of the human condition so that people live longer, healthier and fuller lives” (Ranis and Stewart 2000: 49). The human development paradigm is a strand of development thinking which promotes the notion that

development should be judged from the extent to which it promotes 'human good'. The paradigm is concerned with the "widening of people's choices and the enrichment of their lives" as crucial in life (Haq 1995:20). Hence human development is the "process of enlarging a person's functionings and capabilities to function, the range of options that a person could do and be in her life" (Sen quoted in Fukudar-Parr 2003: 303); and it is also a "process of enlarging people's choices" (UNDP 1990:10). Hence, development of a person is about removing the limitations to what a person can do in life, for example eliminating illiteracy, poor health, lack of access to resources or lack of freedom (Fukudar-Parr 2003: 303). The removal of these obstacles opens the gates to both people-centred development and human capability expansion.

The rationale of human development is that "people are the real wealth of a nation"(UNDP 1990:1). People are both means and ends of development: they are at the centre of development at all stages and they are the purpose for development; hence development must focus on people (Haq 1995:3; Baru 1998: 2275; Streeten 1994: 232; 2007:232). The "personhood of people" enables us to see human beings as persons and not just a means of production in an economy (Anand and Sen 1994: 17). In essence, development should, therefore, be more than just the expansion of income and wealth but should focus on people (UNDP 1990: 10).

Human development is a model or paradigm that explains the necessary components of development that cater for human wellbeing. The paradigm is closely associated with the United Nations system, and it has been promoted through the annual human development reports. Mahbub ul Haq has been at the centre of developing and promoting the notion of human development since the early 1990s, and then Amartya Sen and Paul Streeten followed in his footsteps in the advancement of human development thinking. Haq (1995: 14-15), for example, argues that "the basic purpose of development is to enlarge people's choices" and these choices are ideally positive ones. Choices embrace the enlargement of all human choices in relation to economic, social, cultural and political alternatives. The emphasis on choices stems from the belief that economic growth together with expanding income do not automatically link to expanding

human choices and human flourishing; but “a link between growth and human lives can be created consciously through deliberate public policy – such as public spending on social services and fiscal policy to redistribute income and assets”. Therefore, economic growth is essential in poor societies for improving human welfare.

However, for human flourishing to be realised public policy must address the constraints that limit poor people from accessing the public good. These constraints could, for example, be relating to access to credit, land, basic services such as education or limitations to entry into the political or economic spheres of life. As Mehrotra (2005: 300) indicates, the human development paradigm is broader than the human capital theory but human capital is not a subset of human development because of different emphases: human capital leans on neoclassical economics while human development focuses on social policy. Furthermore, Tilak (2002: 196) points out that the human capital approach emphasises labour-force, its employment and subsequent economic contribution to economic expansion, whereas the human development approach focuses on people in their own right, whether employed or unemployed. However, as Fukuda-Parr (2003:308) observes, the human development approach shares some philosophies with the human capital approach. For example, both consider providing education to people as a powerful means to the attainment of economic progress in societies. Nevertheless, the human development paradigm goes beyond this argument and promotes human agency as a vehicle for “changing policy, social commitment, and norms that require collective action”, including concern for the promotion of human rights.

Human development has advanced the conceptualisation of development thinking regarding how people manifest social progress. Gasper (2002: 459), for instance, illustrates the trends and issues in the human development theory as shown in Figure 2.1 below.

Figure 2.1: Trends and issues for human development theory

From seeing people as:	To seeing them as:
i. masterful choosers amongst given possibilities (the view in standard neoclassical economics); and/or ii. as deployers of and investors in 'human capital' assets (themselves) which are no different from any other assets (the new growth theory view).	iii. having changeable, socially influenced, possibilities, and differing, changeable capacities for choice (the HD school); and iv. as people, producers, group members, culture bearers, men/women, old/young, parents/children...(extending the HD school).

Source: Gasper (2002: 459)

Key: HD = human development

From Gasper's illustration (in Figure 2.1), it is evident that human development shifts people from being external to development to being part of the development and even movers of the development process. People become agents of development as opposed to being passive beneficiaries of development.

Human development can further be described from different perspectives that reveal its components. Haq (1995:16-20) mentions four essential components that underpin the human development paradigm, namely: equity, sustainability, productivity and empowerment. *Equity* relates to equitable access to opportunities. *Sustainability* is about ensuring that the future generations are enabled to enjoy the same wellbeing as we enjoy or even better. However, only the positive elements of our livelihoods need be sustained and not the negative ones. *Productivity* is essential for human development. Productivity, improved through the development of human capital, creates a momentum for society's economic transformation. Indeed education, such as university education, is instrumental in improving human productivity. *Empowerment* implies that people are in a position to freely make choices – people enjoy political democracy and can influence decisions about their lives. In the empowerment process, investments have to be made in the education and health of people so that they may benefit from the existing market opportunities. Empowerment is an essential component for enabling people to access and harness opportunities that enhance human wellbeing. These components define human development as a distinct paradigm from other economic models. Actually, McNeill (2007: 18) refers to the human development paradigm as a valuable one in

terms of policy-making and with the potential to provide “technical, political and moral guidance”. Indeed, the paradigm addresses every traditional growth model from the human side of analysis and interpretation. This comprehensive coverage of human development makes the paradigm relevant in explaining human capabilities expansion and wellbeing.

Human development has a measure called the Human Development Index (HDI). It was developed by Haq and his associates in the 1990s. The index measures longevity, knowledge and living standards in one composite index where each of the three variables is assigned equal weight. Longevity is measured using life expectancy at birth. Knowledge is measured in terms of educational attainments (adult, primary, secondary and tertiary) with adult education accounting for two-thirds weight. And the standard of living is measured by the GDP per capita valued in terms of purchasing power parity (Baru 1998: 2276). Each of the three variables in the index is adjusted to a range from zero to one “by subtracting a pre-defined minimum value from the score for the country and dividing this [score] by the difference between a pre-defined maximum and minimum values” (Nguetack-Tsague, Klasen and Zucchini 2011: 184). The adjustments on the HDI generate an index that allows the comparison of human development levels across people in regions of the world. However, in spite of its popularity in human development policy and practice, the HDI is criticised for some weaknesses such as emphasising only three aspects of wellbeing hence falling short of covering all aspects of human development (Morse 2003 quoted in Nguetack-Tsague et al. 2011:184). However, by and large, the HDI is widely acclaimed as a good measure for quality of life and an alternative to the limited welfare measures that focus only on income (Baru 1998: 2276).

Human development thinking is hardly two decades old. It is still a growing paradigm. Indeed, the intellectual evolution in human development thinking is being stimulated further and refined (Haq quoted in Gasper 2002: 460). The idea of human development has largely been successful mainly because “it combined the practical and policy relevant [notions] with the academically respected [arguments]” (McNeill 2007: 12). However, human development ideas can be debated, criticised, refined and evolved

further in many directions and applied to many situations. Therefore the human development paradigm, though a popular approach to understanding human welfare, needs further refinement and evolution to increase its relevance in theory and practice. However, the human development paradigm can still be used as a guide to understanding university education and higher education capabilities expansion. Indeed, the human development paradigm to some extent guides this study, supplementing the capability approach.

2.4 The Capability Approach

Amartya Sen propounded the capability approach. Actually, he “expanded the human development approach further and called it the human capabilities approach” (Tilak 2002: 195). The central message of the capability approach “concerns the objective of human development: namely, that it should not be economic growth as an end-in-itself, but rather be the expansion of people’s real freedoms to do and be what they value” (Alkire 2005: 125). It should be noted that the capability approach came as a response to the monetary approach, including the human capital approach that emphasised money as almost synonymous with wellbeing. The capability approach has been developed piecemeal for over two decades starting in 1980s through the 1990s to the year 2000 and beyond. It has continued to be refined mainly by Amartya Sen, Martha Nussbaum, Ingrid Robeyns, Des Gasper, and Sabine Alkire.

The approach has evolved as “a broad normative framework for the evaluation and assessment of individual wellbeing and social arrangements, the design of policies, and proposals about social change in society” (Robeyns 2005:94). According to Sen (1999a: 75), the emphasis of the capability approach is that development should be seen as the expansion of human capabilities such as knowledge, health, a clean physical environment, and political freedom, not the maximisation of utility or its proxy, money income. Money income is a means to an end rather than an end in itself.

Capability

In development literature, capability means what people are basically able to do and to be (Saito 2003:19; Sen 1985a: 19). It is a set of life-paths achievable for a given individual (Sen quoted in Gasper 2002: 446). Capability represents the various combinations of functionings (beings and doings) that the person can achieve. A capability is, therefore, a set of vectors of functionings, indicating a person's freedom to lead a lifestyle of a person's choice from "possible livings" (Sen 1992:40; Gasper 2006: 1). A capability can further be seen as a person's ability to perform important acts or reach states of being or as the different combinations of things a person is able to do or be (Walker and Unterhalter 2007:2). For instance, a capability can be "the ability to be well-nourished, to avoid escapable morbidity or mortality, to read, write and communicate, to take part in the life of the community, to appear in public without shame"(Sen 1990 quoted in Saito 2003:19). Capabilities include knowledge, health, a clean physical environment, employment, and political freedom. Capabilities can either be elementary such as nutrition and health, or more advanced, for example "taking part in the life of the community and having self-respect" (Sen 1999a: 75).

Functionings

Under the capability approach, Sen is also concerned with 'functionings', which he at times combines with capabilities. Functionings are the various things a person may value doing or being but also "the things a person is substantively free to do" (Sen 1999a:75). Functionings are 'beings and doings' for example being well-nourished, being confident, or taking part in group decisions (Alkire 2003:5). Functionings also include working, resting, being literate, being healthy, being part of a community, being respected, and so on (Robeyns 2003: 6). Sen explains that "a functioning is an achievement, whereas a capability is the ability to achieve. Functionings are, in a sense, more directly related to living conditions, since they are different aspects of living conditions" (Sen 1987: 36). Functionings are the living conditions achieved by an individual and represent a set of closely related activities and states that form an individual's life (Grasso 2002:2), as contrasted to capabilities that are "notions of

freedom, in the positive sense: what real opportunities you have regarding the life you may lead” (Sen 1987:36). A functioning is a broad term referring to resources, activities and attitudes people immediately consider to be important, for example poise, knowledge, a warm friendship, a knowledgeable mind, good employment (Alkire 2003:5).

In general, functionings have several though related meanings. The multiplicity of meanings a functioning may carry include: “(a) an achieved state (like being without malaria), (b) a conscious action to achieve the state (taking a malaria pill), (c) internal bodily processes/activities (converting the pill to guard against malaria), and (d) activities to the achieved state (like living longer)” (Gasper 2002: 448). From the several meanings of a functioning, it can be noted that Sen’s concept of functioning is a flexible one covering a wide range of human wellbeings and agency achievements. However, this flexibility and broadness can also be a source of confusion when it comes to the measurement and applicability of functionings in different spheres of analysing human wellbeing. In general, it should be noted that, as Alkire (2005: 121) explains, functionings have to have value hence should not be evil or harmful, although scholars such as Stewart (quoted in Alkire 2005:121) have called for a listing of negative functionings.

Freedom

Freedom is one of the core ingredients of Sen’s capability approach. Freedom covers “a person’s ability to get systematically what he *would choose* no matter who actually controls the levers of operation” (Sen 1992: 65). Capability relates to freedom, which also means the range of alternatives a person has in choosing what kind of life to live (Dreze and Sen 1995). In this context, freedom is about the alternative options or combinations of functionings from which a person can choose. But freedom makes sense when combined with the individual abilities to make (rational) choices. This is because what makes a “‘good life’ is partly a life of genuine choice and not one in which the person is forced into a particular life – however rich it might be in other aspects” (Sen quoted in Alkire 2003: 5). Indeed, life is centred on freedom and freedom is a common motivation of human rights and individual development (UNDP 2000: 2). Freedom has an intrinsic value to the effect that the achievement of particular functionings is best

understood after taking into consideration “the capability set from which the functionings were chosen” (Burchardt 2009: 4). In effect, because freedom is very important in human life, without it (freedom) we may not claim human development or increased functionings such as agency and wellbeing. A person’s achieved functionings at any given time are the particular beings or doings the person enjoys in freedom and without freedom the enjoyment of functionings could be a nightmare (Alkire 2003:5). Therefore, freedom has an intrinsic value obtainable both from the choices made and the process of making these choices; but the choices have to be valuable choices in order to improve on human wellbeing. Consequently, the choices at hand have to be evaluated to determine those that are valuable and those that are not.

It should, however, be noted that freedom does not guarantee human wellbeing. Sen explains that a person could have plenty of freedom, without achieving much in life. Moreover, the low achievement levels could happen even if an individual has the capacities to achieve a functioning. This is because even if the capability of an individual is high but “for any reason individuals may choose not to actualize it; or they may choose to have more from a sort of freedom than from another” (Sen quoted in Comim 2001:7). By implication, within the freedoms available individuals still make choices on which one(s) to have more of and which one(s) to have less of.

The capability approach, probably owing to its many contributors, suffers from an apparent mix-up of ideas and descriptions that makes delineation of concepts rather cumbersome. Indeed, some authors, such as Gasper (2002:442), criticise Sen’s capability approach on the grounds that the concepts of functioning, freedom, capability and capabilities are sometimes obscure. For example, Sen’s conceptions of wellbeing and agency are problematic and shares some of the weaknesses of utilitarian psychology; and his conception of freedom appears too focused on the range of (valued) choices, and without considering other aspects of being and need. Moreover, Sen holds that the term ‘functioning’ means several things, from achieved states to actions, to activities resulting from achieved states. The researcher argues that this broad

description of functionings accompanied by some overlapping examples on a list of capabilities and on a list of functionings can be a source of conceptual confusion.

Wellbeing and agency

Wellbeing: The study discusses wellbeing because in the capability approach, capabilities make sense if they translate into achieved functionings that are basically manifested through agency achievement and wellbeing. Wellbeing relates to the standard of living of an individual (Sen 1987). It is a personal dimension and relates to one's life – both to what the person has that makes the person feel happy and what the person does that makes them happy. If a person is involved with commitments that do not benefit the agent herself, then wellbeing is on overall agency (Robeyns 2003:15; 2005:102). By implication, Robeyns suggests that an individual may feel happy because he has helped another person solve a problem and such agency wellbeing could be related to the freedom that individuals have to achieve this outcome.

From the human development perspective wellbeing relates to the basic needs approach. Wellbeing means that the opportunities and choices most basic to human development are accessible and people are able to “lead a long, healthy, creative life and to enjoy a decent standard of living, freedom, dignity, self-respect and the respect of others”(UNDP 2005:38). Thus wellbeing is a broad term that encompasses many human development achievements. The UNDP further states that wellbeing is manifested in the abundance of the means of livelihoods people can lead and it involves the presence of necessities of material wellbeing, and of opportunities for living a tolerable life.

Wellbeing occurs when an individual enlarges his capabilities. Education contributes to wellbeing through capabilities development. Education enables individuals to acquire knowledge or become literate. At a higher level, such as university, “education supports the opportunity and empowerment dimension” of wellbeing (World Bank 2002b: xx). This is because university education offers life chances for people to access better employment and income, thereby increasing their wellbeing. Hence, education can be an essential component of the policy intervention package for improving wellbeing.

Agency: Under the capability approach agency is one of the key functionings of human life. Agency refers to “constructing oneself as an actor” (Walker 2006:129). Sen emphasises the ‘agency’ aspect of freedom when he argues that “the people have to be seen, in this perspective, as being actively involved...in shaping their own destiny and not just as passive recipients of the fruits of cunning development programmes” (Sen 1999a: 53). People should be able to act to bring about desired change (Sen 1999a: 11, 19). Hence, participation in community affairs, where members freely do something for others that they value is an expression of agency (Dreze and Sen 1995:106). Indeed, the process of obtaining freedom to make choices involves the beneficiaries of freedom as actors (agents) and not simply as individuals receiving freedom from ‘donors’. The capability approach, therefore, takes into consideration the freedom to achieve good things, in general, and the capacities to function, in particular. Nonetheless, it should be noted that education is a key ingredient in agency development.

Human diversity and capabilities

There are significant human diversities which are evidenced by “i) personal heterogeneities, ii) environment diversities, iii) variations in social climate, iv) difference in relational perspectives and v) distribution within the family” (Sen quoted in Comim 2001:6). The capability approach takes into account the individual differences in capacities. These differences explain the interpersonal variations in the conversion of the characteristics of a commodity into functionings. The variations in conversion can be due to personal, social or environmental factors (Robeyns 2003:17). The differences could also be a consequence of structural differences as race or gender; or a result of the demands made on a person’s resources by other individuals (Unterhalter 2007:7). Therefore, individuals need to be assessed not only in terms of the resources they can access but also in terms of what they are capable of doing and being given these resources (Sen quoted in Comim 2001:6). The individual differences, for instance, explain why two people with similar resource levels (such as education attainment) and in the same locality end up having two different levels of wellbeing. Therefore, subjective criteria to measure capabilities maybe required because individuals have different

capabilities that they treasure. But subjectivity, if not carefully handled, may mislead development through discouraging replication in the sense that any comparison, say for improvement, could be rejected on grounds of individual, cultural and environmental differences.

It should also be noted that while Sen (1992:108) argues that each society could decide on what valued capabilities are, thereby creating room for variations, there is a possibility of some societies 'getting it wrong'. As Unterhalter (2003:3) asks: "What happens when individuals in articulating 'valued beings and doings' merely reflect what is expected of them"?. Indeed, this can lead to confusion and it is possible that a superficial list of valued capabilities can be created within a given locality. For example, women in a given locality may not claim university education for themselves and their daughters because they believe only men should be educated to such higher levels. If the decision is to be handled through public debate and scrutiny as advocated by Alkire (2006:7-8) and in case the public debate and scrutiny is not rigorous enough, such a decision might be endorsed, thereby constraining women from improving their capability sets in such a society. Hence, there is need to understand the applicable capabilities at different levels of development intervention, given that capabilities can be basic, combined or complex.

Basic capabilities

Capabilities can be categorised as basic, internal, combined and complex (Nussbaum 2000: 83-85; Alkire 2002:163; Maguire 2008:72). Basic capabilities are a subset of all capabilities, which is generally a small number of fundamental beings and doings that are important to wellbeing (Sen 1992:44). Basic capabilities refer to "the freedom to do some basic things that are necessary for survival and to avoid and escape poverty" (Robeyns 2003:18). A basic capability is a capability to enjoy a functioning that is defined at a general level and refers to a basic need or simply a capability to meet a basic need. These are 'instrumental capabilities' or foundational capabilities that facilitate the achievement of other capabilities and the set of basic capabilities could be considered as capabilities to meet basic human needs (Alkire 2002:163; Terzi 2004:10). Basic capabilities are the "innate equipment of individuals" that is the necessary foundation for

developing the more advanced capabilities. The basic capabilities include seeing and hearing, and the capacity for speech, language, love, gratitude and work. This description of basic capabilities is more “like natural and innate capacities, or talents” and less concerned with achievable capabilities (Robeyns 2003: 20). In this view, basic capabilities are mainly ascribed capabilities and therefore cannot be easily merited, which creates almost no room for practical intervention to develop them. However, the UNDP considers basic capabilities as capabilities that are necessary for human development: to lead long and good lives, to be educated, to have access to the resources needed for a decent standard of living and to be able to participate in the life of one’s community (UNDP quoted in Fukudar-Parr 2003: 308). This UNDP explanation goes beyond a description of basic capabilities as merely innate capacities or talents of individuals to cover other achievables as well.

Basic capabilities include the capability to be well-nourished and well-sheltered, to escape avoidable morbidity and premature mortality, to be educated and in good health, and to be able to participate in social interactions without shame (Sen 1992: 44; 1999a: 20). The term ‘basic capability’ could be interpreted differently depending on the issue at hand because what is basic may differ across time and space. Basic capabilities can be related to ‘fundamental capabilities’ that include “being sheltered and living in a pleasant and safe environment; health and physiological wellbeing; education and knowledge; social relations; emotional and psychological well-being; safety and bodily integrity”; and an individual’s capabilities consist of a collection of fundamental capabilities which consists of lower-level and “specific capabilities, some of which are basic and some of which are non-basic. The basic capability of a person is then some kind of aggregate of the basic capabilities in each of the different fundamental capabilities” (Robeyns 2001: 12-13). Robeyns’ explanation implies that a fundamental capability such as being well-educated will be made up of basic education capabilities, such as being able to read and being able to keep personal records, and a number of non-basic education capabilities such as being able to write three international languages, and being able to publish a book. The non-basic capabilities can be important or unimportant, but they are simply not basic in a fundamental capability.

Basic capabilities are also capabilities to meet basic needs. However, capabilities differ from basic needs in the sense that needs is a more passive concept than 'capability' owing to the differences in focus. "Capability approach focuses on capabilities (what can the person do?) rather than with the fulfilment of their needs (what can be done for the person?)" (Sen quoted in Terzi 2004:6). Capabilities relate to empowerment levels while needs relate to relief or welfare services.

Regarding wellbeing and basic capabilities, Sen explains that the importance of basic capabilities is not so much concerned with the ranking of living standards, but in deciding on a cut-off point for the purpose of assessing welfare and deprivation (Sen 1987:109). Sen indicates that the capability approach goes beyond the basic capabilities to include other forms of capabilities. This is because, as Robeyns (2005:101) explains, basic capabilities are more suited for poverty analysis and for studying the wellbeing of people in desperate situations where concerns are still about physical survival. Hence, in our analysis of university education in this study, as indicated in the following paragraphs, the capabilities are conceptualised at a higher level than the survival (basic) level.

Combined capabilities

These are the internal capacities combined with suitable external opportunities that facilitate the exercise of a capability by an individual (Nussbaum 1998:775; 2000: 83-85). Hence, if one has the ability to express one's point of view and has freedom to do so socially and politically, then one enjoys a combined capability. However, if one has the potential of expressing a view but is unable owing to fear of the consequences, "one has the internal capability for freedom of speech but lacks the combined capability" (Alkire 2003:6). Combined capabilities are higher-level capabilities that imply the presence of capacities, freedoms and space for persons to function in a given environment.

Nussbaum (2003), one of the top followers of Sen, has proposed a list of 10 'central human capabilities' that presents a wide range of beings and doings that people may value. More than half of her capabilities are higher-level capabilities. The list comprises

10 categories of capabilities, namely: i) life; ii) bodily health; iii) bodily integrity; iv) senses, imagination and thought; v) emotions; vi) practical reason; vii) affiliation; viii) other species; ix) play; and x) control over one's environment (see also Appendix B). Nussbaum argues that specification of one 'list' of central capabilities is important in order to avoid an open-ended approach that would complicate the practicality of the capability approach where the negative freedoms are promoted and given prominence (Nussbaum 2003; Nussbaum quoted in Alkire 2006: 6). In effect, in Nussbaum's view a list of capabilities creates an avenue for the application of the capability approach. This view is, however, widely criticised for limiting thinking and creativity on the possible capabilities.

Sen is of the opinion that one list of capabilities is not realistic: "the problem is not with listing important capabilities, but with insisting on one predetermined canonical list of capabilities, chosen by theorists without any general social discussion or public reasoning" (Sen quoted in Alkire 2006: 6). Sen further argues that "to insist on a fixed forever list of capabilities would deny the possibility of progress in social understanding and also go against the productive role of public discussion, social agitation, and open debates" (Sen 2004: 18). Therefore, Sen does not oppose listing but the final listing of a 'canonical' list of capabilities. Equally, Robeyns (2003:36) agrees with Sen and opposes the construction of one definitive list of capabilities, but a flexible list of capabilities created through public deliberation. In fact, as Alkire (2003:5) concludes, there is no rigid and fixed set of certain capabilities but the priorities of human life will have to be set and re-set again and again in various ways. Therefore, this proposal creates a possibility for different lists of capabilities depending on the context or social setting, including the nature of the consultation process.

It has been observed that "Nussbaum's 'list' of central human capabilities is a list of combined capabilities, and it is these that development activities (and other activities) should aim to expand" (Alkire 2003: 6). We may also argue that the list also includes complex capabilities such as practical reason and control over one's environment. In addition, her list of capabilities presents a foundation upon which the view that wellbeing

goes beyond economic growth can be analysed and understood. This is because most of her central human capabilities relate to the social aspect of life. Therefore, the list is a valuable one although, owing to its generality, it may not be applicable to university education which is complex in nature.

Higher (education) capabilities

These are complex capabilities that can be attained by an individual at a higher level in any undertaking. Complex capabilities build on the fundamental capabilities, which also include basic capabilities (Terzi 2004: 10). By implication, complex or higher capabilities are difficult to attain without the basic capabilities being in place. In the context of education, complex capabilities are those capabilities attainable at a post-secondary level (Maguire 2008:72), after basic capabilities such as literacy have already been achieved. However, both Maguire and Terzi do not elaborate on the conceptualisation of complex capabilities but the meaning is implied: in the context of education, these are higher education capabilities. Therefore, in the analysis of public university education, the current study conceptualises complex capabilities as higher education capabilities (see also 2.4.2 and Figure 4.1).

2.4.1 Theoretical and practical relevance of the capability approach

Some scholars believe that the practical application of the capability approach is difficult (Sugden 1993 and Srinivasan 1994 quoted in Comim 2001:2), but Sen argues that “the approach must nevertheless be practical in the sense of being usable for assessments of the living standard” (Sen 1987:20). The implications of the approach are not only of theoretical interest to scholars but also have some practical importance in the real world of work (Sen quoted in Comim 2001:2). This is because “the capability approach replaces the traditional concern with either resources or utilities (in theory) or income (in empirical analysis and applied studies) by a more intrinsic concern with what people manage to do and be” (Robeyns 2003:35). The approach, therefore, can be applied to the analysis of different phenomena such as university education or standards of living.

The capability approach can be seen as a normative framework for assessing alternative policies or states of affairs or options – whether in welfare economics or development. It can be applied in the evaluation of individual wellbeing and social arrangements, the design of policies and proposals about social change in society and in justice (Robeyns 2003:5; Alkire 2006:2; Comim 2001:4). Depending on the user's preference, the capability approach may not be seen as a substantive theory but rather a normative framework (Comim 2001:4; Alkire 2002: 28-30; Robeyns 2003:8) or one may look at it as “clearly a theory within the liberal school of thought in political philosophy” (Robeyns quoted in Gasper 2006:12). In either case, Comim and Robeyns agree that the capability approach, whether a theory or simply a framework, is applicable in the assessment of social phenomena. Therefore, we apply it in the current study.

In applying the capability approach, the *valuation exercise* required by the approach encompasses the “identification and weighting of valuable things that people are able to be or to do” (Comim 2001:4). This flexibility allows the capability approach to be adjustable to different situations. On the possible source of data, while applying or using the capability approach, Sen advises the use of non-market observations of personal status as the main focus. Sen (1992:52) clarifies:

In fact the capability set is not directly observable, and has to be constructed on the basis of presumptions (just as the ‘budget set’ in consumer analysis is also so constructed on the basis of data regarding income, prices and the presumed possibilities of exchange). Thus, in practice, one might have to settle often enough for relating wellbeing to the achieved – and observed – functionings, rather than trying to bring in the capability set (when the presumptive basis of such a construction would be empirically dubious).

Hence, the capability approach can be used at different levels of sophistication. The extent of application depends on the practical considerations regarding what data we can access and what we cannot. Whereas the capability approach can take stock of the “full text of freedom to choose between functioning bundles,...limits of practicality may often force analysis to be confined to examining the *achieved* functioning bundle only” (Sen 1992:3). Moreover, some capabilities are harder to measure than others, and attempts at harmonising them may sometimes be of little help in the analysis (Sen 1999a: 81). This

is partly why the capability approach as propounded by Sen does not have a prescribed list of functionings that analysts must use, hence “every evaluative exercise using the capability framework will need to determine a given set of functionings” (Robeyns 2003:35). However, selecting functionings is an “act of reasoning” (Nussbaum quoted in Robeyns 2003:36). This flexibility allows theoretical and practical users of the capability approach to construct capability lists of their choice provided there are data and reasonable measures established and justified. This study equally uses this flexibility to select suitable university education capabilities that are pointed out in Chapters One, Four and Nine (see also 1.4, and Figure 4.1).

Likewise, Grasso (2002:3) agrees that the operationalisation of the capability approach is dependent upon the nature of the exercise, data constraints and the aims of the analyst. The capability approach cannot be rigidly formulated because it is deliberately propounded as an open and flexible framework. In practice, as Sen (1992:117) explains “the reference unit of the capability approach is the individual, functioning and capabilities being in fact properties of individuals”, although Sen refers to regional, national and sub-national, or group data when examining poverty in India and sub-Saharan Africa (Sen 1999b:99-104). Therefore, while the focal point of analysis remains the individual, and since the interest in group is only derivative, we can still shift to aggregate data to interpret an issue. However, in group analysis the “aggregate well-being for a given cohort of people will then be regarded to be the average well-being of the cohort” (Dasgupta quoted in Grasso 2002:5). This is because the standard of living in a society is deduced to be the expected living standard of someone who has equal chances of finding themselves in the position of each member of society. For example, some scholars, such as Stewart (2005:185-189) and Ibrahim (2006: 403-410), demonstrate how capabilities can be understood from the perspective of groups or collectives. This flexibility allows wide applicability of the capability approach.

The applicability of the capability approach has also been demonstrated in many studies. Comim (2001:14) mentions areas where the capability approach has been used. Such areas include multivariate studies, empirical studies, case-study applications, theoretical

applications and methodological applications. Indeed, as Alkire (2006:2) observes, the approach can be and “will be applied differently depending on the place and situation, the level of analysis, the information available, and the kind of decision involved”. For instance, Unterhalter (2003) used the capability approach to analyse adult education and gender inequality and generated logical conclusions from her analyses. These analyses were in line with what Sen explains about the operationalisation of the capability approach, that is, it can have a practical application using whatever information available to get started in a given analysis. This is because the approach is “context-dependent logic” and, therefore, can be applied in different disciplines (Sen quoted in Comim 2001:14). This clarification confirms the wide applicability of the approach in the evaluation of people’s wellbeing. To this end, the current study, through a variety of methods, uses the capability approach in analysing the role of public university education in expanding higher education among students.

Methods and procedures under the capability approach

In the operationalisation of the capability approach a number of methods and procedures may be used to determine the capabilities applicable to particular areas of study. For example, Alkire assessed the different methods that can be used to analyse poverty and concluded that the “methods of identifying capabilities or dimensions of poverty are surprisingly straightforward” and that most researchers tend to use five methods either in isolation or combination (Alkire 2006: 7-8). The methods are:

Existing data or convention: to select dimensions or capabilities are selected mainly because of their convenience or convention that is taken to be authoritative, or because these are the only data available that have the required characteristics.

Assumptions: to select dimensions based on implicit or explicit assumptions about what people do value or should value...

Public ‘consensus’ – to select dimensions that relate to a list that has achieved a degree of legitimacy due to public consensus.

Ongoing deliberative participatory processes– to select dimensions on the basis of ongoing purposive participatory exercises that periodically elicit the values and perspectives of stakeholders.

Empirical evidence regarding people’s values - to select dimensions on the basis of expert analyses of people’s values based on empirical data on values, or data on consumer preferences and behaviours, or studies of which values are most conducive to mental health or social benefit (Alkire 2006:8).

Alkire further observed that these processes can overlap and can often be used in tandem, for example a researcher handling an internationally agreed upon standard such as hours of work might choose to “use participatory approaches to set specific priorities, and then choose indicators drawing on the existing data” (Alkire 2006:8). Likewise, from a list of priorities a decision can be made on which items to include and which ones to exclude in the eventual analysis. This explicit list of procedures has the advantage of enabling technical persons of different disciplines, for instance education and health to articulate their methods in order to instigate both public and academic discussion and learning.

On the other hand, Robeyns (2003:41-45) recommends that researchers use four procedures when identifying the relevant capabilities in a given subject area. The capabilities or domains are: *Explicit formulation*: It entails drawing up a list of capabilities explicitly, discussing it and defending it. This should focus on explaining what that something people value is and what reasons they have for their valuing it. *Methodological justification*: It involves clarifying and defending the method that has generated the list. *Two stage process: ideal-feasible*: It involves drawing up a list in at least two stages that facilitate “empirical application” or “implementable policy proposals”. Each stage generates a list at a different level, ranging from “ideal theory to more pragmatic lists”. Only from the second stage onwards will constraints and limitations related to the measurement design and data collections be taken into account. *Exhaustion and non-reduction*: In this case the listing of capabilities covers all elements that are important without leaving out any relevant dimension. In a nutshell, as Robeyns (2003:37) affirms, the applications of the capability approach can vary across areas of concern such as the academic, activist, or policy-oriented, theoretical or empirical, and the approach can be applied to a global or local context.

In addition, when deciding which capabilities are most important and which assessment criteria to use, some of the alternatives available for use are the UNDP criteria of: “first, they must be *universally valued* by people across the world; and second, they must be

basic meaning their lack would foreclose many other capabilities” (Fukudar-Parr 2003: 306). The ‘basic’ criteria of UNDP in this context imply the foundational in a given context upon which analysis can be based. In the current study, the education and general capabilities chosen for analysis are both universally appealing and are foundational in nature in that their lack poses a big disadvantage to a university graduate (see also Figure 4.1).

In spite of the methodological proposals for operationalising the capability approach, some scholars, such as Nussbaum (2000:70) and Alkire (2002: 28-30), observe that the approach does not provide prescriptions for an analysis but only sets out a general framework and in fact it is not a substantive theory. Others have noted that Sen does not propose a list of relevant functionings, or at least specify how the selection of capabilities should be made (Roemer 1996; and Sugden 1993 quoted in Robeyns 2003:36). Moreover, the approach tends to be limited through focusing more on individual capabilities and less on groups or collective capabilities (Stewart 2005: 185); yet both are important. In fact, Stewart demonstrates how the capability approach can be applied at group or collective level.

Given that the capability approach has been developed piecemeal by the authors who, over the years, have made adjustments to it, to understand it reasonably well one needs to comb through a series of works of Amartya Sen, Martha Nussbaum, Sabine Alkire, Ingrid Robeyns, Des Gasper and others. No wonder, as Alkire (2005: 123) observes, some people have come to criticise the capability approach on the grounds that it does not address certain issues “when Sen has actually developed clear responses to their very questions in other writings”. The cause of such criticisms of the capability approach could be due to bits and pieces of it spread in works by different scholars.

2.4.2 Capability approach and education

One of the strengths of the capability approach is that it can be applied to a wide range of evaluative purposes (Sen 1993: 49). The capability approach was considered relevant to this study because of its relationship to knowledge and skills acquisition through the

university education processes. It has been agreed that “education is central to the capability approach” (Walker and Unterhalter 2007:7). Moreover, education is one of the few crucial *beings* and *doings* that are very important to wellbeing; and, broadly, education is itself a basic capability that affects the development and expansion of other capabilities (Sen 1992:4). For example, higher education can promote reasoning abilities that enables an individual to “distinguish between virtues and vices and then to *act* accordingly” (Flores-Crespo 2004:3). Education provision at all levels can, therefore, be considered as a capability expansion process, but depending on what is taught and how. This is because, as Young (2009: 259) cautions, some learning (for example in situations of child labour) may be detrimental to the individual learner and, therefore, fail to improve the individual’s life.

Education is “a basic and fundamental capability, essential to the expansion of future capabilities, and upon which to outline elements of an entitlement in education” (Terzi 2004:9). Hence, Terzi concurs with Sen that education has an instrumental role of furthering other capabilities. She concludes:

Absence or lack of education would essentially harm or substantially disadvantage the individual. Education thus conceived responds to the basic need of the individual to be educated...since education plays a substantial role in the expansion of other capabilities as well as future ones, it can be considered fundamental and foundational to different capabilities (Terzi 2004:9).

Education is very important in the capability expansion process and education can also be seen as a form of functioning or individual wellbeing achievement (Unterhalter 2003: 6). A person who is not educated suffers many disadvantages in life. For example, such a person experiences language limitations and overall communicative functionings together with constraints in reasoning and learning functionings (Terzi 2004:9). Indeed, “education is good partly because it helps secure other ‘goods’, for example securing a job, contributing to increased income, protecting one’s own health or the health of a child, participating in decision-making” but education is also good in itself (Unterhalter 2003: 9). This makes education a fundamental capability for improving one’s wellbeing. Terzi (2004: 10), for example, underscores the significance of education in individual capability expansion when she explains:

The broadening of capabilities entailed by education extends to the advancements of complex capabilities, since while promoting reflection, understanding, information and awareness of one's capabilities, education promotes at the same time the possibility to formulate exactly the valued beings and doings that the individual has reasons to value. On the other hand, the expansion of capabilities entailed by education extends to choices of occupations and certain levels of social and political participation.

Most people attend schools and colleges in order to improve on their knowledge and skills and at times to access employment opportunities. For education to enlarge capabilities, it must move from rote-learning to addressing the development needs and aspirations of the learners, their ability to think and reason, to build up self-respect and respect for others, to think ahead and to plan their future lives (Hoffmann 2006:2). Hence education needs to provide 'life skills' that enable individuals to obtain skills and abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands of everyday life that confront them (UNESCO quoted in Hoffmann 2006:2). In essence, education can enhance individual capabilities and through learning an individual can improve her life (Sen 1999a: 90-92). Sen further maintains that education contributes to the quality of life and the formation and expansion of human capabilities.

Specific abilities obtainable from education have been classified under three categories, namely "problem-solving skills, autonomy and a sense of purpose, and social ability, directly in line with characteristics and abilities identified as constituting resilience among young people" (Bernard quoted in Hoffmann 2006:3). In the context of the capability approach, however, three capabilities associated with education have been listed as follows: critical thinking; the ideal of the world citizen; and the development of the narrative imagination (Nussbaum quoted in Walker and Unterhalter 2007:7). All in all, education is central to imparting technical, social and life skills and these skills need to be well integrated into the university education processes.

In capability approach literature, education is commonly treated as 'basic elementary education' and mainly expressed in terms of levels of literacy (Sen quoted in Terzi 2004: 2), excluding advanced education, such as university education. Whereas it is generally

agreed by Sen (1992) and Terzi (2004; 2007) that education is a basic capability that constitutes a fundamental entitlement and its provision is a matter of social justice, it is not clear whether this assertion applies to university education too. The concentration of their (Sen's and Terzi's) analysis on basic elementary education and literacy levels indicates an omission of university education and warranted the need to test and apply the capability approach to university education processes and outcomes, which this study is interested in.

An education level, project or programme could be measured to establish its role in capability enlargement. The measure requires the establishment of the capabilities or capability sets that are relevant to the level or programme in question. Terzi (2004:16-17; 2007:37) presents a "list of basic capabilities for educational functionings, at the ideal level" namely:

Literacy: being able to read and to write, to use language and discursive reasoning functionings.

Numeracy: being able to count, to measure, to solve mathematical questions and to use logical reasoning functionings.

Sociality and participation: being able to establish positive relationships with others and to participate without shame.

Learning dispositions: being able to concentrate, to pursue interest, to accomplish tasks, to inquire.

Physical activities: being able to exercise and being able to engage in sports activities.

Science and technology: being able to understand natural phenomena, being knowledgeable about technology and being able to use technological tools.

Practical reason: being able to relate means and ends and being able to critically reflect on one's and others' actions.

The justification that Terzi offers for this list of basic capabilities in education is that it complies with the principles of "exhaustion and non-reducibility" and the absence of these elements in an education programme would constitute a disadvantage. These principles suggest that the elements selected should be fairly comprehensive. In addition, the capabilities should be non-reducible in the sense that a capability listed is basic and does not imply additional basic components. The list of basic capabilities should also be presented at a certain level of generality, therefore permitting more lists to be drawn from it, depending on the context under consideration (Terzi 2004: 17).

Indeed, a list of capabilities in education can be developed because different capabilities differ in importance and drawing up a list of capabilities is normal (Sen 1992: 45-46). Such a list allows analysis and contextualisation of a phenomenon.

Terzi's list of capabilities covers a wide range of education levels, right from elementary (literacy or numeracy) up to the advanced levels (practical reason, learning disposition). In terms of subject matter, the list runs from sociality and participation to science and technology, thus complicating the applicability of these capabilities on a selected specific level of education, such as primary or secondary. Moreover, Terzi does not specify the levels where different capabilities are applicable, but instead mentions the 'ideal level', which is rather vague. However, she accepts that there is room for another scholar to establish capability sets or lists that are relevant to the level of education in question. In the current study, the researcher contributes two items to that list (see also 9.4).

In a different setup, Walker (2006:128-9) presents a list of eight higher education capabilities, namely: practical reason; educational resilience; knowledge and imagination; learning disposition; social relations and social networks; respect, dignity and recognition; emotional integrity, emotions; and bodily integrity (see also Appendix D). Whereas Walker's list of eight capabilities is for higher education, it is too broad to be used wholly in this study; only four capabilities are adopted because of their similarity with those of Terzi. Similarity is presumed to imply consensus on those capabilities as being relevant to education. The three capabilities that intersect are, therefore, adopted to guide this study; these are sociality and participation (social relations and social networks); learning disposition; and practical reason. These three capabilities are supplemented by a fourth one, mentioned only by Terzi (2007: 37), namely science and technology. Science and technology is included in the analytics of this study because of the researcher deemed important in university education regardless of the education programme one is involved in (see also Figure 4.1). Since it is permissible through certain methods to draw up capability lists that are context-relevant (Fukudar-Parr 2003: 306; Robeyns 2003:41-45; Alkire 2006: 7-8), the researcher opted to consider the above four as the most relevant for this study (see also 2.4.1, and Figure 4.1).

2.5 Summary

From the foregoing theoretical review, it is evident that the human capital theory takes a neoclassical approach to education where the benefits of education investment are reduced to income and earnings at the expense of other benefits of education. Hence, the human capital theory may not appropriately apply in the analysis of the role of university education in student capability expansion. Instead, the human development paradigm and the capability approach are used in this study because the two are apparently related to the development of individuals beyond the economic sphere. The two frameworks are reasonably applicable to university education and the expansion of individual higher education capabilities. Of the two, Sen's capability approach is the dominant framework used in this study. Firstly, this choice is considered because the capability approach is basically "concerned with evaluating social policy, including education, without ignoring individual aspirations" (Sen quoted in Unterhalter 2003:2). Secondly, the development of any education programme or project can be focused on developing people's capabilities in the form of knowledge, skills and capacities which promote individual agency. To this end, Sen's capability approach provides us with a general framework with which to examine how university education in Uganda nurtures or frustrates higher education capabilities expansion among students.

While some scholars (such as Sen 1992; Alkire 2002; and Terzi 2004) agree that education is a basic capability, they tend to treat education at lower levels – basic or elementary education – or simply at literacy level. For instance, Terzi (2004: 16-18) discusses education in general and views it as a basic capability, though in her exposition she includes some elements of combined capabilities. Yet, considering the classification of capabilities by Nussbaum (quoted in Alkire 2003:6) as basic, and combined, education is not only a basic capability but also a combined capability that develops both individual capacities and increases freedom. In fact, at university level, education can be treated as what Terzi (2004: 10) and Maguire (2008:72) call a *complex capability*. Therefore, drawing insight from Terzi and Maguire, the researcher has

chosento consider capabilities developed at the university as *higher education capabilities*.

This thesis, inter alia, seeks to shift the analysis of capabilities from elementary education (as elaborated by Sen 1992; Alkire 2002; Saito 2003; and Terzi 2004) and even from general tertiary education (emphasised by Flores-Crespo 2004; Walker 2006; and Maguire 2008) to university education (ventured into by Flores-Crespo 2002), which is at a higher level of education capabilities. In the following two chapters, the study analyses the role of the curriculum content, teaching processes, and learning processes in the expansion of higher education capabilities among students at university. These sub-variables of university education (curriculum, teaching, and learning) are therefore discussed in the context of the capability approach (see also 1.4).

Chapter Three

University Curriculum and Education Capabilities Expansion

3.1 Introduction

Chapter Three presents a literature review related to one of the study sub-variables of university education, namely *curriculum content*. The review focuses on the linkage between university curriculum content and student capability expansion. A discussion of capability expansion is already done in Chapter Two, where it is widely accepted that providing university education is a complex capability enlargement process. The current chapter analyses curriculum issues of formal education, higher education, and university education vis-à-vis education capabilities expansion. The review aims at analysing *theory and practice integration* and *professional relevance* as indicators of the curriculum content sub-variable and how these indicators can relate to capability development.

Analysis of curriculum content is done because the first objective of this study focuses on examining the contribution which the content of the curriculum of public university education in Uganda makes to education capabilities expansion among students. Hence, the review in this chapter provides a background to understanding university education curriculum and its potential role in education capabilities expansion among students. Other university education sub-variables in this study (namely teaching processes and learning processes) are reviewed in Chapter Four. Therefore, the current chapter mainly addresses selected literature for the first objective of the study but begins with a review of formal education in general and university education in particular. In fact, the chapter argues that curriculum content can influence the education capabilities expansion among students hence universities can deliberately include well-formulated education capabilities in their curriculum content.

3.2 Formal education and capability expansion

Formal education, in this context, refers to education that is synonymous with schooling or learning at officially constituted educational institutions. In this study, it is conceptualised that the curriculum content and pedagogy of formal education should

have a bearing on the development levels of individual capabilities and the overall economic development of a country. On economic development, the World Bank, for example, notes that adequate education is a strong tool for promoting overall development and that where basic education is not provided, the country's development might be delayed (World Bank 2002a: 233). This is because education helps "...people to think and act responsibly for themselves and to find self-fulfilment and quality of life appropriate to their own particular gifts, opportunities and insights" (Watson and Ashton 1995: 23). This makes education one of the most powerful tools economies have for reducing deprivation and for lifting earnings potential, expanding labour mobility, promoting the health of parents and children, reducing fertility and child mortality, and affording the disadvantaged a voice in society and the political system (World Bank 2000a: 234). Hence education can be instrumental in expanding individual capabilities and transforming the livelihoods of individuals.

Education is a capability and is very important in enabling individuals to access valuable goods, such as better life prospects, career opportunities and civic participation (Terzi 2004: 14). In addition, formal education promotes the achievement of knowledge and skills, which play a vital role in agency achievement and wellbeing expansion (also see 2.4.2). On the other hand, education is intrinsically good and enhances the possibility for an individual to participate in a wide range of activities, which are in themselves fulfilling. Therefore education is important in capability expansion and is itself a capability.

When education expands capabilities it usually changes society for the better. Society needs change, usually radical, and educational institutions play an instrumental role in causing this change. Karl Marx, for example, argues that education has the potential of bringing about fundamental change by carefully imparting the knowledge, skills and attitudes that society desires to inculcate in students. On the other hand, Marx also believes education is a tool used by capitalists to maintain their economic interests. He argues that the 'hidden curriculum' of educational institutions reinforces passivity as demanded on the assembly line in an industrial enterprise (Karl Marx quoted in Miller 2007:80). To Marx, education has both the positive and negative potential effects for

society's wellbeing. Hence, the education outcome may depend on the policy-makers and educators.

We can further argue that the *level* of education attainment can make a difference in society's capability development levels. Education attainment can be one of the common dimensions used to measure and analyse wellbeing and agency. Low education is an aspect of low capabilities or a sign of deprivation. Hence, by increasing education provision in a population a country enhances capabilities expansion and thereby contributes to improvement in agency achievement and wellbeing (Anand and Sen 2005:232). Education solves the low human capital endowments; hence when an economy invests in education it enhances the accumulation of human capital, which is essential for higher incomes and sustained economic growth and capability expansion. To this end, education, especially basic (primary and lower-secondary) education, helps increase individual capabilities by increasing the productivity of the poor and by equipping individuals with the skills they need to participate fully in the economy and in social life (World Bank 1995:1). The World Bank indicates that primary education and/or lower-secondary education, as opposed to higher or university education, are critical in improving capabilities and livelihoods. This argument is contrary to what Bloom, Canning and Chan (2006: iii) believe, i.e. that higher education has enormous public and private benefits. These benefits include better employment prospects, higher salaries, and a greater ability to save and invest, which are essential for the improvement of health and quality of life. These scholars posit that the productive skills obtainable from higher education are enormous, but they (scholars) are silent about the benefits of lower education, which they probably deem less important than those of higher or university education. Nevertheless, regardless of the level – whether primary or university–education enhances capability expansion.

3.3 University Education

Universities exist in almost all countries of the world and they are the centres of knowledge and research. A university is an institution that offers higher education,

participates in research and grants academic qualifications to learners in different subjects. A university provides both undergraduate and postgraduate studies.

Historically, the word *university* came from the Latin phrase "*universitas magistrorum et scholarium*", which describes a "community of teachers and scholars" (Chisholm 2009:1). It appears that "the medieval Madrasahs known as *Jami'ah* ("university" in Arabic) founded in the 9th century" are the first examples of a university because they were institutions of higher education and research and they offered academic degrees at all levels such as bachelor's, master's and doctorate (Bump 2008:2). These madrasahs represented the highest level of education in the formal education system just like today's university does. The oldest university in the world is believed to be Al-Azhar, founded by the Fatimids in 969AD or 970AD (Smith quoted in Kasozi 2003: xv; Assie-Lumumba 2006: 26). Al-Azhar still exists today and awards both degrees and diplomas. Therefore, universities started to gain shape in the 9th and 10th centuries. They existed as centres of higher learning and creating, preserving and disseminating knowledge and skills.

During the mediaeval period, many universities were founded in Western Europe with the support of the Catholic Church and, in some cases, kings. In Europe, the first universities included the University of Bologna in (1088), the University of Oxford (1167), the University of Cambridge (1209), the University of Salamanca (1218), the University of Montpellier (1220), the University of Padua (1222), the University of Naples Federico II (1224), and the University of Toulouse (1229). Many universities were former high schools that got elevated to university status by the monastery authorities or other powers.

After the 14th century, the modern university started to gain shape. Universities transformed themselves into modern research institutions. Many external influences, such as the eras of humanism, enlightenment, reformation, and revolution shaped the research that universities carried out during their development. By the 18th century, universities were publishing their own research journals and by the 19th century they had

gained a lot of influence and independence (Chisholm 2009:2). However, the basic structure and aims of universities remained constant over the years.

Until the 19th century, religion played a significant role in university curriculum development. However, the role of religion in research universities decreased in the 19th century, and more so by the end of the 19th century. Universities concentrated on science in the 19th and 20th centuries and became increasingly accessible to the masses. For example, in Britain the move from the Industrial Revolution to modernity saw the arrival of new civic universities with an emphasis on science and engineering. The British also established universities worldwide, and higher education became available to the masses not only in Europe but elsewhere as well. The university remained the centre of knowledge creation and the torch bearer of research, innovation and national transformation. Gradually, university system transformed itself from the mediaeval university to the modern one.

The modern university

Today's university can be public, private-for-profit or private-not-for-profit. A public university is one that is predominantly funded by public means through a national or local government (Chisholm 2009:1). Private universities belong to individuals or private organisations and, therefore, depend on private resources to run their affairs. Some countries keep public universities under the full control of government; while others grant them reasonable freedom to manage their own affairs. Some African countries, for example Uganda, allow private wings to be established in public universities. Students admitted to a public university under the private arrangement pay full or slightly subsidised tuition and share the same classes and other learning resources with fellow students under the publicly sponsored scheme.

A modern university brings men and women to a high level of intellectual development in a wide range of disciplines ranging from the arts and sciences to the traditional professional disciplines. A modern university also promotes a high level of research among the lecturers and students. A university is, on one hand, a community of persons

engaged in study and research and, on the other, a source of highly trained manpower for the professions (Abdalla 1977: 32-33). The role of the university in affecting society affairs is further explained:

The university is that place in our society where we come to an understanding of ourselves as individuals committed to specific projects within a community having a recognisable culture and a shared identity. This is the role, not so much for which the university was created, but which it created for itself. From its origin in medieval society the university enacted a place to theorise the contingencies of the human situation, to assemble theory into the coherence and unity of science, and to initiate the next generation of scholars and citizens into the discourse appropriate to the engagements of society (Crawley 2000: 29).

Crawley's statement presents a university as a centre for reflection where people meditate and rediscover themselves, and where people theorise and document their theories. This statement depicts a sophisticated image of a university as an institution of highly intelligent and analytical individuals. It also explains the university as a practical and culture-oriented institution, in addition to its theoretical focus. According to Waghid (quoted in Assie-Lumumba 2006: 46), the university can also serve as a 'community of reason' as well as an actor in the process of nation-building. From this viewpoint, a university can be strong in both intellectual matters and in outreach to the social 'real' world. Hence the university plays a double role of being internally effective and externally socially responsive. To this end, university education can deliver graduates with education capabilities (see also 4.5).

3.4 University Education and Capability Expansion

Ideally, universities are contributors to education capabilities expansion in students regardless of the type or location of a given university. In addition to the earlier classification in this thesis, universities can be categorised as: public and private; academic and vocational; undergraduate and graduate; outside and distance-based; and so forth. As for university education, in this study, the researcher breaks it down in terms of curriculum content, teaching processes, and learning processes (see also 4.5).

The notion of public interest weighs much more in defining the mission of public universities than in defining those of private ones. Public universities are more

bureaucratic, less autonomous, and more stable and buffered from market forces. To the contrary private universities, though controlled by state regulations, must cover their costs, but private-for-profit ones must also have the generation of a surplus as a core goal (World Bank 2000a:48). These different characteristics of universities influence the content of the curriculum, teaching processes and learning processes in addition to the activities these different categories of universities are likely to conduct, and probably their contribution to students' education capabilities expansion.

An effective public university education system relies heavily on the oversight of the state. A government ministry responsible for education and the ministry concerned with labour or employment matters in most countries are at the forefront of public university education provision. As the World Bank indicates, the government must ensure that the system serves the public interest, provides at least those elements of university education that would not be supplied if left to the market, promotes equity, and supports those areas of basic research relevant to the country's needs. Moreover, the state must ensure that the system as a whole is financially transparent and fair. The level of state control of university education institutions could range from extreme state control to total laissez-faire. High state involvement politicises university education and total laissez-faire may not be socially responsive (World Bank 2000a:53). It follows, therefore, that the curriculum content, teaching processes and learning processes are partly a reflection of state interests and level of involvement in university education. Hence, a middle ground is necessary to regulate the level of state involvement in public university education, given that governments own and finance the public universities.

University education is generally believed to make a positive contribution to higher education capabilities expansion. A university is part of the higher education system. Bloom et al. (2006: 1), for example, reveal that higher education has enormous public and private benefits, such as big tax revenues, and increases in savings and investments, and that it leads to a more entrepreneurial and better civic society. Furthermore, higher education can improve a nation's health, contribute to reduction in population growth, facilitate technological development and enhance good governance.

In addition, as Briggs and Cooper (quoted in Bates 2008: 307) also explain, universities are direct contributors to the national economy. In fact, the entire higher education system ideally increases national productivity, which largely determines the standard of living and the national competitiveness in a global economy. For instance, higher education institutions support knowledge-driven development by training a qualified and adaptable labour-force, generating new knowledge, and building the capacity of the locals to access and adopt global knowledge. Indeed, it is argued that “sustainable transformation and growth throughout the economy are not possible without the capacity-building contribution of an innovative tertiary education system” (World Bank 2002b: xx). Therefore, according to these arguments, it is through higher education such as university education that, among other avenues, a country is able to develop socially and economically through expanded individual knowledge, skills, capabilities and opportunities.

There are additional indirect benefits of university education. For instance, well-trained graduate teachers enhance the quality of primary and secondary education systems and enable secondary school leavers to gain access to greater opportunities for economic advancement. Likewise, by training health workers, universities can improve on a society’s health and raise productivity at work. Moreover, by training people in leadership skills, universities can provide countries with talented individuals needed to establish a policy environment favourable for growth. Other benefits, such as strong and fair legal and political institutions, and developing a culture of job and business creation are all products of university education (Todaro 1999: 112). Therefore, university education is important in education capabilities expansion because the capabilities developed at university have the snowballing effect of creating other capabilities at different levels of the society or even in the education system. Such benefits partly justify why governments invest in university education, and these benefits point in the direction of expansion of education capabilities. However, the opposite is also possible. The presence of poor-quality graduates in an economy can have negative backward effects on other levels of education, for instance, through graduates acting as poor role models, teaching sub-standard skills at the lower levels of education or performing shoddy work

within the different sectors of the economy. Therefore, the benefits of university education depend on the quality and engagement of the university graduates.

Some scholars argue that higher education, including university education, yields no or few “social benefits” beyond what the individual student gets from higher education and that higher education may instead promote “social unrest and political instability” (Friedman and Friedman 1980: 34). This argument implies that the public benefits of higher education are not widely recognised. For that matter, it makes little sense, for example, to use university education as a vehicle for public investment and national transformation. Similarly, Psacharopoulos and Patrinos (2002) maintain that returns from primary schooling are substantially higher than those from secondary or tertiary education. To the contrary, Bloom et al. (2006: 17) argue that higher education is the most beneficial education level. They further question the applicability of the findings of Psacharopoulos and Patrinos due to the narrow focus of their analysis on the monetary returns accrued by individual graduates and the tax revenues they generate, while neglecting the broader benefits of higher education that go beyond direct economic benefits. This contradiction implies that the established benefits of an education project or programme may vary depending on the parameters used by an individual in the cost-benefit analysis.

The benefits notwithstanding, higher education is not a panacea for economic development, though sustained progress is impossible without it (World Bank 2000a: 19). Higher education makes a difference in an economy if other barriers to development, such as those relating to macroeconomic management and good governance are removed. It creates the potential for a skilled human resource but this resource must be allocated to production or service delivery in order for it to benefit the economy (Bloom et al. 2006: 30-31; World Bank 2002b: 60). For example, a graduate who has received university education is, ipso facto, rendered capable of contributing positively to national wealth in any sector where such a graduate is deployed to work (Banjo 2006:8). Therefore, higher or university education is relevant to economic development, depending on the area of deployment of the graduates. A university

graduate is expected to be confident, skilled and productive. Hence, regardless of the study programme undertaken or area of specialisation chosen by someone at university, a graduate can possess general and educational capabilities (see also 1.6). However, the level of education capability possession among graduates may depend on what is taught (curriculum content), how it is taught (pedagogy) and how it is evaluated.

3.5 University Curriculum Content and Education Capabilities Expansion

In this section a review of literature on curriculum is made because it is important to not only understand how students learn, what they learn, and how they are taught but also how what they learn is prepared (Shay 2011: 316). A curriculum is “the formulation and implementation of an educational proposal, to be taught and learned within a school or other institution and for which that institution accepts responsibility at these levels, its actual implementation and its effects” (Jenkins and Shipman quoted in Neary 2003: 34-35). A curriculum refers to “what counts as valid knowledge” (Bernstein quoted in Shay 2011:316) and it covers the subjects to be taught and provides general guidance on the frequency and duration of instruction (World Bank 1995:77). However, what is to be taught must be put into the proper context of the stakeholders’ interests and needs. For example, the curriculum content of university programmes could be focused on influencing the type and quality of graduates a university releases to the public. The curriculum should also answer the questions that Barnett (2009:429) asks: “What should we teach and how should we teach?” Hence, the university system needs to get concerned about the specific type of learning content, materials, and the teaching methods that are in place.

University lecturers’ understanding of what should be taught can affect what students eventually learn. In the context of university education, a variety of descriptions and meanings can be attributed to the term *curriculum* (Fraser and Bosanquet 2006: 282). For example, in their study of Australian higher education institutions, Fraser and Bosanquet (2006: 272) established that the description of the curriculum among academics offers four different categories of conceptualisation, namely: (i) the structure and content of a unit; (ii) the structure and content of a programme of study; (iii) the

students' experiences of learning; and (iv) a dynamic and interactive process of learning. Fraser and Bosanquet further indicate that categories (i) and (ii) are concerned with what the lecturer teaches and with the programme undertaken by a student; category (iii) is about the process and structure that facilitate student learning; and in category (iv) the curriculum is considered to be a collaborative learning process for both the students and the lecturer. The conceptual differences pointed out by Fraser and Bosanquet may affect the curriculum content determination process across different disciplines and individual lecturers. In fact, the differences can be a source of confusion to students and subsequently affect the student outcomes. Therefore lecturers' beliefs about curriculum structure and content may translate into the nature of the capabilities developed in students.

Theoretically, the various ways in which curriculum is conceived has been classified into four categories, namely "humanistic, social reconstructionist, technological, and academic", and all the four conceptions differ in their attempt to explain what should be taught, to whom, when, and how (McNeil 1990:1). According to McNeil, the humanistic orientation holds that the curriculum should be geared towards providing individually satisfying experiences such as guaranteeing the need for growth and personal integrity. He also indicates that the social reconstructionists argue for societal needs to prevail over individual needs in the curriculum and that the curriculum should reform societal values to make society better. As for the technologists, curriculum-making is a technological process for achieving the existing public policy objectives through efficient and accountable means. Finally, the academic orientation considers curriculum as the vehicle by which learners come to grasp subject matter disciplines and synchronise knowledge and skills. From these four conceptions of curriculum presented by McNeil, it can be observed that the purpose, content, organisation and evaluation of curriculum can, therefore, differ across institutions and levels of learning depending on the curriculum orientation.

However, it is important that the conception of the curriculum is shared and agreed upon by stakeholders before any curriculum content is rolled out to learners so that the

curriculumis implemented and evaluated in a harmonised manner. The sharing would lay the foundation for specific types or sets of educational capabilities that stakeholders deem relevant for individual competence development, national development and transformation. In fact, the curriculum purpose should focus on developing the learner's capabilities, given that the learner is the object targeted for change.

The importance of stakeholder input during the design of curriculum content has been explained (Saint 1992: 82). Stakeholder involvement enhances curriculum relevance to users and its quality. Fraser and Bosanquet (2006: 281) observe that for a university curriculum, "content selection is not arbitrary; rather, the teacher and students negotiate what will be included in the curriculum. The students are the final authorities on what is 'authentic knowledge'..." However, stakeholder involvement needs to be gradual and systematic in order to be helpful in causing the necessary improvements. For example, Serafin (quoted in Ishiyama and Hartlub 2007: 567) observes that changes introduced to the syllabus haphazardly affect subject matter understanding and the final grade performance of students. The clearer the syllabus is, in terms of number of objectives, content, instructional resources, and grading components, the better the subject matter is understood and probably the higher the likelihood for students to develop their capabilities. When stakeholders are involved, student capability expansion as an aim takes centre stage in curriculum content development processes. This is because students are the prime beneficiaries of the curriculum content.

University curriculum content requires continuous review and adjustment in order to produce graduates who are able to contribute to national development and such review and adjustment should be done in accordance with each country's needs and assessed priorities. It is argued that one way of ensuring that the university course content keeps pace with new knowledge and changing labour market requirements is through involving informal advisory committees at the university departmental level. The committees generally include representatives of the main employment sector (Saint 1992: 82); but there can also be other stakeholders at the international, national and institutional levels taking part in curriculum restructuring (Karseth 2008: 638). The involvement of

stakeholders in restructuring demystifies what Lockett (2009:443) refers to as a curriculum that is largely a “sacred academic space and responsibility” managed by the lecturers independently. As already indicated elsewhere, this inclusive participatory approach to curriculum review enhances the relevance and appropriateness of university education.

A clearly documented and well-executed curriculum is one of the key determinants of the quality of university education and hence the quality of university education outcomes. The curriculum varies from one university to another, and this difference might make one university more successful than others (Chen, Sok and Sok 2007). The variation in the quality standards of universities, for example, calls for the need to have an up-to-date curriculum that is also relevant. According to Marshal (1987:138), high-quality courses encourage students to be committed to learning and internalising the application of such knowledge and skills in their future life and career. Therefore, from an education capabilities expansion perspective, for a university course to be relevant it needs to be designed in such a way that the learners come out when they have practical reason, learning dispositions, sociality and participation skills, and a reasonable skill base in science and technology (see also 2.4.2). The clarity in the documentation of university education outcomes is important because universities serve as guiding stars to other levels of education.

Universities are at the top of the education pyramid or the education ‘food chain’ and provide the last formal education input in a learner as he exits to the world of work. It can, therefore, be argued that the curriculum content that helps a university student to expand his capabilities needs to strike a careful balance between theory and practice and be relevant to the student’s chosen profession but also focused on the needs of the learner. The broad principles which inform curriculum design and content development for tertiary institutions are:

1. Promote learning and professionalism
2. Ensure other subject areas are applied to the chosen profession or vocation.
3. Integrate theory with practice by providing regular tutorials and set study periods for discussion on site.

4. Provide a personal-centred approach to learning and teaching.
5. Enable learners to develop professional competence and to capitalise on their proven academic ability.

(Neary 2003:103-104)

Neary's principles provide an informative framework that can be used to assess university curriculum content in terms of professional relevance and theory-practice integration. Since the curriculum content dictates what individuals will learn, and to some extent how they will learn it, the curriculum has a direct influence on what the people will know and, therefore, what they will be able to do. What they will be able to do (and actually do) greatly contributes to individuals' wellbeing.

In terms of what people know and are able to do, and considering the different learning dispositions of different students, the curriculum can be categorised into different blocks. Watson and Ashton (1995: 6-7) classifies the curriculum into four categories, namely: explicit curriculum; implicit curriculum; null curriculum; and received curriculum. The explicit curriculum is the curriculum regarding what teachers think they are communicating to the learners; the implicit curriculum is what the teacher assumes the learner is able to get indirectly; the received curriculum is the real meaning of what the learner gets from the teacher at school; and the null curriculum refers to the external learning in which the curriculum is delivered. This classification of curriculum requires the teacher to be more cautious with the received curriculum, through planning it, implementing it and evaluating it. This is because, "if education is to be of value in enabling clarity of thought, it is the *received* curriculum...that is really important"(Watson and Ashton 1995: 6). And, as Cornbleth (1990: 12) points out, what "we see, think and talk about, study and act on the curriculum made available to our students" is influenced by our conception and analysis of the curriculum. Therefore, if university education aims at imparting the received curriculum, the students gain more.

The design of the curriculum content is important because at the end of the study programme what a student learns ('the received curriculum') is the most important thing. This is because the curriculum is meant for the learning and development needs of the

students. As Grundy (1987:76) observes, students are the subject of the curriculum but not its object just like learning, not teaching, is the central concern of the teacher. Hence, content is selected for the purpose of assisting students to learn and utilise. However, the curriculum content needs to be integrated both theoretically and practically in order to develop the requisite education capabilities.

3.5.1 Theory-practice integration of university curriculum

The university curriculum, regardless of professional specialisation, should enable the learners to internalise both theory and the practical application of the knowledge and skills obtained from university education. Therefore, all course descriptions and curriculum need to demonstrate “a union of theory and practice that ultimately constitutes the values and competencies of professionals” (Bates 2008: 315). A reasonable balance between theory and practice is important in order to create a useful populace of graduates. This balance increases the possibility of meeting what should be the main purpose of aspiring for university education, namely the acquisition of knowledge, skills and attitude that depict learning dispositions, practical reason, sociality and participation, and an understanding of science and technology (Terzi 2004: 16-17; 2007: 37). Hence, integrating theory and practical elements in university curriculum content is important for the expansion of student education capabilities.

Furthermore, integration guards against university education processes “reproducing occupational capacities” that are important but “failing to develop the kinds of critical capacities that are required for professional practice”(Billet 2009:828). When we have to choose between the two, however, theoretical understanding of concepts yields less value than practical competence in handling issues, because, as Barnett (2009: 439) explains, the graduate needs to have capabilities with which to deal purposively with the world of reality where “the knowing student” gets “replaced by the performing student” because the performing student is more relevant to the world. Hence, the level of mix of theory and practice within the curriculum has a bearing on student outcomes, namely the education capabilities developed. But there is need to emphasise the practical bits of the curriculum need because, as Billett (2009: 830) asserts, “...anything that passes as

education needs to be vocational: addressing individuals' needs and trajectories". By implication, education should have elements of practical application both in the short and the long term regardless of the sector of employment. A lot of theory tends to have low value to the student while a lot of practical applicability of the knowledge tends to be of high value and relevance.

To integrate theory and practice, Miller (2007) recommends a holistic curriculum that can facilitate the connections between the student and the community. He describes the community as stakeholders and their environment, such as the classroom and the school neighbourhoods, or even the global community. He advocates for building community connections, for example, through 'cooperative learning'. Miller (2007:148) understands cooperative learning to mean small groups in which students learn to trust each other and to work together in the learning processes. And, as Johnson and Johnson (quoted in Miller 2007: 149) explain, cooperative learning includes the following elements: student-positive interdependence; face-to-face interaction; individual student accountability and responsibility to achieve the team goals; use of interpersonal and small group skills; and frequent evaluations of current team functioning. Therefore, from these explanations of the holistic curriculum content and its application to a wider community, an insight is communicated to the effect that university education needs to link what is taught to the end users: the community. Even when the student is still in college, the link is necessary so as to make education relevant and practical when the student finally graduates. This link is only possible if the graduating student possesses the necessary and relevant education capabilities with which to help the community. Education capabilities expansion through cooperative learning is possible because cooperative learning encourages the students to test and engage theory through discussions. The discussions enable students to not only refine the ideas learnt in the class but also to socialise in the process of learning. Socialisation is part of the holistic curriculum and it enlarges education capabilities in students (see also 4.5).

Although a balanced or holistic curriculum that enables students to be exposed to a wide range of issues is desirable, it may not be easy to implement, let alone design. As

Watson and Ashton (1995:86) observe, “the ‘balanced’ curriculum can never be one whose content is universally agreed or applicable”, but one with a reasonable balance. What is important to take into account is that students from different learning backgrounds need a curriculum that has a broad understanding of the world so as to internalise a wide range of issues. Therefore, the curriculum needs to be comprehensive and inclusive of the divergent needs of both the individual and the community because after school the graduates will join full community life. It is the role of the university to design curriculum that meets all stakeholder needs.

At university level, the integration of theory and the practical content of the curriculum mainly lies in the hands of the lecturers. This happens because university lecturers retain a very significant advantage over teachers in other branches of education regarding control of what is to be included in the teaching syllabus. Unlike their peers in primary, secondary, technical and vocational education whose courses are designed by other experts, university lecturers design their own courses (Toohey 1999: 1). Indeed, much of the creativity and power in teaching lies in the design of the curriculum, notably the choice of reading materials and ideas which become the focus of study; the planning of lessons for students; and the means by which learning achievement is assessed. Therefore, consciously or unconsciously, the lecturers exert a lot of influence on what education capabilities will be planned for and which ones will be excluded in the curriculum content.

In curriculum content formulation, certain principles also need to be observed in order to benefit the targeted students. For example, Barnett (2009: 438)’s four principles require that the curriculum a) be reasonably *demanding* to enable ‘resilience’ to form; (b) offer contrasting insights and perspectives to allow ‘openness’ to develop; (c) demand presence and commitment on the part of the student to enforce ‘self-discipline; and (d) contain enough space and spaces to facilitate the unfolding of ‘authenticity’ and ‘integrity’. Barnett’s views on the curriculum content are insightful and the researcher finds them helpful in understanding university curriculum and education capabilities

expansion in students. In addition to these principles, the curriculum should be professionally relevant to the student.

3.5.2 Professional relevance of university education curriculum

In order to be of importance, the curriculum is designed in terms of value added, fitness for purpose, and fitness of purpose. The value added attribute relates to what the students will gain as a result of learning with respect to what they will know, what they will be able to do, and how they will behave as a result of the teaching or learning experience. Fitness for purpose is about appropriateness to the group in terms of previous learning, their level of learning, abilities and needs. Finally, fitness of purpose implies appropriateness to the standards and expectations of the qualifications that the students are studying for (Butcher, Davis & Highton 2006: 20-21). This blend of the three qualities of the curriculum outlines some of the key considerations upon which an analysis of the professional relevance of university education curriculum may be based.

If it is to transform people's understanding of 'the real world' and the way people operate in it, the university curriculum has to have clear goals and content. Butcher et al. (2006: 40) and Toohey (1999: 71) recommend that universities supply information about what is required of the student enrolling in any course and this could be done, for example, through availing to students the aims and outcomes, but they (aims and outcomes) do not necessarily have to be exact. However, it is important that these outcomes are determined ahead of time. The programme aims and learning outcomes clarify the scope of the curriculum and help to focus the learner on what he needs to study and achieve. Indeed, if such information is supplied to students, it would not only increase predictability regarding what people are to study, but also enable students to gauge the course relevance and suitability ahead of time. In fact, as Barnett (1997: 212-13) argues, "[t]he greater effectiveness of the curriculum is felt to lie in the promotion of specified competencies and outcomes. Here the curriculum becomes a matter of technology, in which the required outcomes are engineered". Therefore, making learning goals available to students ahead of time is crucial in increasing motivation and the

acceptability of the programme and subsequently the development of the intended outcomes, such as education capabilities.

Today, university education is expected to deliver certain outcomes regardless of the field, and the graduates must possess certain capabilities or competences. In 1997, for example, in the United Kingdom, the Higher Education Quality Council (HEQC) listed three kinds of achievements that a typical graduate is expected to possess. They are:

- Field-specific-knowledge – the possession of a body of knowledge and other qualities particular to the field (or fields) studied;
- Shared attributes – the possession of certain more general attributes that might be common to graduates from families of degrees, whether associated by cognate subject matter and/ or approach (such as the life sciences or the performing arts);
- Generic attributes – the possession of yet more general attributes, which might be common to all or most graduates.

(HEQC: Quality Enhancement Group, 1997 quoted in Toohey 1999:71)

These three achievements expected of a graduate offered the current study a good foundation upon which to partly assess the curriculum and education capabilities of students. In the current study, the main data collection methods, namely interviewing and focus groups, considered all the three kinds of achievements recommended by the HEQC, but the quantitative questionnaires tested for 'shared' and 'generic' attributes. Using these expected achievements, this study has been able to fairly gauge whether or not a new graduate of a public university has the education capabilities, such as sociality and participation; learning disposition; practical reason; and science and technology. Consequently, the researcher was able to fairly estimate the contribution of the curriculum content to higher education capabilities expansion among students.

Similarly, the National Board of Employment Education and Training (NBEET) of the Higher Education Council (HEC) of Australia states that the desirable 'characteristics of quality' in graduates are a combination of the following:

- Generic skills
These are skills that every graduate should be able to acquire regardless of their discipline or field of study. They should include knowing how to learn, to solve problems, to be able to think logically as well as laterally and independently, to be intellectually rigorous, to integrate information and to communicate effectively. There are also important socially-relevant qualities expected of

graduates which relate to leadership, cooperation and team-work, ethical practice, and critical/evaluative skills; and personal skills such as intellectual liveliness and the willingness and capacity to learn and re-learn.

- A body of knowledge

The knowledge that graduates acquire has two main purposes. It should provide them with knowledge of a discipline and its theoretical base at a depth and detail appropriate for the level of the award. It should also act as a vehicle to inculcate the generic skills...

- Professional/technical or other job-related skills

The professional, occupational or practical skills, which graduates can apply immediately to their employment. Some of these skills will be occupational-specific; some will be a more general ability to work with minimum supervision in the specific field, to apply learning to the workplace and so on.

(NBEET: HEC, 1992: 9)

The NBEET: HEC listing of 'characteristics of quality' in a graduate is comprehensive because it covers the technical, theoretical and practical aspects of university education. These characteristics need to be taken care of right from the curriculum content design stage through the pedagogies up to learning evaluation. In fact, the listing is in line with that of the HEQC already indicated in this section. The HEQC list can serve as a guide for university education planners in setting quality standards and education evaluation parameters in the curriculum. Moreover, the characteristics can be used to gauge the level of graduate education capability achievement.

Drawing from her experience at United Kingdom universities, Toohey (1999: 71) notes that academics tend to emphasise, as goals for graduates of their courses, the 'generic skills and abilities'. The implication of this emphasis is that at the end of the degree course, graduates are not strong on the professional/technical skills or other job-related skills proposed by the NBEET: HEC. Moreover, as Harvey and Knight (1996) explain, academics tend to believe that the generic or transferable skills are more or less by-products of university education and do not have to be taught, as opposed to employers who argue that these skills should be explicitly developed and examined at university. This explanation reveals a contradiction between teachers' expectations of the students vis-à-vis employers' expectations. This contradiction may partly explain the cause of 'irrelevant' and 'incompetent' graduates who do not possess what the employers require, yet their lecturers are satisfied with their students' education capabilities. By implication,

teachers' satisfaction with such capabilities stems from what teachers believe students should learn. And as Martin, Prosser, Trigwell, Ramsden and Benjamin (2002: 103) observe, what teachers believe their students should learn affects how and what teachers teach. Hence, the curriculum gets filled up with what teachers believe is appropriate for the students regardless of whether it builds education capabilities or not.

Indeed, students learn what their teachers emphasise and consider to be important. To this end, "students develop those generic skills or abilities on which their teachers place a high value, but show little change in those areas which are not valued by staff" (Toohey 1999:21). For example, if the teachers value conceptual, analytical and planning skills, when planning and delivering their lessons, the students will follow suit; but if the teachers emphasise interpersonal, communication and teamwork skills, the students will equally follow suit. In fact, Boyatzis (1995) expounds on the fact that lecturers' goals affect students' learning outcomes because teachers tend to conduct classes in accordance with their goals, thereby influencing students to develop those education capabilities which teaching staff focused on. From this view, it can be realised that in order to change what students learn, one has to change the goals and values that lecturers have. If university lecturers' goals and values can be harmonised at institutional level or throughout a given course to match the needs of other stakeholders, then the intended impact of university education on higher education capabilities expansion can be enhanced.

Some countries have described what a first degree university graduate should be able to know and do. In the United Kingdom, for example, the Quality Assurance Agency (QAA) has instituted standards that a graduate student should have in order to be awarded a bachelor's degree (see also Appendix A). According to the QAA (2001: 14-15), for a university student to qualify to be awarded an honours (bachelor's) degree, he should, among others, demonstrate: a good understanding of key aspects of his field of study; an ability to utilise established techniques of analysis and enquiry within his discipline; an understanding of the uncertainty, ambiguity and limits of knowledge; and the ability to manage his own learning, and to make use of scholarly work and primary sources.

These prescribed standards help to clarify the expected quality of graduates of the United Kingdom universities. These standards present a good framework which the current study partly used to assess the quality and relevance of new graduates and/or students in public universities in Uganda, given that Uganda runs a university system almost similar to that of Britain.

In a different context, Sambo's (2006: 317) study of Nigerian universities provides evidence to the effect that the relevance and delivery of the curriculum in universities can generally be wanting. He concludes that "employers are unhappy with the products they receive from institutions and complain about lack of communication, analytical, and collaborative skills in graduates". He reveals that the clients of university education are "practically on a collision course with the institutions and express displeasure with what they get out of the 'system'". Evidently, the university curriculum and pedagogy do not satisfy both the labour market requirements and the expectations of the direct university education recipients, namely the students. This implies that university education at times can make sense only to lecturers and, maybe, fail to satisfy other stakeholders. However, if it is to be agreed that the university students as well as the employers are two of the top leading stakeholders (the others being lecturers and the community) in the university education curriculum, then failure to satisfy them (students and employers) implies poor performance on the part of the universities.

The curriculum can be tailored to the needs of the students, the community and the specific professions that the students will serve after graduation. Universities ideally train people to handle community needs and challenges. According to Hativa (2000: 38), the overall educational goal of university teaching is widely agreed as the preparation of students for their professional life. Moreover, professional success in the 21st century workplace requires "original, imaginative, and non-routine thinking, the ability for self-study, and flexibility in adjusting to changing conditions". Hativa further reveals that to prepare students for the dynamic world, universities must teach students "well-developed thinking skills and a well-founded basis for self-directed, independent learning". This is because students are not passive recipients of knowledge and skills but rather active

learners who can generate their own knowledge. Similarly, Perkins and Swartz (1992) agree that teaching enhances students' understanding and capacity to apply new knowledge to a variety of tasks and work situations. In addition, university education promotes students' thinking by explicitly teaching them decision-making approaches and reflection, and by promoting their tendencies for thinking and doing. Hence, useful university curriculum integrates both the theoretical and practical application of knowledge and skills. Probably, this explains why Billet (2009: 827-828) is of the opinion that university education should promote a curriculum that is relevant to the practical world of work through practical learning and, therefore, enable graduates to have the "capacities to engage immediately and effectively in the professional setting where they secure employment". This type of curriculum is in line with employers' demands and governments' expectations; and it develops these occupational capacities if students are taken through relevant learning experiences and programmes.

University education curriculum systems that are flexible tend to be effective in meeting society's needs. Flexibility implies adaptability of the systems, including the curriculum, to the rise and fall of different fields of study, and to changes of skill demanded in the labour market (World Bank 2000b:51). By implication, the usefulness of a university course or programme in the context of community needs may influence the university curriculum content and professional knowledge and skills to be developed among learners. In addition, a curriculum that is flexibly designed and focused on society needs is balanced in terms of education and training systems that yield a mix of skilled workers (Ramacharan 2002 quoted in King and Palmer 2006:62). The balance and flexibility in skills-mix in terms of levels is needed because, as King and Palmer (2006:63) argue, if the quantity and quality of qualifications at different levels of education outlets are not proportionately balanced, training will inevitably result in capacity constraints or excesses in some qualifications. Such surpluses at certain skills levels and deficits at other levels lead to skills-imbalance, including education capability deficiencies.

It should, however, be observed that even good universities with relevant curricula that deliver professionally competent and well-adjusted persons in society, without sufficient

employment opportunities, can inadvertently create a labour reserve of unemployed graduates. However, if the elements of integrating theory and practice as well as the professional relevance of graduates are catered for, employment should be securable. For example, in this era of widespread informal sector employment and self-employment, university business departments or colleges should be able to deliver graduates who are ready and able to start their own businesses; agricultural departments at universities can deliver those graduates who can do farming; and so forth. This is because, at university level, students can fairly predict the usefulness of an education programme before enrolling for it. Meanwhile, lecturers are expected to impart knowledge and skills that are demanded in the labour market. This is because, as Todaro (1999) states, the demand for education is derived demand for wages and employment: people go to school not for its sake but because of the expected benefits of education.

The *model* used in delivering the curriculum of a university has an influence on the student level of understanding of the subject matter, including the subsequent knowledge and skills developed from the university. Neary (2003: 61-62) identifies two models for curriculum development, namely the *product model* and the *process model*. The product model is also called the 'behavioural objective model' due to its focus on curriculum outputs. This model helps to reduce the vagueness of the syllabus; it specifies practical skills; it makes assessment techniques more precise; and it influences the idea of behaviourism. This model further addresses the product of the curriculum and seeks to answer four questions, namely: "What are the aims and objectives of the curriculum? Which learning experiences meet these aims? How can the extent to which these aims and objectives have been met be evaluated? How can these learning experiences be organised?" (Tyler quoted in Neary 2003: 60). Neary further indicates that these questions require careful thinking and analysis by both learners and employers, in addition to task analysis by curriculum planners. In the current study, the researcher finds the product model quite relevant because it focuses on the curriculum outputs, that is, the intended behaviours, which are crucial since the curriculum can only be as good as its products.

On the other hand, the process model is considered to be an alternative to the product model. The process model seeks to address the question: "Can curriculum and pedagogy be organised satisfactorily by logic other than that of the means-end model?" (Stenhouse quoted in Neary 2003: 61). To this end, the process model focuses on three issues, namely: teacher activities (the teacher's role); student and learner activities; and the conditions in which the learning takes place. This model, therefore, defines the learning experiences other than the outcomes, giving an impression that learning activities are more important than the prescribed content. The model fits well with curriculum designed to teach social and life skills, although it might apply to other subject areas as well. The model has the advantage of emphasising the active roles of teachers and learners. However, it has weaknesses such as neglecting the consideration of appropriate content and having limited application in some learning areas. By implication, the process model favours learner-centred education through active discovery unlike the passive "accumulation of stored knowledge" (Neary 2003: 63). Under this model, the learning processes tend to be less formal and less rigidly controlled; and everything in the assessment of student performance is directed at improving the process of learning and assessment is part of the learning processes.

In the present study, the process model, though learner-centred, is deemed to be less helpful because of its emphasis on the education processes as opposed to education outputs. This is because it is possible to have a learner-centred approach with a facilitator, but so long as the outputs of the learning processes (for example student capabilities) are sub-standard, the intention of the education programme is lost. Education outputs and outcomes basically represent the purpose of education provision. This is because educational institutions, universities for example, exist in order to deliver useful and productive graduates who can improve society. Hence, university students need to interface with a curriculum that is both professionally relevant and also relevant to society.

3.6 Summary

The foregoing literature review has focused on university education, particularly curriculum content and how it can influence education capabilities expansion of university students. The review reveals that to a large extent the curriculum content needs to be relevant to the students, the specific professions and to the public. The curriculum content also needs to be balanced in terms of theory and practice in order to contribute to education capabilities expansion among students. This is because of the centrality of curriculum content to university education processes where the curriculum serves as a “pedagogic vehicle for effecting changes in human beings through particular kinds of encounter with knowledge” (Barnett 2009: 429). Therefore, the curriculum content needs to be carefully designed to meet stakeholders’ needs, especially those of the students. However, in the literature reviewed in this chapter, it is not very clear *how* the university curriculum content can be focused on student needs such as capability expansion although scholars agree *what* can be done. For example, scholars recommend that in the curriculum content determination process student needs can be met through involving stakeholders (Saint 1992; Toohey 1999; Karseth 2008), emphasising the practical bits (Billett 2009), making the curriculum holistic (Watson and Ashton 1995; Miller 2007), and making the curriculum goal-oriented (Hativa 2000; Butcher et al. 2006). These suggestions complement one another in explaining the potential contribution of the higher education curriculum in order to benefit the student who is the primary stakeholder.

It is generally agreed that higher education can make a significant contribution to the expansion of (complex) capabilities because it imparts advanced skills, knowledge and attitudes that increase the labour productivity of the graduates (World Bank 1995: 27). At university level, graduates’ contributions can benefit the whole society, for example through graduates working in public or private services or sharing knowledge and skills at lower levels, thus supporting the younger generation in their capability expansion. However some scholars, such as Psacharopoulos and Patrinos (2002), unreservedly emphasise elementary and/or primary education curriculum as the most critical level in national development and individual capability expansion as opposed to

higher education. In spite of this contradiction, there is a majority consensus among scholars (such as Bloom et al. 2006; Assie-Lumumba 2006) that higher education significantly contributes to national development through knowledge and skills development of graduates. It should, however, be noted that this argument is made while referring generally to the entire higher education system, and not to the specific role of a public university in capability expansion.

The role of public university education in knowledge and skills development is, therefore, intertwined with that of other higher education institutions, making it difficult to disentangle the specific contribution of public university education to individual graduate capability expansion. Moreover, the contribution of the higher education curriculum to capability expansion is presented mainly from the economic perspective and remains vague on the specific role of the university education curriculum in other, non-economic areas of capability expansion. Therefore, this study, *inter alia*, investigates the role of the curriculum content of public university education in education capabilities expansion. Curriculum content is analysed alongside other sub-variables of university education since it (the curriculum content) is just one of the sub-variables in the education package. Hence, in the following chapter (Chapter Four) the researcher presents a review of two other sub-variables, namely teaching processes and learning processes, in relation to education capabilities expansion.

Chapter Four

University Pedagogies and Education Capabilities Expansion

4.1 Introduction

Chapter Three reviewed *curriculum content* as a sub-variable of university education and established that curriculum content is critical to student education capabilities expansion. The current chapter presents a literature review of two other sub-variables of university education, namely *teaching processes* and *learning processes*. In this chapter, teaching processes encompass teaching strategies, teaching approaches, and quality assurance measures as indicators. On the other hand, learning processes cover learning strategies and approaches and level of university involvement in academic research.

This chapter reveals the relationship between students' learning processes and the probabilities of individual students expanding their education capability sets in life. The chapter also indicates the potential relationship that exists between the teaching processes and the possibility of students expanding individual education capabilities. Basically, the chapter provides foundational literature for eventual analysis of the second and third research objectives of this study, namely: to analyse the extent to which the university teaching processes contribute to the education capabilities expansion among students in Uganda and to assess the role which the university learning processes play in the education capabilities expansion among students in Uganda (see also 1.4).

In this chapter, the literature reveals that the development of student capabilities in university education cannot only be understood in general education terms of what is taught, how it is taught, and how it is learned but also in terms of what the teacher aims at developing in the students, namely the education outcomes. The researcher argues that the critical issue in university education, therefore, lies in the teachers' and students' education capability enlargement intentions that need to be specified, not merely in listing general education outcomes.

4.2 University Teaching Processes and Capability Expansion

Teaching refers to the design and implementation of activities that promote student understanding of the subject matter. Teaching embraces session design and the development of teaching and learning materials, the out-of-class interactions between lecturers and students plus the day-to-day and overall assessment of student learning (Smith 2001:1). Teaching can also be seen as “transferring knowledge and skills, supporting the active processing of knowledge, supporting the transformation of conceptions, supporting holistic personal growth, and building a learning community with students” (Paakkari, Tynjala and Kannas 2010:915)[original emphasis]. Effective teaching is that teaching that facilitates in students successful learning in a deep and meaningful way (Hativa 2000:11). It can also be defined as the extent to which a teacher has facilitated student achievement of educational goals (McKeachie 1994: 315). Lecturers are the major determinants of teaching processes at universities although learning largely depends on the behaviour of the student.

Three important questions can help us in managing effective teaching: “How do teachers behave? Why do they behave as they do? And what are the effects of their behaviour?”(Gage quoted in Hativa 2000:12). By implication, the answers to these questions unveil the different perspectives of teaching that go beyond class instruction. The behaviour of teachers, for example, could be of the type that displays disorganisation, lack of focus, low commitment, and poor personal disposition; such behaviour could wrongly role-model students into careless future citizens who can miss out on developing their own individual education capabilities. Therefore, the management of the teaching processes, such as strategies and approaches, is critical because they (teaching processes) can affect the learning outcomes.

4.2.1 University lecturers’ teaching strategies and approaches

A teaching strategy is a “plan for someone else’s learning” and it includes the presentations which the teacher intends to make, the exercises the teacher has designed for students, the materials which will be supplied or recommended for students to use, and the ways in which the learning outcomes will be evaluated (Toohey 1999:

152). A teaching strategy is, therefore, a broad concept that encompasses all activities and resources that a teacher prepares for the student to be able to learn. Teaching strategies may range from teacher-focused to student-focused ones (Martin, Prosser, Trigwell, Ramsden, & Benjamin 2002: 109). Usually, the student-focused ones are the most helpful, especially when they specify the skills and capacities that need to be developed.

Teaching strategies that are student-focused enable students to learn the intended material and acquire the necessary education capabilities. Toohey (1999: 152-157), for example, explains 'a simple model of the learning process' which postulates that a learner goes through five stages in order to internalise an issue, be it a concept, principle or skill. The stages are: i) encounter or be introduced to the idea, concept, principle or skill; ii) get to know more about it; iii) try it out for oneself; iv) get feedback; v) reflect, adjust and try again. In the process of trying again only the later four stages need to be repeated as many times as necessary to deliver full mastery of the knowledge or skill. Toohey argues that the traditional methods used in university teaching have the potential for supporting all the five stage of learning. For example, in lectures or through readings when students are introduced to new material, information and different views, these cater for stage one. Then, laboratory work, tutorials, small-group work and assignments give students an opportunity to try out the new knowledge, get feedback, reflect and try again and in the process, stages two to five are covered. These different stages have to be reasonably balanced for effective learning to take place. For instance, in a situation where laboratory work or tutorials or small-group work are not used in teaching, the efficacy of knowledge and skill acquisition is compromised. Therefore, it is important that the methods used in teaching are carefully chosen in order to impart the required knowledge and skills to students.

Teaching methods impact on the development of student education capabilities differently. There are many teaching methods and techniques available to a university teacher /lecturer. They include: lecture, demonstration, case-study analysis, fieldwork, practical exercises, discussion, and simulation exercises. The emphasis has been

shifting over time from one method to another in a bid to identify the most effective approach to university teaching. In this study, we elaborate on five of the apparently most commonly used, but not necessarily the best, teaching methods.

The lecture method is a comparatively uninterrupted talk or presentation by a teacher on an academic subject, usually in a classroom setting (Thielens 1987: 1). The purpose of a lecture is to introduce new subjects, convey facts and statistics (Stone 1997: 7-7). Lecturing may be strict lecturing, implying teacher exposition with almost no student participation, or it could be less strict, where students are allowed to ask questions seeking clarification and also where some form of discussion is allowed (Hativa 2000: 71). Lecturing tends to move with other complementary sources such as textbooks, handouts, assignments and tests.

The discussion method is a teaching approach that encourages students to actively contribute ideas in the learning processes by talking to the teacher and to one another as the session progresses (Armstrong 2003: 900). The discussion method can be teacher-centred or student-centred. Student-centred discussions take the form of discussion groups of students handling similar or different issues. A teacher-centred discussion is one in which the teacher raises a question or a topic and guides students' answers (Thielens 1987). The teacher-centred discussion is the most commonly used in university lecture rooms (Stone 1997: 7-5) but is not necessarily the best approach. Through discussions students pool several ideas and are able to advance their thinking.

The group-work method refers to a form of cooperative learning where small groups of four to seven learners examine a problem and develop a solution (Stone 1997: 7-6; Armstrong 2003: 902). Groupwork can also be a teaching approach where two or more students are enabled to work together to accomplish a common goal under three main conditions: "positive interdependence" where all students in a group must cooperate to complete a task; "group accountability" where all group members are accountable for the final outcome of their group work; and "personal responsibility" where students execute responsibility for their peers (Hativa 2000:117). Hence group-work members engage in

cooperative activities that benefit both the specific individuals and the entire group. Group learning enables students to present their ideas, develop problem-solving skills, learn from one another and develop team spirit, and helps clarify personal values (Stone 1997: 7-6 and Armstrong 2003: 902). In effect, group learning also gives students a sense of responsibility in the learning processes. Hence, group work is widely considered a useful approach to teaching.

The role-playing and simulation method is a teaching approach that requires students to act in a particular situation by combining case study and role-playing (Armstrong 2003: 902). In role-playing, a student who is in a learning process models some real-life problem-situation and tries to solve the problem so as to learn (Stone 1997: 7-4). Learners are given the opportunity to practise behaviour in conditions that are very similar to those they will meet in the workplace. The teacher composes a real-life situation and a cast of characters. The students adopt the different characters, find out the required information on the characters, and then act out a scene.

The case-method teaching involves using stories (cases), real or imagined, that place the students in the role of the decision-maker or problem-solver, thereby teaching skills and attitude change (Stone 1998: 7-3; Armstrong 2003: 901). Students are provided with background data and are required to make sense of the information provided to them, discover the principles which the case illustrates, and formulate appropriate responses regarding the next practical action to take. Consequently, the cases involve the consideration of many possible alternative approaches for action or solution that call for the evaluation of each approach. Case-based teaching helps students apply theory to practice and evaluate the applicability of those different theories to real-life situations. Students also learn that there are many different solutions to one problem.

The different teaching methods discussed above are very useful but require professional, committed and well-organised lecturers who know how to handle study-group dynamics. In fact, the multiplicity of teaching methods or approaches, where teaching is aimed at imparting knowledge, skills and attitudes that are applicable to the real world, can be a

challenge for many university lecturers seeking the best teaching method or combination of methods to use. This challenge is possible because what a given teaching method aims to give to students may not be what the students are actually internalising. As Watson and Ashton (1995: 91) explain, “it is not usually just 1) *what* is said, but 2) *how*, and 3) *with what authority* on the part of teachers, and 4) *how often*, and 5) *what is missed out*, and 6) *in what context*, and 7) with what personal attentiveness on the part of recipients” that determines what the students will actually learn. Watson and Ashton’s views provide that insight that a teacher needs to take stock of the totality of the teaching content and context. We may also add to Watson and Ashton’s list of issues the importance of considering the specific teaching intentions (education capabilities) as one of the determinants of effective learning.

Martin et al. (2002: 109-111) summarise the categories of approaches to teaching as follows: Firstly, the teacher may intend to transmit information to the students and this may be achieved through presenting the material to be studied, or covering the material, or clarifying the material to be learned. Secondly, the teacher may intend to enhance students’ “conceptual development” and this could be achieved either through engaging students with “discipline knowledge” or in “practising discipline knowledge”. And, thirdly, the teacher may focus on students’ “conceptual change” through engaging them in “challenging their discipline understanding/professional practice”. From this categorisation of approaches, it can be noted that the first category of teachers’ approach to teaching mainly focuses on “knowledge given” whereas the second and third categories focus on “knowledge constructed”. Hence, these two conceptual distinctions in the teaching approach may guide how a lecturer will teach, and the subsequent education capabilities the teacher will build in the students.

Furthermore, it is argued that approaches to teaching, just like approaches to learning, contain two distinct dimensions, namely “intention and strategy” (Trigwell and Prosser 1991:264). Intention refers to the outcomes of teaching that the teacher aims at, while strategy means the plan through which the teaching outcomes are to be achieved. In the

opinion of Trigwell, Prosser and Taylor (1994: 78), there are five different approaches to teaching in higher education that reveal intention and strategy, namely:

Approach A: A teacher-focused strategy with the intention of transmitting information to students.

Approach B: A teacher-focused strategy with the intention that students acquire the concepts of the discipline.

Approach C: A teacher/student interaction strategy with the intention that students acquire the concepts of the discipline.

Approach D: A student-focused strategy aimed at students developing their conception.

Approach E: A student-focused strategy aimed at students changing their conceptions.

These approaches, in one way or another, form a hierarchy of usefulness to the student, with approach 'A' just giving facts, and perhaps skills, but almost not involving students in the teaching-learning processes. The teacher more or less assumes that the students have no clue about the subject and the teacher, therefore, gives all the information. To the contrary, approach 'E' focuses on the student with the aim of creating a conceptual understanding in the student. More emphasis is put on what the student is doing as opposed to what the teacher is doing. In the *capability approach* framework guiding the current study, approach 'E' would imply that the education capabilities the student is developing are considered prime and, therefore, deliberately developed.

University education is not only affected by the teaching approaches used but also by the wide environmental context in which teaching takes place. Effective teaching requires that a teacher has a good understanding of the teaching environment and a wide knowledge base that consists of not only mastery of alternative teaching methods but several teaching domains. According to Shulman (1986), the critical domains for teaching are: i) subject-matter knowledge; ii) pedagogical content knowledge; iii) general pedagogical knowledge; iv) knowledge of learners and learning; v) curricular knowledge; vi) knowledge of educational ends; vii) knowledge of context; and viii) knowledge of self. The mastery of these domains makes a teacher an effective one, but the extent to which these are realised in public university education are questionable, and requires investigation, for example, in public universities in Uganda.

Hativa (2000:16) believes that many university teachers do not possess good knowledge and skills of teaching because they did not receive sufficient preparation in teaching methods in their career progression. Moreover, as Stark (quoted in Hativa 2000:17) observes, these “deficiencies in pedagogical knowledge negatively affect all aspects of university teaching” and this may happen as teachers plan their lessons with their mind tuned to the content and how to present it while giving little consideration to how their students will understand it and utilise it. In fact, if students are poorly taught they learn less than if they are taught well. Hence, teaching effectiveness gets affected by the teacher’s level of pedagogical knowledge, teaching behaviours and teaching styles.

Teachers’ conception of the teaching and learning processes affects how they teach (Trigwell, Prosser and Waterhouse 1999: 60, 67). Similarly, teachers’ perception of the teaching environment influences how they will teach and this, in turn, affects student learning outcomes. For instance, when teachers believe that students are ignorant about the subject matter in question then the teachers may decide to concentrate on transmitting facts that simply enable students to write down good notes. This approach may, in turn, lead the students to adopt a surface approach to learning which is actually less helpful in imparting lifelong knowledge and skills. Kember (1997 quoted in Paakkari Tynjala & Kannas 2010: 906) synthesises teaching conceptions into five categories, namely “imparting information, transmitting structured knowledge, student-teacher interaction/apprenticeship, facilitating understanding, and conceptual change/intellectual development”. According to Paakkari et al. (2010:906), these five categories can be classified into two orientations, with the first three representing “teacher-centred/content-oriented conceptions of teaching and the last two categories representing student-centred/learning-oriented conceptions”. In the current study, the researcher argues that what changes the lives of students in terms of education capabilities expansion is the student-centred orientation. Therefore, in this study attention is paid to the teaching orientations of public university education in Uganda.

The different teaching orientations imply variations in teaching approaches. As Trigwell, Prosser and Taylor (quoted in Martin et al. 2002: 109) observe, the variations in the teaching approaches used across personalities depends on teachers' intentions and strategies. Intentions may range from transferring information to students to enabling them to change their conceptions and understanding of the subject matter. For example, knowledge and skills development would most likely be realised when the teachers' intentions focus on changing students. In fact, Biggs (1996: 361) argues that good teachers should be clear about what they want students to learn and should indicate what students have to do in order to demonstrate that they have learned at the appropriate level. He further argues that teachers should know and utilise approaches that make their students learn effectively at the desired intellectual level and teacher should, therefore, be more student-centred in their pedagogical activities and more objective during the assessment processes. Hence, Biggs reaffirms the need for student-focused teaching approaches.

In general, teaching strategies and approaches that are effective in transforming students' lives can be guided by six principles of good teaching, namely: a high level of teachers' interest and explanation of their discipline; teachers' concern and respect for students and student learning; teachers' adoption of appropriate assessment and feedback; teaching that provides clear goals and intellectual challenge to the students; teaching that promotes independence, control and active engagement in the classroom; and teachers' willingness to learn from students taking their course (Ramsden 2003 quoted in Exeter et al. 2010: 772). These principles are very important at university level if students are to develop the required knowledge, skills, attitudes and capacities. The current study utilises these principles to further explore the specific capabilities that university education needs to provide to undergraduate students (see also 9.4). In addition, the analysis in Chapter Seven takes care of the evaluation and quality assurance systems in university pedagogies.

4.2.2 University teaching quality assurance systems

Quality relates to: fitness for purpose; meeting customers' expectations; a cycle of continuous improvement; and a blended system of interconnected processes (Neary 2003:195-196; NCHE 2011:2). In the context of university education, quality means different things to different competing stakeholders, depending on their expectations and their perception of the role of the university (Blackmore 2009:860). Quality assurance endeavours can be seen in terms of the audits, practices, policies and procedures an institution has developed and is implementing. Power (quoted in Blackmore 2009:857) asserts that quality in teaching and research are markers of class in university education and quality assurance is one of the common tools used by governments and university management in the auditing of the teaching processes, learning processes and quality of teachers.

Some philosophies have been advanced to further describe the meaning of quality. A set of six dimensions of quality can be used to group and analyse issues of quality such as education in a university setting. The dimensions are: i) *access*: which covers both geographical and timeliness of access; ii) *equity*: which implies providing an education or a training service on the basis of measured rather than any other subjective characteristics; iii) *relevance to need*: which implies the extent to which the packages of services provided to a given group of customers meets their education or training needs; iv) *social acceptability*: which implies the extent to which a service meets the expectations of the service consumer, for example the social aspects of training; v) *efficiency*: the extent to which learning resources, for example money, people, equipment and buildings are best used; and vi) *effectiveness*: this measures the balance of education benefits for an individual learner, the extent to which a learner manages to avoid any intervention which is useless for the individual learner (Maxwell quoted in Neary 2003: 202). Maxwell's dimensions are broad, logical and provide a good framework which analysts of quality and standards in an educational institution can use. In the current study, these principles are referred to in the analytical chapters (Six, Seven and Eight).

Quality in education might be difficult to measure but it can be defined by student outcomes, educational experiences or learning environment. As one of the indicators of quality education in universities, student outcomes are perceived from the perspective of value added by schooling which consists of learning gains and the increased probability of income-earning activity, and research productivity (World Bank 1995: 46; 73). To establish quality in university education, it is advisable to use a practical checklist that has items such as policy, staff, courses, marketing, teaching/learning, and outcomes (De Wit quoted in Neary 2003: 196); and to provide and guarantee quality in education, administrative measures have to be put in place by the educational institution. Measures help to keep an educational institution competitive and focused on her objectives. For example, on the quality of teachers, Elton (2001: 53) recommends that teachers be well versed with the "...pedagogy of their discipline and its scholarship". This versatility builds a foundation for quality in education. Therefore, through professional staff, the education processes can create the requisite education capabilities in students.

Quality assurance is a crucial part of academic professionalism and a key mechanism for building an educational institution's reputation or brand in the education arena. The world over, quality assurance is one of the criteria used by governments to increase, widen, or control stakeholder participation in higher education, and is important in the current debates about whether higher education is a public or tradable commodity. Moreover, quality assurance is fundamental to the mobility of professionals across regions and educational institutions. Hence, effective quality policies and practices in education are crucial in realising knowledge economies, lifelong learning, community development and social inclusion (Middlehurst & Campbell 2001: 12). Therefore, quality assurance at all levels of education is significant.

Quality assurance measures at a university can be originated and controlled from either external or internal sources. In the United Kingdom, for example, universities use the guidelines provided by the Quality Assurance Agency (QAA) which handles quality issues at policy level. The agency carries out external reviews or audits and considers the quality of provision and the processes governing the provision at both institutional

and subject levels. At institutional level, the assessment covers the processes and procedures by focusing on a number of issues, namely: how standards are moderated and maintained in the institution; the processes that exist to monitor and measure the quality of individual courses; and the academic and pastoral support offered to students across campus, including assurance for equality of provisions for students. While at subject level, the reviews consider: what the course is trying to achieve; whether the course achieves its aims; how to tell if it achieves its aims; how learners are supported and the resource base in question (QAA 2001: 10-11). The different levels of economic development notwithstanding, these guidelines can be used by a country such as Uganda, given that Uganda emulates the British university system. Indeed, in the current study, reference is made to some of these guidelines to gain an insight into the performance of public university education in Uganda.

There are some ways of improving the quality of education in an educational institution. The World Bank, for example, suggests four measures of improving the quality of education outcomes. The measures are: "(a) setting standards for performance; (b) supporting inputs known to improve achievement; (c) adopting flexible strategies for the acquisition and use of inputs; and (d) monitoring performance" (World Bank 1995: 73). The World Bank further explains that these measures make a lot of sense, especially at primary education level. However, at higher levels quality control is handled through financing mechanisms, for example, autonomy and accountability, taxation, cost-sharing with local communities and block grants, in addition to the involvement of the household that serves as an incentive for schools to improve quality. From a different perspective Neary (2003: 206) offers the following questions to guide quality assessment endeavours: Where are we now? Where do we want to go? And how do we get there? Hence, education quality standards and criteria need to be written down to support the ideology that exists within a unit or department and because they (standards) form a basis for quality audit; they clarify issues and serve as a quality tool. Furthermore, quality standards need to be monitored and evaluated to ensure that the institution remains focused on its mission. In the current study, both the World Bank's and Neary's views

are pertinent in explaining quality and are, therefore, used to give an insight into the analysis of quality assurance, assessment and monitoring in university education.

Quality assessment, monitoring and improvement need a framework that indicates standards, targets, and defined indicators in order to determine what has been achieved and what needs to be reset. This is important because appraisal for improvement identifies “what worked, how and why it worked, and how performance can be improved” (Blackmore 2009: 861). In Uganda, for example, the National Council for Higher Education provides a quality assurance framework for universities that defines the standards against which university education can be assessed (NCHE 2011: 17-25). Even at East African regional level, the quality assurance guidelines have been set for universities. The guidelines focus on goals and aims, the process to achieve the goals and on checking the education outcomes (IUCEA 2010:6). These frameworks also serve as guiding tools for operating a university in Uganda.

In university education, assessment is crucial because it strongly influences the learning approach that students adopt in their studies (Thomas and Bain quoted in Kember, Leung and Ma 2007: 623). Furthermore, evaluations or assessments of teaching help us ensure that the education system delivers the type of graduates we want. For example, “if valued graduate attributes are compassion, care, a sense of social justice, a sense of public service” then the teaching and learning has to be geared towards such attributes (Blackmore 2009: 870). Similarly, in the development of lifelong learning capabilities, it is necessary to use some forms of quality assessment which nurture the expansion of the desired capabilities (Kember, Leung & Ma 2007: 623). Such assessments need to move in the direction of improving the quality of education provision and outcomes, including relevance. In the university context, for example, through research and documentation the standards, goals, and indicators can be refined and aligned with stakeholders’ interests and the quality of education can be enhanced. However, enhancing the quality of education is not simply an issue of improving assessment processes but also the learning processes that students engage in.

4.3. Learning Processes in the University and Education Capabilities Expansion

According to Billet (2009: 835), “learning is a continuous process that occurs across all kinds of activities and the range of settings where humans think and act. The ongoing process of thinking, acting and learning co-occur (i.e. simultaneously); they are not separate”. Learning can also be considered as a process of creating knowledge through the “transformation of experience” (Kolb 1984:38). Hergenhahn (quoted in Torrington and Hall 1998: 371) defines learning as a “relatively permanent change in behavioural potentiality that results from experience and cannot be attributed to temporary body states such as those induced by illness, fatigue or drugs”. Learning may be incremental or transformational in nature. Learning can further be understood from learning characteristics, learning theories, strategies, approaches and learning principles. This understanding guides the teacher in making decisions about training design and in guiding the students on how to learn. Guidance is necessary because “how students construct knowledge, how they learn, and the beliefs they hold about what kind of knowledge and knowing” is very important in higher education (Otting, Zwaal, Tempelaar and Gijsselaers 2010:741-742), especially at university level. Moreover, how students learn determines how much they retain and are able to apply in the real world of work.

Students joining university are exposed to different learning processes, but their conception of learning determines which approach they will emphasise. Marton, Beaty, and Dall’Alba (2004: 409) reveal the results of a survey of students’ conception of learning in their university studies, in the UK, as falling into six different categories, namely: i) *learning as acquiring knowledge*: where knowledge is viewed quantitatively, and understanding measured in terms of ability to reproduce what one has learned; ii) *learning as memorising and long-term retention*: where learning is focused on getting the details but with an understanding that some issues are more important than others; iii) *learning as application*: where learning is for “being able to apply the knowledge in an exam and practical applications”; iv) *learning as insight or understanding*: where a student is able to understand the author’s intention is able to relate the new ideas to what he has already learned, so that he can interpret and understand new ideas and circumstances; v) *learning as personal development*: where learning is both “an

emotional as well as cognitive aspect” and is oriented to problem-solving and personal philosophy; and vi) *learning as transformational*: where learning is an instrumental component in developing a person. These conceptions tend to overlap but also form a hierarchy, with the latter ones encompassing the earlier ones. For example, if a student considers learning to be *personal development*, then he will also have embraced the conception of *learning as application*. From this list, the first two views are the least helpful to a learner because they encourage the reproduction of what the teacher has shared more than the construction of a more personal understanding as demanded by the last three ones. It can, therefore, be argued that the differences in student conception of learning affect students’ approaches to learning.

The learning processes or quality of learning at university can have an influence on capability expansion. Where learners concentrate on constructing a personal understanding of ideas, the probability of replicating such ideas in practice after university life is increased and vice versa. Therefore, the university learning processes need to emphasise learning approaches that benefit both the individual student and society. Approaches to be emphasised are those that concentrate on building insights, personal development and transformation of a student. As Nightingale and O’Neil (1994:53) explain, the main purpose of university education is “fostering higher order intellectual capacities in students”. The processes of nurturing these intellectual capacities need to be well organised and synchronised to produce a useful university graduate. Tertiary education, for example university education, is about developing general qualities of a personal, social and intellectual kind such as “communication skills, problem-solving abilities, interpersonal skills, planning and strategic thinking abilities and critical and evaluative skills, including logic” (Nightingale and O’Neil 1994:54), and these are the capabilities that are applicable to the real world. Therefore, to achieve a combination of these skills, the learning processes in universities have to be broad, eclectic and pedagogically sound. In effect, university learning processes should be rigorous in order to deliver useful, knowledgeable and skilled graduates.

Learning mainly depends on the behaviour of students (Cross 2005:1). “How students deal with new information and how they learn depends greatly on their beliefs about knowledge and knowing” (Otting et al. 2010:742). Consequently, for students to learn effectively, they need to have the correct behaviour and positive attitude towards learning. On the other hand, the teacher must understand how students learn, where and why students have difficulty, what their preferences in teaching are, and what teaching practices are most effective in helping them learn sophisticated material. This understanding is essential for promoting students’ meaningful learning (Kreber quoted in Hativa 2000: 51). Therefore, analysis of learners’ behaviour helps to align students’ expectations and teachers’ approach to teaching and when the two are harmonised learning is enhanced.

One of the theories that explain how students learn is the experiential learning theory developed by David A. Kolb in 1981. Experiential learning theory posits that learning must be rooted in the student’s own experience. Hence, experience plays an important role in learning (Kolb 1981: 235). Learning can both be practiced on-the-job or even off-the-job such as in a class environment. It is argued that learning happens after critical reflection on the experience and after four stages namely: “(1) action, (2) reflection, (3) abstraction, and (4) application” (Stehno quoted in Itin 1999:92). When used in class, experiential learning model calls for either building the learning sequence on previous student experiences, or building an experience into the learning sequence where the learners can use their senses to learn about something.

Similarly, according to the constructivist learning theory, meaningful learning is possible only on the basis of previously acquired knowledge. Human beings are considered to have some “pre-installed knowledge or methodological rules” (Light, Cox and Calkins 2009: 22-23). Therefore, knowledge, criteria and methods of knowing are constructed. Learners come to understand issues by “...actively selecting, and cumulatively constructing, their own knowledge, through both individual and social activity” (Biggs 1996: 348). To increase the probability of learning, new knowledge has to be related to one’s existing cognitive structure or previous experience. This is because the experience

of the learner is crucial to the learning processes. Moreover, in this type of learning, learners examine their experience by “reflecting, evaluating and reconstructing it [knowledge] in order to draw meaning from it in the light of prior experience” (Jackson 2010:494). Consequently, according to this view, learning of unrelated information is difficult and retention is temporary because the new information cannot be connected to a network of other previously acquired mental material.

Constructivist learning theory uses meaning-making as a central component of the learning process (Hein 2000:15). According to Zitton and Brinkmann (2012: 1809), meaning-making implies “the process by which people interpret situations, events, objects, or discourses, in light of their previous knowledge and experience”. Therefore, learning is meaning-making in a sense that students are actively engaged in making sense of the learning environment and experience. Just as Hein (Hein 2000:15) observes, learners interpret any learning information obtained from the environment by their senses and make meaning out of such information. The interpretation is based on the prior learned meaning.

Studies further indicate that students with “constructivist beliefs about knowledge and learning” enjoy group work and learning environments that allow them to utilise their prior knowledge in the learning tasks (Tsai & Chuang 2005 quoted in Otting et al. 2010:745). Therefore, in this context, students learn from their prior experiences (Kolb 1984:6). By implication, teachers need to link their teaching to the familiar concepts and environment in order to facilitate learning in their students. However, if information is completely new, and the teaching resources do not allow enough student involvement, then learning might be negatively affected. This is because constructivism emphasises learners’ activities in creating meaning from what is learned and this theory can guide decision-making in instruction design, such as setting curriculum objectives, determining learning activities and assessing student performance (Biggs 1996:347). Conversely, the theory presents a view that might discourage teachers from introducing completely new material and concepts even when such information is essential in the later lives of students.

Actually, learning may not only occur through past experience or just constructivism but also through transformation. Transformative learning is underpinned by the transformational learning theory which postulates that because “adults enter into learning with a prior knowledge base; they must transform that base in order to assimilate new information” (Bass 2012: 388). Hence learners are transformed when there is a change in their beliefs or attitudes. Bass further contends that transformation occurs when learners analyse their point of view, and critically reflect on their experience, dialogue with others and then change their view. The current study is interested in analysing how students in public universities in Uganda approach their studies and; how students’ learning strategies relate to higher education capabilities expansion (see also 8.2).

4.3.1 Students’ learning strategies and approaches

Learning strategies are the methods, plans or styles through which learners internalise the knowledge, skills, abilities and attitudes. Learning strategies can also be viewed as “behaviours of a learner that are intended to influence how the learner processes information” (Mayer 1988:11). “A *learning strategy* describes the learning activities students apply to study the learning material”, for instance selecting main points in a text, thinking of examples, memorising certain points and so on (Ferla, Martin and Schuyten 2009:185). Students employ different learning styles during the learning processes. Kolb (1981:238) identifies four preferred learning styles, namely convergers, divergers, assimilators, and accommodators. He describes these categories as follows: i) the *convergers* are students who are most comfortable with abstract concepts and active experimentation; ii) the *divergers*, on the other hand, are most comfortable with concrete experience and reflective observation, and are able to see concrete situations from different angles; iii) the *assimilators* are students who learn best through abstract conceptualisations and reflective observation, and perform best in working with theoretical models and inductive reasoning; and iv) the *accommodators* learn best in an environment that allows for concrete experience and experimentation: they like to do, and enjoy solving problems intuitively. From Kolb’s classification of learners, it can be noted that a teacher needs to have an understanding of the different learning styles so as to be able to adjust his teaching styles. This is what can help different students

internalise knowledge, skills and attitudes. However, Kolb's classification creates a challenge for teachers to use a multiplicity of teaching styles in order to cater for the different styles of learners in the same class.

At post-secondary school level, two common learning strategies or styles that students use have been identified, namely the *holistic* strategy and the *serialist* strategy (Pask 1988). Students who are oriented to holistic strategies prefer, right at the outset, to look at the learning task in its wider context. Such students enjoy the use of illustrations, examples, analogies and anecdotes in the learning processes so as to deeply understand the subject matter. On the other hand, students using the serialist strategies prefer to start learning an issue from a narrow focus, paying careful attention to details and logical connections and later, towards the end, considering the broader context of the topic. In general, most students tend to show a bias towards one of the two styles and only a minority use both styles with ease; however, this also depends on the topic at hand. However, Pask does not indicate which of these two types of learning strategies is the most appropriate at university level, especially when the concern is to impart or acquire education capabilities that are usable beyond the university gate.

At university level, students determine their own learning strategy. Billet (2009: 838) observes that students, not their instructors, are the ones who make meaning out of learning. The process of learning is shaped by students' experiences in the institutions and the workplace placement in terms of how "they construe, construct and engage with what is afforded to them". Billet further indicates that active engagement and learning by university students is likely to enhance the higher order learning required for the principle-based and classified forms of workplace knowledge. Similarly, Jungert and Rosander (2009: 139) argue that students' learning can be improved if they become active participants in the learning processes and not simply passive recipients, and are involved in the development of the learning atmosphere.

Students have various approaches to learning. Students' approaches to learning refer to the manner in which students approach the same learning tasks differently; and this

variation may affect the different learning outcomes (Marton & Saljo quoted in Balasooriya, Toohey & Hughes 2009: 781). An approach to learning can also be described as “an *orientation* or predilection for learning in a certain way... [or] how a student handles a particular task at a *particular* time”(Biggs & Moore 1993:315). Some approaches used by students in the study process have been identified, each of which contains an affective (motivational) component and a cognitive component (Biggs 1987: 1). The commonly cited approaches are the surface approach and the deep approach (Marton & Saljo quoted in Biggs & Moore 1993: 310).

The *surface approach* is about the external motivation and surface learning strategies. The students' sole intention in learning is to satisfy the perceived requirements of the teacher or the system, which the students look at as externally imposed and detached from their interests. In such a situation students tend to reproduce information they have been given to satisfy the examination requirements of the course (Biggs 1987: 1; 1993:310; Hativa 2000: 59). However, in this approach, students might even be active, but will learn only to pass examinations. As Trigwell and Prosser (1991: 251) observe, the students may use tactics such as memorising or rote-learning strategies in order to be able to reproduce the material. In fact, “a surface learning strategy is characterised by learning activities such as rote memorisation and other routine processing activities (e.g. repetition), and reflects a focus on recall and reproduction” (Entwistle quoted in Ferla, Martin & Schuyten 2009:186). In this approach, students can easily be conversant with facts during examinations and even pass their examinations very well only to lose such knowledge in a short while. For instance, if the knowledge was about ways and means of using a computer or was on personal management, the graduate would retain little knowledge in the long run and thereafter face the challenges of post-university knowledge application. In the opinion of Marton and Saljo (quoted in Exeter et al. 2010: 763) such a student is a disengaged learner who may settle for taking notes during lectures, memorising facts and important points in order to get the minimum pass-mark. According to Balasooriya, Toohey and Hughes (2009: 792) such a student tends to focus on the external benefits of education and at times has “limited academic skills and low self-esteem combined with fear of failure” hence will memorise the facts but may lose

them shortly after the examination. In the development of graduate capabilities such a student would achieve very little.

The *deep approach*, on the other hand, consists of internal motivation and deep learning strategies. It is about making connections and meaning rather than focusing on isolated elements or rote-learning (Butcher et al. 2006: 89). The student takes deliberate steps to internalise the major substance of the subject material presented. He seeks meaning of the subject matter in order to understand it (Biggs & Moore 1993:312; Trigwell & Prosser 1991:251). Such a student aims at gaining an understanding of the subject matter. He adopts strategies such as reading widely and discussing the concepts or issues with others and seeks to make sense of new knowledge and relate it to what he already knows about this topic and related topics. The student interacts critically with content, examines evidence and evaluates the process through which conclusions have been generated (Biggs 1987:1). Hence, “a deep learning strategy is characterised by learning activities such as relating ideas and seeking evidence, and reflects an intention to understand what is being taught” (Vermunt 1992 & Entwistle 1998 quoted in Ferla, Martin & Schuyten 2009:185). The major interest is not in high marks or grades but rather to achieve knowledge and skills. In effect, the deep-approach student has “passion for learning with a focus on development of capabilities needed for future practice” (Balasooriya, Toohey and Hughes 2009: 792). Therefore, deep learning can be equated with successful learning that can form a foundation for further learning, unlike surface learning that is short-term (Butcher et al. 2006: 89). This is because the deep learner is an ‘engaged’ student “seeking to develop his/her knowledge, reflecting on the facts and details presented in the lecture related to their own experiences and ‘the big picture’” (Exeter, Amaratunga, Ratima, Morton, Dickson, Hsu & Jackson 2010:762). Indeed, deep approaches to learning tend to have high-quality learning outcomes whereas surface approaches tend to have poor-quality learning outcomes (Marton & Saljo 1997; Trigwell et al. 1999: 58). Students, therefore, need to be encouraged to practice deep learning because it is associated with high-quality learning. And, as Biggs (1999: 73) suggests, this encouragement demands a well structured knowledge base; an appropriate

motivational context; learner activity; and interaction with others. Indeed, it is possible to deliberately create these factors in a learning environment such as at university level.

From the above two learning approaches, the surface approach is apparently the least helpful and points to immaturity on the part of the student. On the other hand, the deep learning approach would be ideal for university students aiming at acquiring applied knowledge and skills. Therefore, the deep approach, if practised and encouraged, can transform students' lives through knowledge and skills retention.

Incidentally, it has been noted that surface learning is the dominant approach used by most university undergraduate students (Biggs 1987: 1); and it should be noted that the approach students choose depends on the learning context and the nature of material to be learned (Ramsden 1992 quoted in Balasooriya et al. 2009: 781). For example, the student might use a surface approach in some context and a deep approach in another context. As Biggs, Kember and Leung (2001: 135) assert, the choice of the approach is dependent upon three stages in the process of learning, namely: what happens before learning ('presage'), what happens during learning ('process') and the outcome of learning ('product'). To the contrary, Balasooriya et al. (2009: 789-791) provide evidence that the surface or the deep approach to learning may not necessarily be influenced by 'presage, process and product', but by a combination of other different factors such as passion for learning, motivation, academic skill, attitude, esteem and so forth. In brief, scholars present different factors that influence the choice of learning approach and, hence, the current study explores the learning approaches in the public universities in Uganda and evaluates these factors. Furthermore, attention in the current study is paid to the learning outcomes from these approaches, namely the education capabilities of students.

It appears that learning approaches affect learning outcomes in general. However, learning approaches depend on students' conception of learning and students' perceptions of the learning environment (Trigwell, Prosser & Waterhouse 1999: 60), on how the teacher teaches, and how the learning outcomes are managed. "Students'

conception about what constitutes good teaching and learning influences how they approach learning tasks and conceive the learning process” (Trigwell & Ashwin 2006 quoted in Otting et al. 2010:743). Their conceptions also determine how much they will learn. For example, the conception of learning may take the form of “a student-centred approach focusing on knowledge construction processes and a teacher-focused, content-oriented knowledge transmission approach” (Otting et al. 2010:743). When the learning is student-focused, the probability of education capabilities expansion increases and vice versa when the learning and teaching processes are teacher-focused.

Equally, the teaching styles and/or course designs have an influence on the approach to learning (Kek and Huijjer 2011: 203). Trigwell et al. (1999: 66) maintain that student-focused teaching leads to deep learning whereas teacher-focused teaching promotes surface approaches to learning by students. The approach to teaching students influences what and how they learn, although the teaching process does not fully determine student learning (Otting et al. 2010:743), but rather a combination of student-related, teacher-related, and environment-related factors jointly determine learning approaches. Student-related factors include a student’s background or personality and teacher-related factors include level of time pressures, stress from examinations, and nature of tests set for students (Biggs 1987: 1). Firstly, considering the issue of time stress, the more the student’s day is crammed with activities, lectures and notes, the more the likelihood for surface learning to occur. Secondly, if the assessment system does not test critical thinking, logical arguments and problem-solving, but instead allows students to pass by simply replicating information from lectures and books, then surface learning is likely to thrive. Thirdly, when the unit prescribed by the academic department is made available to the students, and where there is little or no choice in assessable work and all the assessment requires a similar response, students are more likely to opt for a surface approach in order to meet the requirements that they may have little commitment to. Fourthly, when the academic department or teachers regard students as untrustworthy, and show signs of controlling, monitoring and limiting their decisions about their own learning, then surface learning is likely to flourish (Toohey 1999: 13-15). In Toohey’s view, the factors that promote surface learning are mainly related to course

design and, therefore, embedded in the institutional systems and norms as opposed to individual lecturer decisions. In effect, in order to transform students from surface learners to deep learners, attention has to be paid to the institutional teaching, course design and evaluation systems. Therefore, the current study, inter alia, analyses the approaches to learning in the light of teaching styles and course designs.

Whereas there are many learning styles among different people, when it comes to the extent to which a student internalises and assimilates knowledge, skills and attitudes, the largest contributor to student learning gains at university level is the effort students put into their own studies and students' perception of their role in learning (Pace 1988). Other factors that affect the students' learning include the aptitude for learning; approaches to studying; teacher's style of responding to students; preference for teaching styles; gender; and access to early nutrition and stimulation programmes, and level of students' freedom to study in line with their interests (Watson and Ashton 1995: 121; World Bank 2002a: 235). Hence, an effective teacher is one who understands and takes care of these student factors while teaching; and who has appropriate thinking, motivation, knowledge, aptitudes, sensitivity and skills for teaching.

Watson and Ashton (1995:95) refer to a study done in the USA which established that in the learning process learners retained 5% of what they were taught through lecture; 10% of what they read; 15% of what was presented in an audiovisual fashion; 30% of what was demonstrated; 50% of what was discussed in groups; 75% of what they learned by doing; and 90% what they actually taught. From these percentage estimations it is evident that making a student to teach something is the most effective method of enabling that student to learn something and the least helpful is the lecture approach. Indeed, as Beard and Wilson (2005: 5) attest, people can gain more knowledge and skills through "being, doing, sensing, feeling, knowing and changing". Therefore, this student involvement is what needs to be emphasised in the learning processes. However, in practice, at some universities, not every student may have a chance to teach or feel the learning material, given the usually large numbers of students. The high student population compels a university to settle for the second most effective method; if

that fails then the third best in that order, descending to the least effective one. Nevertheless, the most effective methods are those that involve learners, and they include fieldwork, projects or other forms of interactive learning. In addition, at most universities one of the available teaching options to students is the tutorial method where students in small groups of 8 – 15, usually under the guidance of a junior lecturer (tutorial assistant), are given topics to present or discuss with their peers in a learning session. The tutorial sessions ‘fine-tune’ students in their understanding of the subject matter. In fact, tutorials contribute to quality improvement of the university teaching and learning processes. To this end, tutorials or participatory learning methods enhance higher education capabilities expansion among students.

According to the American Psychology Association (APA), effective learning occurs when learners feel challenged to work towards appropriately high goals (APA 1997: 2). Regardless of the teaching methods (the process) a teacher employs, for as long as there is a felt need for learning (the intention), students will learn. This view downplays the *process* (methodological) aspect of learning as key to effective learning but promotes the *need* (goal) for learning as critical to determining what the student actually learns. In this study (in Chapter Eight) the researcher explores teachers’ intentions or expectations with regard to their completing undergraduate students and, in Chapter Seven; the researcher discusses the teaching approaches they use to meet these expectations. In addition, the researcher discusses the students’ expectations of the university education processes and relates it to their learning approaches.

In other quarters, it is argued that students’ learning is influenced by their cognitions about learning (or student learning models) and students’ motivation for learning. There are four student cognitions, namely: academic self-efficacy; learning conceptions; attributions for academic performance; and assessment expectations (Vermunt 1998: 151-152). Students’ self-efficacy beliefs refer to “students’ personal judgements about their capabilities to organise and execute the activities required to attain designated types of academic performances” (Zimmerman 1995 quoted in Ferla, Valcke & Schuyten 2009: 187). As for learning conceptions, they are of two types; the first is *constructive* learning

conception, which relates to “seeking understanding” and the students feeling responsible for their learning outcomes; and the second is *reproductive* learning conception, which considers learning as “memorising knowledge” and the teacher being responsible for the students’ learning (Devlin 2002: 294). The third student cognition – attributions for academic performance – is about students’ beliefs in the causes of academic performance such as “ability, effort, task difficulty and luck”. The fourth student cognition – assessment expectations – is about how students perceive the educational environment, especially the assessment requirements. For example, if students perceive assessment as calling for “passive processing of knowledge and accurate reproduction of the knowledge elements, [they]...will adopt low-level cognitive strategies such as rote memorising”. On the other hand, “when assessment is perceived to require thorough understanding and integration, students will use high-level cognitive strategies such as critical thinking, and will process the learning material more deeply” (Ferla et al. 2009: 188). These beliefs affect learning processes and learning outcomes.

It appears that learning is also affected by the learning environment. “‘Learning environment’ refers to the social, psychological, and pedagogical contexts of learning in which learning occurs and which affect students achievement and attitudes” (Fraser 1998:3). The relationship between the environment and student approaches to learning has been widely discussed in literature (Entwistle & Ramsden quoted in Trigwell & Prosser 1991:251). When the classroom-level learning environment has elements that promote deep approaches to learning, students are stimulated to adopt deep approaches. However, when the students are placed in learning environments that demand superficial learning, such as recall and memorisation, they are likely to adopt surface approaches to learning (Trigwell et al. 1999: 58; Kek & Huijjer 2011: 203). Hence, student approaches to learning can, inter alia, be adapted to the environment. Consequently, by improving the learning environment, it is possible to improve on the quality of learning and the learning outcomes. The environment can also be adapted to the students’ expectations, especially the positive elements in their expectations. This is because, as Otting et al. (2010:745) point out, when the learning environment is matched with students’ beliefs and conceptions the quality of student learning is likely to improve.

In brief, besides the above factors that affect the learning outcomes, other factors include students' prior knowledge, IQ personality, background and motivation of the student; and with regard to the educational context the factors include type of subject, structure of the course, teaching strategy, time available to students to undertake learning and nature of the assessment (Biggs 1987). All these factors will affect the learning outcomes and there is no single isolated strategy that can be employed as the best for achieving a certain learning outcome. Learning strategies differ across groups of students or across topics or even learning contexts. The strategies that work well at university level may involve students in the determination of their learning outcomes and may promote a lot of independent learning approaches that include methods such as involvement in research.

4.3.2 University teachers' and students' involvement in research

One of the justifications for public interest in university education is the value which a country derives from a well-developed system of research and generation of knowledge (World Bank 2000a: 42). The degree and quality of research intensity of a university are crucial to its status. Worldwide the highest status ('the best') universities are known for the quality and sustainability of their research products and culture (Jenks 2008:9). Jenks further observes that any research culture rests on five key elements, namely: firstly, the academic staff who do the research; secondly, the outputs from research processes, including their impact; thirdly, the university environment comprising the funding, students, infrastructure and academic activities; fourthly public evaluation of the university's success; and fifthly the institution's values and mindset. In the current study, (in Chapter Eight) Jenks' elements are considered important and are used to make an input in the analysis of public university research in Uganda, and more so the education capabilities that research teaching and practice enhance.

Whereas universities can generate knowledge and hold it within their libraries and laboratories, knowledge can only help the public if it is disseminated and applied. Knowledge created by universities need to be shared with the wider public that can put it into practice and then give feedback to the university regarding the applicability of such knowledge to the real world. Hence, the adage that 'theory informs practice and practice

informs theory' is relevant in university research endeavours. It is also a common belief that "basic research and fundamental knowledge generation thrive where new findings are widely shared and are available for testing and refinement within an open forum" (World Bank 2000a:42). To this end, universities are the best-placed institutions in generating knowledge through teaching, research and consultancy. When universities shy away from their intellectual role, their relevance to the economy diminishes. However, quite often universities do not play their research role optimally; instead they use their research products internally without disseminating them to the public. Possibly, one of the avenues for universities to share knowledge is through releasing graduates with the skills and capacities to do research. This higher education capability can be useful not only to the graduates but also to the community where the graduates work.

Teachers' and students' understanding and practice of research are very important in the development of the university research culture. "When these two stakeholders understand research the chances for "a more carefully targeted pedagogy" increases (Wagner et al. 2010: 84). This is because university research teaching is matched to both the students' expectations and also to the intended learning outcomes: the education capabilities. However, the matching requires deliberate efforts on the part of both stakeholders with a view to improving the quality of research work.

Literature reveals that university research teaching and products have been below the expected levels at some universities. For example, in 2002, the World Bank conducted a worldwide study of tertiary education and knowledge-creation institutions and found some research deficiencies. Most universities in developing nations were functioning "at the periphery of the international scientific community, unable to participate in the production and adaptation of knowledge necessary to confront their countries' most important economic and social problems" (World Bank 2002b: 59). The bank further noted that, although some developing countries had exhaustive data to document, there were alarming poor quality problems in their education provisions. Overall, the research levels in the institutions were found to be very poor. The findings of the World Bank point to neglect of their research role by some universities in developing countries. This

neglect might be a contributor to low education capabilities development in graduates at such universities, and probably a contributor to overall low agency achievement levels.

In a specific-country case, Sambo (2006: 317) explains the results of a study on the research levels and relevance of university education in the Nigerian economy. He reveals that there is “little impact of the universities on the socioeconomic problems of the country, and worse, the research capacity of universities has virtually collapsed”. Sambo’s revelations point to low quality university education in Nigeria, where the role of the university in socioeconomic problems is marginal instead of being central. Moreover, low quality of research by universities in Nigeria inevitably affects the quality of education capabilities developed. In the current study, the research levels at public universities in Uganda are equally analysed (see also Chapter Eight).

University research and publication are important in education capabilities expansion among students. As part of education capabilities expansion, and not merely for academic purposes, public universities can use research and information dissemination as one of the key entry points to the development of general capabilities such as the independence, employment and rights and freedom of graduates. In fact, as Morter-Lewis (2008:1) argues, government institutions of higher education have a *de facto* responsibility (by virtue of their legal relationship with and their fiscal dependence on the government) to provide a trained workforce and address identified national needs through human capability development and through research and publication. For example, a myriad of problems such as ignorance, political unrest and diseases, especially in Third World countries, can be minimised by universities researching and advising policy-makers on what to do. Therefore, university involvement in research practice, teaching, and publication may assist their graduates in developing education capabilities that are important in their lives, communities and the entire economy.

Research and publication at university level in whatever discipline help students in the “formation of dispositions, such as a will to learn, a will to engage, a preparedness to listen, a preparedness to explore and hold oneself out to new experiences, and a

determination to keep going forward” (Barnett 2009: 436). These dispositions in a student are fundamental to enabling the student to make sustained and great progress in life. Indeed, these dispositions are some form of education capabilities and, therefore, need to be promoted. At a university where there is a dearth of research and publication the expansion of such education capabilities might not be realised. However, the expansion process of education capabilities in students through university education is also affected by the socioeconomic context of education.

4.4 University Education in Context: ‘Conversion Factors’

The role of public university education in higher education capabilities expansion can be moderated by a number of socioeconomic variables that either stimulate or frustrate this role. For example, in a study of six developed countries – France, Japan, Sweden, the United Kingdom, Australia and Italy – it was established that higher education had a strong causal impact on economic growth in the first four but no impact in the last two. By implication, whereas higher education improved economic growth in some countries, its role was neutral in others. So, other factors that are significant for economic development are the social, political, and economic structures and the technological level of the society to which the educational system belongs. This is because these factors dictate the knowledge and skills which graduates can actually expand (De Meulemeester & Rochat quoted in Bloom et al. 2006:18). By implication, these social, political and economic factors moderate the influence of higher education on any parameter and, therefore, need to be taken into account in the assessment of the role of university education in higher education capabilities expansion among the students of Uganda.

Robeyns (2003:12-13) presents a framework that attempts to explain the variables (‘conversion factors’) that moderate the process of education converting into individual ‘capabilities’ such as employment, practical reason, rights, sociality and participation. (Robeyns is one of the supporters of the ‘capability approach’ that has been developed and continuously refined by Amartya Sen for the last three decades (see also 2.4)). She outlines the three conversion factors as personal characteristics, social characteristics and environmental characteristics. Given the capability development context in which

Robeyns discussed these factors, they are relevant to the current study and are, therefore, elaborated and considered in the study framework (see also 4.1) and eventual analysis in Chapters Six, Seven, Eight and Nine.

Social characteristics

The probability that university education will be translated into a competence or skill then into a graduate's agency achievement and individual wellbeing depends on, among other factors, the social characteristics that confront the graduate. According to Robeyns (2003: 12) the social characteristics, as conversion factors, include public policies, social norms, discriminating practices, gender roles, societal hierarchies, and power relations. The public policies, for example, may be on high taxation for industrialists that inadvertently make it costly to run businesses in an economy. The industrialists may decide to cut down on costs – including labour – through laying off expensive employees, and this may result in unemployment for graduates, thereby lowering the employment capability, together with the would-be functionings from employment.

At university education level, the development of certain courses and teaching strategies and approaches in order to meet the labour market requirements (say, in the undergraduate programmes) could be frustrated or enhanced by the political leadership of the day. And, as the World Bank points out, "reforms of education, whatever their technical merit is, will not take hold unless they are politically and socially acceptable and unless the pace of reform is appropriate" (World Bank 1995: 137). This condition is true because (public) education is intensely politically controlled since it affects most citizens, involves all levels of government, takes a big chunk of public spending and subsidises students. Hence, the socio-political characteristics play a moderating role in university education and its influence on education capabilities expansion among students.

Personal characteristics

The personal characteristics that moderate a person's chances of utilising an education processes for increasing opportunities or capabilities include metabolism, physical condition, sex, reading skills, intelligence and so on (Robeyns 2003:12). For example, if a person is illiterate or blind or has never learnt the basics of using a map, then a map will be of limited value to enable him to locate a place in the city. Therefore, from Robeyns' description of personal characteristics, it can be inferred that access to and attendance of education may not necessarily come with the commensurate education capabilities (for instance, practical reason or learning disposition) and may not enhance the achievement of certain functionings (for example, wellbeing).

Furthermore, in education there is a set of individual factors that influence learning outcomes, and they include aptitude, motivation, gender, and access to early nutrition and stimulation programmes (World Bank 2002a: 235). These 'World Bank factors' seem to be general and some of them, for instance access to early nutrition and stimulation programmes, seem to explain education outcomes for dropouts at the elementary education levels and not at university education level. Hence, in the current study, only those factors that are relevant to university education are taken into account in the analysis of the findings as presented in Chapters Six and Seven.

Environmental characteristics

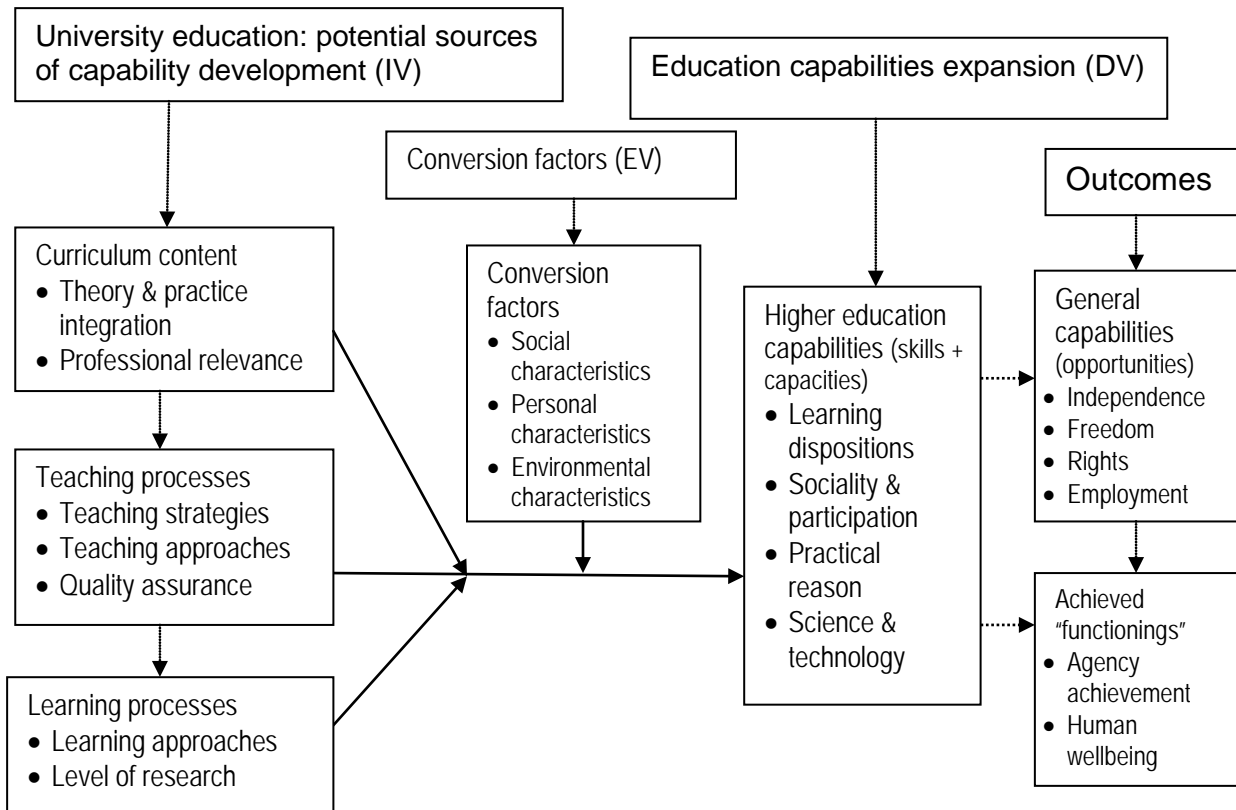
The environmental characteristics influence the process of "conversion from characteristics of the good to individual functioning" (Robeyns 2003: 13) or to a capability. According to Robeyns, these factors include climate, infrastructure, institutions, and public goods. For example, in the context of university education, the social or legal norms could limit the employment of women in the formal sector. Consequently, educated women would not easily access paid jobs that would otherwise save them from low incomes. Therefore, the possession of an education qualification, in this context, would be insufficient to influence the employment or economic independence that the women can enjoy.

The key education outcomes at macro level, which are closely related to education capabilities expansion, include general improvements in “the primary completion rate, gender disparity in basic education, student learning and the adult literacy rate” (World Bank 2002a: 235). These education outcomes are essentially for the elementary education level and not university level. They are influenced by the individual, household, and community factors. Similarly, at university level there are government policies and actions, both at sectoral and macroeconomic levels that can influence what skills university students will learn. The government policies and actions include those policies that affect macroeconomic conditions and the labour market functioning. For example, trade policies, investment laws and regulations affect the demand for education and the specific disciplines and skills students will decide to specialise in. At university level, the extraneous influence of these environmental characteristics on higher education capabilities expansion among students in Uganda is explained in Chapter Eight. However, in the following section we present a conceptual framework illustrating the conversion factors together with other variables of the study.

4.5. Conceptual Framework: A Synthesis of Theoretical and Literature Review

In Chapter Two, the study presented the capability approach as the main theoretical framework for guiding the current study. In Chapter Three a review was made of curriculum content as a sub-variable of education. And in the current chapter both the teaching processes and learning processes as sub-variables of education have been discussed. Therefore, in this section (4.5), the conceptual framework synthesises and diagrammatically illustrates the interconnectedness of these, already discussed, different sub-variables. This framework is fundamentally informed by Amartya Sen’s ‘capability approach’ to the conceptualisation of human wellbeing. Wellbeing is possible when, among other things, capabilities are expanding. In the current study, the framework in Figure 4.1 is a basis for analysing public university education and its role in expanding higher education capabilities of university undergraduate students.

Figure 4.1: Conceptual framework for understanding the influence of university education processes on higher education capabilities expansion



Source: Author's own construct from the writings of Sen (1999a), Robeyns (2000; 2001; 2003; 2005), Neary (2002), Saito (2003), Terzi (2004; 2007), Gasper (2002), Alkire (2005), Walker (2006), and Walker and Unterhalter (2007)

Key: IV = Independent variable; EV = Extraneous variable; and DV = Dependent variable

As Chapter Two revealed, there are many factors that contribute to education capabilities expansion, but the conceptual framework in Figure 4.1 is limited to explaining the potential relationship that exists between the independent variable (IV) – university education, the dependent variable (DV) – higher education capabilities, and the conversion factors (extraneous variable (EV)). In the analytical chapters (6, 7, 8, & 9), the study does not analyse the outcome variables because (although illustrated in Figure 4.1, briefly reviewed in Chapter Two and admittedly important) the outcome variables are outside the purview of this study. Equally, the non-university education contributors to education capabilities expansion of undergraduate students are not analysed and even not illustrated in the framework (see also 1.6 and 7.2).

The primary variable is the dependent variable of education capabilities expansion among students and is a consequence of the role played by university education processes among students. Capability expansion is, in this framework, related to Amartya Sen's description of the increase in human capabilities such as knowledge, rights, political participation, employment, independence and freedom of choice of lifestyle. The general capabilities are "the substantive freedoms a person enjoys to lead the kind of life he or she values" (Sen quoted in World Bank 2001:15). Meanwhile, the education capabilities are the knowledge, learning, skills and importance that can be enhanced (Gasper 2002: 446) (see also 2.4). Other non-university education dimensions of capabilities are not a concern of this study and are, therefore, excluded in the subsequent chapters (see also 1.6).

In our illustration in Figure 4.1, public university education is deemed to be capable of playing a role in the expansion of education capabilities in terms of developing individual student knowledge and skills and increasing the opportunities a university student has. Public university education is explained in terms of three variables, namely the curriculum content, teaching processes and learning processes. Analysis of the curriculum content variable covers the major elements of the university curriculum and how it is informed by what Neary (2002:103) refers to as "the broad principles of curriculum development and design", specifically in terms of professional relevance, theory and practice integration. Secondly, the teaching processes cover the strategies, approaches and quality assurance measures undertaken by the university lecturers. Thirdly, the learning processes embody learning strategies and level of research among students in universities. These sub-variables represent the potential source of capability expansion.

The three sub-variables, namely curriculum content, teaching processes, and learning processes, in the framework constitute the independent variable (university education) that is used to explain the conceptualised linkage between university education and capability expansion. Meanwhile, capability expansion is further conceptualised as

increased capability sets that encompass higher educational capabilities of learning disposition, sociality and participation, practical reason, and science and technology (Walker 2006:128-129; Terzi 2004:10) plus the general capabilities such as independence, individual rights, freedom, and employment (Alkire 2005:125; Sen 1999a:75). Thus, university education is used to determine whether or not students will be able to possess the education capabilities which are fundamentally 'complex (education) capabilities' (see also 2.4.).

In this framework, it is further conceptualised that the influence of public university education on education capabilities expansion is affected by some extraneous variables, as identified by Robeyns (2003: 12-13), namely the social, personal and environmental factors. These factors may play the role of converting university education into education capabilities. Sub-variables such as social characteristics, which might embody social norms, gender roles, public policies, societal hierarchies and so forth, are some of the social structural factors considered. Thus, according to the framework, a set of social characteristics may affect the changes attributed to university education on education capabilities expansion. For example, social hierarchies or gender roles can affect whether a university graduate will work in a certain job or not. On the other hand, the lecturers at universities, for example, might also emphasise the learning strategies and quality assurance systems which are in tandem with gender roles, and the social hierarchies familiar to students. Equally, personal characteristics, such as physical condition, sex and intelligence, might moderate the effect of university education on education capabilities expansion. The relationship between the independent variable (university education) and the dependent variable (education capabilities expansion) is further affected by environmental characteristics such as infrastructure, educational institutions, public goods, and unemployment levels. The environmental characteristics might favour or disfavour the interaction of university education processes and the education capabilities expansion. Therefore, the role of public university education in capability expansion is affected by some 'conversion factors' that either facilitate or impede this role.

4.6 Summary

The foregoing literature review reveals that the teaching and learning processes have to be focused on student needs, and the student has to be involved in the learning processes if learning is to make a positive after-school impact on individual capabilities. However, it is also noted that various teaching and learning factors could facilitate or sabotage an undergraduate student's effort to acquire education capabilities such as practical reason, learning dispositions, sociality and participation, and science and technology which are crucial if a graduate has to live as a citizen with agency and wellbeing. It has also been noted that environmental, social, and individual characteristics are fundamental to the role that university education plays in education capabilities expansion in a student. These factors are important in the process of university education converting into capabilities, although Robeyns (2003: 12-13) offers them in general terms as factors that influence the conversion of capabilities into functionings. The role of these conversion factors in affecting university education in education capabilities expansion is further investigated in this study (see also 8.7).

Whereas the literature reviewed on teaching and learning processes provides a fair understanding of the potential role of university education in contributing to education outcomes, the literature does not explain the specific capability expansion endeavours in university education and the environment in which public university education should be offered. Actually, the literature indicates that relationships exist between a student's individual characteristics, perceptions of the learning and teaching environment, and approaches to learning, on the one hand, and the student learning outcomes, on the other (Trigwell et al. 1999: 58; Kek & Huijjer 2011: 203). However, it does not clearly reveal how a combination of these factors relates to one another and jointly affect student outcomes (education capabilities expansion). Specifically, much of the research on higher or university education has been on the relationship between teaching processes and student outcomes; learning processes and student outcomes; and curriculum content (as shown in Chapter Three) and student outcomes. However, there has been little research on the relations between all the three sub-variables (curriculum, teaching and learning) and education outcomes (education capabilities). This study

attempts to examine the three education sub-variables concurrently and specify education outcomes further in terms of higher education capabilities expansion among students(see also 9.2 and 9.4).

Probably, owing to the complex nature of university education (in terms of level of teaching and learning, even curriculum content) and the complex capability development processes in it, there has been little research on university education capabilities. It is also possible that development scholars consider university education as elitist and, therefore, meriting no developmental research singling out the role of curriculum content, teaching processes and learning processes in expanding education capabilities. Hence, the purpose of the current study is to explore the role of university education (embracing curriculum content, teaching and learning processes) in education capabilities expansion among students. In the process the study examines the potential guidance the capability approach makes available to public university education so as to positively contribute to higher education capabilities expansion among students. In the following chapter (Chapter Five), the researcher explains the methodology that was used in the course of this study.

Chapter Five

Research Design and Methodology

5.1 Introduction

This chapter explains the research methodology used in the current study of the role of public university education in Uganda in education capabilities expansion among students. The chapter discusses the research design, study population, sample size, processes of selection of respondents, methods of data collection, and how data were analysed and presented. The chapter also explains how the researcher used the mixed method approach (qualitative and quantitative) in the study. Qualitative data were collected from new graduates (2001-2010) of public universities, lecturers at public universities, and selected senior public officials from the Ministry of Education and Sports; the Ministry of Gender, Labour and Social Development; and the Public Service Commission of Uganda. Quantitative data were collected from the new graduates only.

5.2 Research Design

A research design is a “conceptual structure within which research is conducted” and it embodies a description of the collection, measurement of variables and analysis of data. A research design includes an outline of what the researcher will do right from writing the hypothesis to data analysis (Kothari 1990: 39). The current study used a case study research design and an exploratory case-study approach. This design was used to discover ideas and insights into university education and higher education capabilities expansion among university students.

In the current study, the researcher examined in depth some features of public university education over nine months and the cases selected were two public universities, namely Makerere University and Mbarara University. The selection of these cases was guided by the writings of Neuman (2006:40), who advises that “cases can be individuals, groups, organizations, movements, events, or geographical units”. The data from these two cases were detailed, varied and extensive. The researcher selected the two cases

because of their importance in illustrating public university education in Uganda and these two cases were analysed in this thesis (see also 1.2.2).

The current study used responses of individual newgraduates, university lecturers, and relevant senior public officials as representative sources of data on the two universities under study. These stakeholders in the two universities were of paramount importance because they helped the researcher to explore the actions or perceptions of individual respondents towards the university education processes. In addition, these multiple sources of evidence revealed how and what public university education contributes to education capabilities expansion among students. In effect, the multiple sources strengthened the dependability, credibility and confirmability of the study findings.

Furthermore, the case study design was used because case studies are the preferred strategy when the researcher has little control over a phenomenon (in our case university education), and the focus of the study is a contemporary phenomenon within the real-life context of a locality (Yin 2003:1; Kothari 2004: 115). In addition, the case-study design enabled the researcher to trace out the natural history of public university education and its relationship with higher education capabilities expansion and the forces involved in the surrounding environment. In effect, public university education was studied and related to its role in expanding higher education capabilities among students.

This study is an embedded case study design. As Yin (2003: 42) observes, an embedded case study is one which involves many units of analysis within a single case where attention is also given to sub-groups. An embedded design is an important tool for focusing case study research. In the present study, the two public universities (Makerere University and Mbarara University) have colleges, schools, departments, and then programmes or courses within departments. These departments, which were sampled through cluster techniques, generated sub-units or sub-groups for analysis. In the analysis, particular attention was paid to individual higher education capabilities as an indicator for public university education in expanding higher (graduate) capabilities.

The researcher triangulated multiple data sources with a focus on public university education processes. The study employed both qualitative and quantitative approaches. The qualitative approaches were employed first and the quantitative approaches followed. As Horn (2009:135) explains, the analysis of qualitative data can come first to allow issues and ideas to emerge for the quantitative exploration. Therefore, in this mixed method study, the qualitative method informed the quantitative method by raising issues for triangulation. In fact, quantitative questionnaires were designed after the collection and analysis of data from qualitative interviews and focus groups.

In this study, emphasis was on the qualitative research approach because qualitative research promotes “greater understanding of the way things are but also why they are the way they are”(Amin 2005:42). Moreover, the qualitative approach considers the world through the eyes of another person: it analyses meanings, draws on subjective knowledge and works with the feelings and values of participants (Burns and Grove quoted in Horn 2009:200). Therefore, through mainly qualitative methodologies, the study examined how the public university education system in Uganda contributes (or fails to contribute) to higher education capabilities expansion among students.

5.3 Study Population

The study covered two out of five public universities in Uganda, namely Makerere University and Mbarara University (see also 1.2.2). The two universities were selected because they are the biggest and oldest public universities in Uganda. The study population was public university graduates between 2001 and 2010 (herein referred to as new graduates) who were holders of one bachelor’s degree; full-time lecturers at Makerere University and of Mbarara University; and selected senior public service officials.

The lecturers considered were those on university payrolls as at 30 June 2010 and who had taught at the respective university for at least seven years. It was estimated that Makerere University had a total population of about 1,028 fulltime lecturers (Ahimbisibwe 2011: 27) and Mbarara University had about 150 lecturers. Of the 1,178 fulltime lecturers

at Makerere and Mbarara universities combined, about 600 had served at least seven years and about 110 taught in the sampled departments. The two universities had about 70,000 new graduates between 2001 and 2010 (Kagolo 2011:1; Mbarara University of Science and Technology 2011: 24). About 40,000 students had graduated through the departments under study (see also 5.4).

Makerere University is the largest university in Uganda, with a total student population of about 38,000 at diploma, undergraduate and postgraduate levels. It is located in Kampala City, the capital of Uganda. On the other hand, Mbarara University is in the western part of the country, 420 kilometres away from Kampala. As at 30 June 2010, Mbarara University had a student population of about 3,200 offering a wide variety of courses in development studies, science education, computer science, forestry and conservation, and medical-related sciences (Mbarara University of Science and Technology 2011: 24) (see also 1.2.2).

The public service organisations deemed most relevant to the current study were the three line ministries that are concerned with university education, knowledge and skills development and graduate employment in Uganda. These are the Ministry of Education and Sports; the Ministry of Gender, Labour and Social Development; and the Public Service Commission. These three organisations combined have an estimated population of 40 senior officials at the level of principal officer and above.

5.4 Sample Size and Selection

The study used both cluster sampling and purposive techniques. Cluster sampling was used to select the new graduates (2001-2010), who were the main respondents. Cluster sampling is a type of random sampling that uses multi-stages in which “aggregated units are randomly selected and then samples are drawn from sampled aggregated units, or clusters” (Neuman 2006:233). This study used cluster sampling because, as Neuman (2006:233) further explains, cluster sampling helps resolve the problems of lack of a good sampling frame for a dispersed population, and when the cost of reaching a sampled element is high. The researcher noted that whereas public universities in

Uganda have records of current students, unlike western universities, they do not have forwarding addresses of the alumni. When the students in Uganda graduate, they are not easy to trace, even when one uses university records. For example, the addresses used by students while applying for entry into a university are often outdated by the time they complete their studies. This is because students rarely go back to those addresses after university education. Therefore, cluster sampling was preferred as the most relevant in this study because clusters allowed substitutability of individual respondents in case of failure to trace a respondent.

Purposive sampling is a non-random sampling technique in which the “researcher uses a wide range of methods to locate all possible cases of a highly specific and difficult-to-reach population” or specialised population. Purposive sampling uses the judgement of an expert in selecting cases or cases are selected with a definite purpose in mind (Neuman 2006:222). Purposive sampling is appropriate for selecting cases that are informative. In the current study, using purposive sampling the two universities were selected from a list of five public universities because these two are the biggest and oldest public universities in Uganda and had enrolled more than 80% of all students who were attending public university education in Uganda.

Structurally, Makerere University has colleges that comprise schools and within these schools there are departments. In the cluster sampling process, using records from the University registrars, two colleges out of six were purposively selected. Then two schools were randomly selected from those Makerere University colleges and similar schools (on the basis of academic disciplines) were selected at Mbarara University to enhance the focus of the study, i.e. to make the study analyse related courses and programmes.

The two sampled colleges at Makerere University were the College of Education and External Studies and the College of Humanities and Social Sciences. The School of Social Sciences and the School of Education were selected from these colleges respectively. Subsequently, three departments were randomly selected per school. The selected departments in the School of Education were Social Science and Arts Education; Science,

Technical and Vocational Education; and Foundations and Curriculum Studies. As for the School of Social Sciences the departments selected were: Sociology and Anthropology; Social Work and Social Administration; and Political Science and Public Administration. Twenty-two new graduates from the period 2001 to 2010 were randomly selected and targeted per department. Therefore, at Makerere University, the sample selection process was as follows: 01 university x 02 schools x 03 departments x 22 new graduates = 132 new graduates.

There was no College of Humanities and Social Sciences or School of Social Sciences at Mbarara University but there was an equivalent of a school, namely the Faculty of Development Studies with two departments (the Department of Development Studies and the Department of Management Science). Hence, 01 university (Mbarara University) x 02 departments x 14 new graduates = 28 new graduates. Furthermore, at Mbarara University, Education was a mere department under the Faculty of Science and there was no Department of Arts Education. Hence, 01 university x 01 department x 14 new graduates = 14 new graduates. To substitute the absence of some departments at Mbarara University, and considering that Mbarara University had fewer new graduates than Makerere University (see also 5.3), another sample of 22 new graduates was purposively selected from an additional department at Makerere University, namely the Department of Philosophy and Development Studies. Hence the new graduates selected for the study were $132+28+22+14 = 196$ new graduates (respondents). Of these, 178 were to complete questionnaires and 18 were to take interviews (see also Tables 5.1 and 6.1). The 18 respondents to be interviewed were determined using judgemental sampling where the researcher deemed 18 respondents (new graduates) to be sufficient to generate interview data up to a point of saturation.

In addition, 36 lecturers were selected to participate in the study either in one-on-one interviews or in focus groups. The lecturers selected were those who had served for at least seven years at the university. The researcher believed that such lecturers could provide a deeper explanation of curriculum content, learning processes, and teaching processes used by the university. The lecturers were purposively selected from the same

faculties that comprised the cluster samples of the alumni (new graduates). The purpose of selecting lecturers was to provide for triangulation of the data collected so as to enrich the findings and analysis.

Furthermore, a total of 11 government officials were purposively selected from three government ministries, but only nine managed to participate. At the time of sampling (June 2010), there were 22 government ministries and commissions in Uganda. Of these, only three were included in the study as cases. The cases were purposively selected and they were: Ministry of Education and Sports; Ministry of Gender, Labour and Social Development; and the Public Service Commission. Each of these government ministries had some unique relevance to the study. For example, the Ministry of Education and Sports was selected because it directly controls universities and has an indirect hand in the design, development, financing and delivery of the public university education system. The Ministry of Gender, Labour and Social Development has the mandate to oversee the employment of all citizens, such as those graduating from public universities in Uganda, and at times this involves assessing the graduates' knowledge, skills and capacities. Finally, the Public Service Commission is the principal recruiting and selection body of the public sector. More than any other specific organisation in Uganda, the Public Service Commission interfaces with new graduates seeking jobs. The Commission staff, therefore, administer employment tests and are well placed in the labour market to explain the trends of graduate capabilities they have witnessed over time.

Table 5.1: Selection of sample of respondents

Population category	Population (estimates)	Sample size	Sampling technique
New graduates in 10 departments under study (2001-2010)	40,000	196	Cluster
Lecturers in 10 departments with at least seven years in service	110	36	Purposive
Senior government officials in ministries	40	11	Purposive
Total	40,150	243	

Source: Offices of School Dean (Universities); and Office of Personnel Administration (Ministries)

As Table 5.1 indicates, the total number of respondents selected for the study (questionnaires, interviews, and focus groups) was, therefore, 243. Of these, 196 were new graduates; 36 were lecturers and 11 were government officials. In order of relevance to the study, the key respondents were the new graduates followed by lecturers, and finally by policy-makers from the central government ministries. These selected respondents were representative enough to generate data for analysis and valid conclusions.

5.5 Data Collection and Data Sources

Data were collected from new graduates who were located through the snowballing method. The snowballing method is a non-probability sampling method where the initial subjects with the desired characteristics are identified using purposeful techniques and the few identified subjects mention others that they know have similar characteristics and this goes on until the researcher gets the required number of cases (Mugenda & Mugenda 2003:51; Horn 2009: 113; Vogt quoted in Burnett 2009: 172). The snowballing approach is an acceptable method of finding a sample of people who are hard to reach and it can be used with other methods (Burnett 2009:172). In the current study, through the snowballing method that started with three new graduates, a study sample population was selected. The new graduates (respondents) were used to locate their peers until the desired number of 196 was realised. Concurrently, attempts were made to collect data from each of the identified new graduates. Snowballing was used because the new graduates (2001 – 2010), who were the primary respondents, had left university and were scattered all over Uganda and beyond with no forwarding addresses; yet the researcher had to locate them so that they could participate in the study.

The lecturers were selected through purposive techniques using the staff lists and the criteria of seniority with seven years service as minimum (see also Table 5.1). Under the guidance of heads of department in the selected 10 departments, the lecturers were physically located. Each head of department introduced the researcher to the relevant

lecturers and the data collection exercise started. As for the government ministries, the researcher gained access to them through the permanent secretaries, who handled administrative clearance and enabled the researcher to collect the data from the selected senior officials.

Data were collected using both quantitative and qualitative methods. This mixed method approach was used because of its advantages. For example, Firestone (quoted in Miles & Huberman 1994: 41) explains that quantitative studies “persuade” the reader through emphasising the use of established procedures, thereby “leading to more precise and generalizable results” while qualitative research “persuades through rich depiction and strategic comparison across cases”, thereby solving the problem of abstraction embedded in quantitative researches. The mixing of methods in this study was to cater for the different advantages that each method brought to the study.

Qualitative data were the dominant form used in this study during the stages of collection, analysis and interpretation. The study followed a sequential exploratory design of qualitative to quantitative. By implication, the study followed the sequence of qualitative data collection to qualitative data analysis then quantitative data collection to quantitative data analysis and finally to interpretation of the entire analysis (Creswell 2009: 210-11; Horn 2009:135). To this end, the quantitative methods were embedded in a qualitative design, and the quantitative data were used just to support the qualitative findings (see also 5.2).

Since qualitative data dominated this study, the researcher used rich and thick data through a variety of research strategies and techniques, which generated a wide range of insights into understanding public university education and education capabilities expansion. Qualitative data involved documenting real events, recording what new graduates, lecturers and employers said, observing specific behaviours and studying written materials. Moreover, following Miles and Huberman’s (1994: 10) advice, the qualitative data were collected over a *sustained period* providing room for studying public university education processes, exploring lecturers’ and students’ experience in the

university environment and thereby interpreting the meanings that respondents attach to university education. Consequently, the study generated an invaluable form of data that were later analysed to produce this thesis.

This study used both primary and secondary data sources. Primary sources, as already indicated elsewhere, were the respondents, namely the new graduates, lecturers, and senior public officials. The new graduates' accounts and opinions were collected. The lecturers' experiences, ideas and interpretations were studied. Finally, the government ministry officials' experiences, feelings, perceptions, and opinions were analysed. In essence, it was a study of perception as it delved into feelings, views and perceptions. The secondary sources were the published university curriculum (basically course outlines); university quality assurance documents; publications on university education; capabilities; and other general education and administration documents relating to university education processes.

5.6 Data Collection Methods and Instruments

In the current study, the methods used to collect data were: semi-structured interviews, focus groups, document reviews and structured questionnaires. Data were collected using different instruments in order to enhance their quality. Basically, data collection and analysis were done simultaneously with writing the thesis.

5.6.1 Interviews and interview guides

An *interview* is a data collection meeting in which the interviewer asks questions to another person (a respondent) (Babbie 2006: 264). An interview can be seen as a "secondary social interaction between two strangers with the explicit purpose of one person's obtaining specific information from the other". Such information may be obtained in a structured conversation where the interviewer asks prearranged questions and records answers, as the respondent answers (Neuman 2003: 305). Interviews have a high response rate; they allow for probing and clarification, and in a face-to-face interview, the interviewer can observe the respondent while asking questions (Babbie 2006: 265). In the current study, care was taken to avoid respondents mistaking the

interview for a mere conversation. Incidentally, the respondents were persons with university education, who easily appreciated the value of the research interviews.

An *interview guide* is a document containing questions or topics that help the interviewer to put questions to a respondent. The current study selected 196 first degree new graduates of 2001 to 2010 from public universities in Uganda and only 18 of these were targeted for interview using an interview guide although 16 were actually interviewed. Meanwhile, a total of 166 new graduates of the remaining 178 sampled, completed the questionnaires. A semi-structured interview guide was used because, as Cohen and Manion (1998: 271) reveal, semi-structured interviews are more flexible than the structured ones since they allow the interviewer to ask the participants/respondents major questions and provide opportunity for probing deeply (see also appendices D, E, & F). Indeed, during the interviews the researcher probed respondents a lot in order to unearth the necessary details.

The focus of the interviews in this study was on the curriculum content and the respondents' appreciation of it in terms of theory and practice integration, and professional relevance to the world of work. The interviews further investigated the teaching processes in terms of strategies, approaches and quality assurance measures that these new graduates had experienced during their student days. The new graduates were also interviewed on the teaching processes they had gone through during their university days. The interviews investigated the learning strategies that the students used to employ; the learning approaches that dominated their study days; and the levels of research these new graduates had been involved in while at university. Overall, the interviews enquired into the extent to which the university developed higher education capabilities among students. The higher education capabilities considered were; learning disposition; practical reason; sociality and participation; and science and technology.

Up to nine interviews were held with university lecturers. The focus of investigation was on the indicators of curriculum content and on the teaching processes and learning processes described in the previous paragraph. These sub-variables were investigated

from the perspectives and experiences of lecturers facilitating the university education processes. In addition, lecturers were interviewed on the education capabilities they believed to have imparted to the new graduates. Besides, of interest was the lecturers' perception of the probability that their graduates might achieve general capabilities and the functionings of agency and wellbeing through the education capabilities developed at the university.

Nine one-on-one interviews of the targeted 11 interviews were held with senior public officials. Of these, one official was from the Ministry of Education and Sports; three from the Ministry of Gender, Labour and Social Development; and five from the Public Service Commission. The area of investigation was the higher education capabilities of new graduates. Specifically, the interviews probed the level of practical reason, learning disposition, sociality and participation, and science and technology competencies these new graduates seemed to be exhibiting.

5.6.2 Focus group discussions

The focus group method is fundamentally a qualitative method based on structured, semi-structured and unstructured interviews that allow the interviewer to handle many individuals concurrently (Babbie 2007: 308). A focus group discussion is a special qualitative research technique in which people are informally 'interviewed' in a group discussion setting where groups may range from six to 12 people at a venue with a researcher to discuss selected topics (Neuman 2006: 412). However, "participants in focus groups are not likely to be chosen through rigorous, probability sampling methods" (Babbie 2007: 308). According to Krueger (1988:47) the focus group technique captures real-life data in a social environment; is flexible, speedy, low-cost, and has high face validity. On the limitations of focus groups, Krueger notes that the researcher has less control than in individual interviews; data is difficult to analyse; it requires skilled moderators; groups can be difficult to assemble; and different groups can yield contradicting answers. However, the focus group method is widely accepted and used as a reliable information-gathering method in qualitative research.

In the current study, the focus group respondents were purposively selected. Three focus group discussions (FGDs) of 6–10 people were held in the different departments under study. The first interview was held with seven lecturers at the Department of Social Work and Social Administration in the School of Social Sciences at Makerere University Kampala. The focus group discussions took place at the Makerere University Guest House. Permission was sought from the head of department who mobilised the focus group members. The second focus group comprised six lecturers from the Department of Development Studies at Mbarara University of Science and Technology (Mbarara University). The discussions took place in a computer laboratory, which provided privacy to the group. The third and last focus group had 10 members and the discussions took place under the Department of Science (education) in the Faculty of Science at Mbarara University. The discussions took place in a science laboratory after staff had had their half-day workshop on a different matter. A planned fourth focus group discussion with the School of Education at Makerere University repeatedly failed to attract more than three members. The researcher consequently opted for individual interviews in that school. In general, 23 lecturers participated in focus group discussions.

Owing to the sparse distribution of new graduates in terms of courses, geographical settlement and years of completion at public universities, it was, in practical terms, difficult to convene focus groups for this category of respondents. Therefore, all new graduates participating in this study were either interviewed individually or completed a structured questionnaire. Similarly, the focus group discussion method was impracticable for the senior public officials since these respondents were distributed in various ministries. Therefore, the senior public officials were interviewed individually.

Focus group discussion guide: A semi-structured interview guide was designed and used to interview groups of lecturers (see Appendix F). The lecturer focus group discussion guide had 14 questions focusing on: theory and practice integration of the curriculum; professional relevance of what they taught; teaching strategies and teaching approaches that they were using; learning strategies that they had observed in their students; quality assurance measures that they had undertaken in teaching processes;

and level of research that they had undertaken and promoted among students at the university. Discussions also explored the feelings, views and experiences of lecturers with regard to what educational capabilities they felt they had helped to develop in their students.

5.6.3 Document review

There was extensive literature research, which included exploration of the official content of curriculum, teaching processes, and learning processes of the selected departments in public universities in Uganda (see also 5.4). The desk survey was intended to unravel the learning and teaching processes that were embedded in public university education in Uganda. Secondly, the focus was on exploring the link between public university education and higher education capabilities expansion endeavours by public universities in Uganda.

The documents reviewed were the university departmental curriculum that are normally in the form of course outlines. These university sources were complemented by official documents produced by government ministries such as Government Standing Instructions from the National Council for Higher Education (NCHE). A review was also made of selected journal articles, textbooks on education pedagogies, philosophy and capability expansion (see also the references at the end of this thesis). The themes of investigation were curriculum content, teaching processes, learning processes, and education capabilities expansion.

5.6.4 Questionnaire

A questionnaire is “a document containing questions and other types of items designed to solicit information appropriate for analysis” (Babbie 2007: 246). In this study, a questionnaire was used because it was generally considered to be a tool that was free of the researcher’s bias since the answers represented the respondents’ own opinions. As Kothari (2004: 100-101) observes, the questionnaire also allows the respondents to give well-thought-out answers since they have reasonable time available to complete it. In addition, the questionnaire is considered inexpensive because it yields dependable

answers in large samples and is generally time-saving. However, in the current study the method ran a small risk of low rate of return or non-response by some identified respondents. In addition, there was loss of control experienced once the questionnaire was sent out. This was countered by using two vigilant research assistants who distributed and followed up each and every respondent. The research assistants were graduates of social sciences and experienced in data collection. Nevertheless, the researcher first trained them for one day on how to collect the specific quantitative data for this study.

In this study, items or questions for the questionnaire were selected from the qualitative responses in interviews and focus groups plus the reviewed literature in Chapters Two, Three and Four. The questionnaire used was a structured one with closed questions on a five-point Likert scale (Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree). The closed-ended questions allowed standardised responses that were easily compared from person to person. The structured questionnaire was used because the questionnaire was targeting a high response rate and was intended to supplement the larger part of data for this study, which was highly qualitative (also see 5.5 & Appendix H). Indeed, most of the information used in this mixed-method study was from individual interviews and FGDs; the questionnaire made only a minor contribution to the entire study.

Nevertheless, the questionnaire enabled the researcher to generate informative quantitative data. Using quantitative data, the researcher tested the correlation between university education sub-variables and higher education capabilities. The quantitative findings affirmed that the three sub-variables of university education (curriculum content, teaching processes, and learning processes) are positively correlated to education capabilities (see also Figure 4.1 and Chapters 6, 7, & 8). Moreover, through regression analysis, a combined contribution of the three sub-variables of university education to higher education capabilities expansion among students was established as 81.2% (see also 9.2). The analysis further concretised the relevance of university education processes in higher education capabilities expansion.

5.7 Validity (Credibility) of Research Instruments

The validity of an instrument implies the extent to which a research instrument measures what it is supposed to measure. It is the extent to which an empirical measure clearly reflects the true meaning of the concept under consideration in the study (Babbie 2006: 146). The current study used face and content validity to check the instruments. Face validity is the extent to which particular measures may or may not resonate with our common understanding and our personal “mental images” with regard to a particular concept or issue. On the other hand, content validity “refers to how much a measure covers the range of meanings included within a concept” (Babbie 2006: 147). The current study focused on the extent to which the content of both the questionnaire and the interview schedule corresponded to the content of the concepts in the capability approach and university education that the instrument was intended to measure (Amin 2005: 286). The basis of content validity in university education was an examination of the curriculum content, teaching processes and learning processes. Meanwhile, under the capability approach, an examination was done of selected higher education capabilities.

Hence, to establish content validity, this study specified the domain of the content for analysis as curriculum content, teaching processes, learning processes, and university education capabilities. The indicators for curriculum content were theory and practice integration and professional relevance. The indicators for teaching processes were teaching strategies, teaching approaches, and quality assurance. The indicators for learning processes were learning strategies and level of student/lecturer involvement in research. University education capabilities which were deemed to be the outcomes of the curriculum content, teaching and learning processes had the following indicators: sociality and participation; learning dispositions; practical reason; and science and technology.

It is argued that in research, the validity of instruments is determined primarily through judgement (Amin 2005: 285). However, efforts were made to ensure that the instruments

were comprehensive and that they could be used to collect only data relevant to the study. To ascertain this objective, two other doctoral-level scholars in Uganda reviewed the instruments and advised the researcher on how the instruments could further be improved upon. The Unisa promoter of the current study also reviewed the instruments with the researcher and agreed on them. Improvements were made to them and the final version was produced and used in this study (see Appendices C - G).

Internal validity was further enhanced using the recommendations of Schumacher and McMillan (1999: 391-92) who advise that (a) there should be a lengthy data collection period to provide opportunities for continued analysis; (b) the participant language should be consistent to minimise a mix-up of meanings; and (c) there should be disciplined subjectivity. In the current study, qualitative data was collected over a period of nine months as the study progressed, although quantitative data was collected in a period of three weeks in March 2011. The language used was English for all methods of data collection employed in this study, namely interviews, FGDs, questionnaires and document reviews. Finally, the researcher endeavoured to maintain self-discipline and rigorous self-evaluation during the research process.

Hence, the credibility of data collection was enhanced through relating the information collected in the interview with that from the questionnaires and focus groups. This triangulation of the data methods allowed the collection of many types of evidence (Ebersohn 2011: 6). The themes of investigation were generated from both respondents and literature on university education and on the capability approach (see also 5.9).

5.8 Reliability (Dependability) of Research Instruments

Instrument reliability can be considered as “the degree to which the instrument consistently measures whatever it is measuring” (Amin 2005: 293). By implication, reliability is about applying a particular technique repeatedly to the same object and being able to yield the same results each time (Babbie 2006: 143). Hence the reliability of an instrument establishes the extent to which a research instrument is consistent in measuring what it is supposed to measure.

In this study, the consistency of the documents was tested using internal reliability. According to Amin (2005: 293), internal reliability is the extent to which a research instrument can yield “consistency of results within that site or organisation”. In the current study, the instruments were pre-tested on lecturers and students of Uganda Management Institute, which is a management training institute whose training business is related to the public university education system. The questionnaire was pre-tested on 12 new graduate respondents from Kyambogo University in Kampala City. Using Cronbach’s alpha under Statistical Package for the Social Sciences (SPSS), reliability tests were performed and an average score of 0.681 was realised. This score confirmed the reliability of the questionnaire.

To further enhance the reliability and dependability of data, the researcher used simple terms in the questionnaire, interview schedule and focus group discussion guide. The use of multiple methods of collecting data allowed the generation of data from different accounts. Triangulation also allowed cross-checking of data and consequently improved its quality. Secondly, the researcher created a record of data that can be followed by another researcher back from conclusions to raw data. Thirdly, the respondents in the focus group discussions and interviews were used to check the accuracy of congruence of their perceptions. Finally, with permission from the respondents, a voice recorder was used in all interviews to enable the researcher to record the answers accurately and compare them across respondents.

5.9 Analysis of Data

The data were qualitatively and quantitatively analysed. Each category (qualitative and quantitative) required a specific approach that was technically acceptable and relevant to generate credible results.

5.9.1 Qualitative analysis

For qualitative data different approaches were used to do the analysis. This was because “there is no single right way to do qualitative data analysis – no single

methodological framework" (Punch 2008: 194). In the current study, the analysis went through three concurrent activities, as advocated in literature, namely: *data reduction* which involved selecting, summarising, focusing, simplifying, and abstracting the data from transcripts; *data display* which involved organising and compressing information, which facilitated conclusion drawing and action; and *conclusion drawing and verification* which involved establishing meanings from regularities, patterns, explanations, causal flows and propositions (Miles and Huberman 1994:11-12). In effect, the notes taken during FGDs and in one-on-one interviews with respondents were edited to make the data consistent. The data were mainly in the form of transcripts from audio-recorded interviews and transcribed notes from focus groups and university documents.

Through thematic and content analysis the data were discussed and interpreted. Content analysis was the dominant form of analysis used in this study. In content analysis the study identified, coded and categorised patterns in the data. The coded data were developed into broad themes that later led to a broad analysis and interpretation. The major themes of analysis were: how the public university curriculum content contributes to higher education capabilities expansion (see also Chapter 6); how public university education teaching processes had reduced or increased capabilities among the students (see also Chapter 7); how the learning processes contributed to higher education capabilities expansion (see also Chapter 8); and what higher education capabilities the students possessed (see also Chapter 9). The generation of these themes, as Miles and Huberman (1994: 58) advocate, was also guided by "a provisional 'start list' of codes prior to fieldwork" that the researcher had developed. This list was developed from the conceptual framework and the research questions that guided this study (see also 1.5 and 4.5).

The codes were handled at different levels of analysis, ranging from descriptive codes entailing little interpretation to inferential codes that revealed emergent patterns that had been discerned in the responses of participants. Coding happened at different stages of analysis. The outcomes of the analysis from the coded information led to a further

interpretation of the four major themes that were used to deduce the role of public university education in higher education capabilities expansion among students in Uganda. Using Sen's (1999a) capability approach to human wellbeing and development, the study explained the relevance of university education to higher education capabilities expansion (see also 4.5). The study also drew conclusions regarding the role of public university education in expanding the students' capacities, knowledge and skills in practical reason, learning dispositions, sociality and participation, and in science and technology. The eventual analysis provided an explanatory presentation on the contribution of public university education to higher education capabilities expansion among students. In addition, the study findings and conclusions were used to confirm the relevance of the capability approach 'framework' in understanding the relationship between public university education and capability expansion at university level, but also indicated the extent to which the capability approach can guide university education processes.

5.9.2 Quantitative analysis

Quantitative analysis was a minor part of the analytics in this study and, therefore, quantitative data simply supplemented the qualitative data. The emphasis on qualitative aspects was due to the conceptual location of the study in the wider domain of social development that cherishes the qualitative aspects of life (see also 5.5). In this vein, human development may be explained more from qualitative than quantitative aspects.

Nevertheless, quantitative data were collected from 166 respondents and analysed through both descriptive and inferential statistics. The descriptive statistics involved means, frequencies and percentages while inferential statistics were handled through correlation and regression techniques. The correlation technique was used to analyse the relationship between university education and higher education capabilities. Correlation coefficients were generated that revealed the association and the direction of the relationship between university education and higher education capabilities.

Meanwhile, regression analysis was used because the study took interest in determining predictions among the variables. In regression analysis, the researcher aimed at analysing the degree of predictability between university education and higher education capabilities expansion. The study used simple regression when generally dealing with university education and higher education capabilities expansion. This was in line with what Mugenda and Mugenda (2003:135-136) advise, that is, when dealing with one independent variable and one dependent variable, the researcher should use simple regression. In this study, it was therefore possible to test the contribution of public university education to higher education capabilities expansion among students in public universities in Uganda.

Moreover, using regression analysis, the researcher generated a statistic coefficient of determination, also called R squared (R^2). In this study, the R^2 generated coefficients which were used to explain the amount of variations in graduate capabilities predicted by university education sub-variables (Mugenda & Mugenda 2003: 136). The R^2 was computed in fractional figures with decimal points and then converted into percentage figures; hence the extent of explanation or prediction was arrived at in percentage form (see also Chapters 6, 7, 8 & 9). These quantitative data were then triangulated with the qualitative data to make the findings of the study more authentic, and the two data sets were interwoven and interpreted together.

5.10 Measurement of Variables

The dependent variable of interest in the current study was higher education capabilities expansion. In the study, higher education capabilities expansion among new graduates referred to opportunities, knowledge, skills and capacities resulting from university education (Gasper & Van Staveren 2003). The student *higher education* capabilities analysed were: i) learning dispositions; ii) sociality and participation; iii) practical reason; and iv) science and technology. These four education (complex) capabilities are some of the “basic capabilities for educational functionings, at the ideal level” that Terzi (2004:16-17) recommends and Walker (2006: 128) endorses.

The study assessed the four selected (higher) education capabilities in terms of the extent to which their attainment (where they existed) had been influenced by public university education processes. The assessment was guided by the measurement of these variables as elaborated in the following paragraphs, basing on Walker's and Terzi's explanation.

The study measured *learning disposition* by the new graduates' ability to concentrate, to pursue an interest, and to inquire. *Concentration* was measured by the graduates' ability and speed to internalise the questions the researcher asked them in interviews. In the questionnaires, direct questions were put to new graduates about university training in mental concentration and the respondents expressed their opinions. *Pursue interest* was measured by the graduates' expressed interests and ambition. *Ability to inquire* focused on the new graduates' research abilities in the area of their training (on the assumption that a first degree holder might have *basic* research knowledge and/or skills).

Sociality and participation was measured in terms of being able to establish positive relationships with others and to participate in public life without shame. *Sociality* was measured in terms of the level of friendships one had retained from those created while still a student at the university. And *participation without shame* was investigated on the basis of the confidence exhibited during the interview, such as eye contact, body projection and confidence.

Practical reason was measured by the level of being able to relate means and ends and to critically reflect on one's and others' actions. This was measured by asking respondents a series of questions that were assessed thematically and also by listening to the respondents discuss the questions posed during the one-on-one interviews with the researcher.

Science and technology was measured in terms of being theoretically knowledgeable in two basic Microsoft Office programmes, i.e. Word and Excel, and being practically able to use a computer to write a word document with ease. In the study, computer

technology was considered a basic technology that every graduate, regardless of discipline, should know how to use.

The independent variable of public university education was related to the dependent variable of education capabilities expansion through the assessment of the curriculum content, the learning processes, and the teaching processes. Curriculum content was further measured in terms of theory and practice integration, and professional relevance of what is contained in the curriculum. The teaching processes were measured in terms of teaching strategies, teaching approaches and the quality assurance measures in place. Finally, the learning processes were measured in terms of learning strategies and the level of research among lecturers and students. Using the above measurements, both the lecturers and senior public officials were asked a series of questions concerning their views, perceptions and feelings about the university education processes and education capabilities of the students (see also Appendices D, E & F).

5.11 Limitations of the Study

Firstly, the study was limited to public university education and left out private universities in Uganda. The exclusion of private universities was due to the need to focus the study on government-led education since government is at the forefront of training and capacity development endeavours in Uganda. Moreover, more than 75% of the university student population in Uganda is currently in public universities (see also 1.6).

Secondly, the study was mainly qualitative, thereby limiting the total number of respondents to 243 since the main methods of data collection were interviews, focus groups and document review. The quantitative questionnaires were used only to a minor extent. However, in spite of the limited number of respondents, the study was quite informative and provided a good understanding of the role of public university education in higher education capabilities expansion among students.

Thirdly, the study focused on two colleges or faculties per university and cascaded down to two schools and then to 10 departments. At Makerere University the study focused on

the College of Humanities and Social Sciences, and the College of Education and External Studies. At Mbarara University, the faculties covered were those of Development Studies, and Science. Probably, the inclusion of different colleges or faculties such as of health sciences, computing, agriculture and so forth would have yielded different insights. However, in spite of this limitation, it was important to focus on what the study covered because these selected faculties are the ones that yield the greatest portion of the graduate population in Uganda and, therefore, have the potential to make or put at risk an economy's education capabilities 'bank' and impact on overall socioeconomic development.

Fourthly, to understand the role of public university education in higher education capabilities expansion, the study used new graduates as the main respondents and deliberately excluded current students. This was due to the need to measure what education capabilities the university had really given to students, as a full package, over the last 10 years. The exclusion of the current students was due to the fact that they are still in the university education processes and, therefore, still in formative stages of higher education capabilities expansion as contrasted to new graduates who have just received the full public university education package. However, it is possible that another study using the current university students might reveal some slightly different results.

5.12 Summary

Chapter Five has described the different stages in the mixed method approach as used in this study. The rationale behind each decision at every stage of the methodology has been indicated as well as how the role of the public university education in higher education capabilities expansion was established through the collection, analysis, presentation and interpretation of data. In essence, this chapter has explained how the study was carried out, right from the design stage, through data collection and data processing up to the final stage of analysis and presentation of findings. In so doing, the chapter has established a background against which the study and its results can be judged by the readers. In general, the researcher attempted to be rigorous to ensure that

the final output meets acceptable scientific and academic standards. The following chapter (Chapter Six) presents the study findings, analyses and interpretation.

Chapter Six

Presentation, Interpretation and Discussion of Results: University Curriculum Content

6.1 Introduction

Chapter Five explained how the study was carried out through the stages of design, data collection, processing and analysis. Chapters Six, Seven and Eight present the findings of the current study, and discuss them in line with the major study objective. The study aimed at analysing the role of public university education in Uganda in expanding higher education capabilities. In addition, it aimed at establishing why public university education is apparently not fully developing the higher education capabilities of students. Basically, capabilities are conceptualised as opportunities plus skills, learning and capacities that can be enhanced (Gasper & van Staveren 2003; Gasper 2002: 447). However, the higher education capabilities covered in the current study are: learning dispositions; sociality and participation; practical reason; and science and technology (see also 2.4 and 5.10).

Chapter Six addresses the first specific objective. As indicated in Chapter One, the study was guided by three specific objectives, namely: i) to examine the contribution which the content of university education curriculum makes to higher education capabilities expansion among students in Uganda; ii) to analyse the extent to which the university teaching processes contribute to education capabilities expansion among students in Uganda; and iii) to assess the role which the university learning processes play in higher education capabilities expansion among students in Uganda (see also 1.4). In these three chapters (Six, Seven and Eight), the three objectives which also form the sub-variables of the university education variable are examined successively, one objective per chapter, to determine how they can be used to establish the role public university education plays in education capabilities expansion among students (see also Figure

4.1). Therefore, the data presented in these three chapters were collected in line with the three objectives.

Chapter Six (sub-sections 6.1 and 6.2) summarises the research methodology as it applies to the three chapters (Six, Seven and Eight). The three chapters analyse the data collected from the 14 interviews with new graduates (2001-2010), who were the lead respondents in this study. The chapter also presents the information from the nine individual interviews and three focus group discussions with lecturers from Makerere and Mbarara Universities. In addition, there is more information presented in the chapter that was generated from nine individual interviews with senior public officials from central government public sector ministries (see also 5.4 & 5.6). The data collected from the respondents was analysed and the data revealed several findings.

The findings are both qualitative and quantitative in nature. Qualitative findings were generated from interviews, focus groups and document reviews. All interviews were held in the English language, which is understood by all respondents, although it was the second or third language for all respondents. In these three chapters, where the respondents are quoted verbatim in the presentation and discussions of themes, no attempt has been made to correct language usage where the message is understandable. However, where the meaning of a quotation is not clear the researcher has added an interpretation between brackets to clarify the message. Verbatim quotations are presented in quotes that are in one-and-a-half linespacing or in indentions that are in single-line spacing. This style of quoting is meant to separate the quotes from the researcher's interpretations and analyses. Meanwhile, quantitative findings were generated from self-administered questionnaires. The questionnaires were completed by 166 selected new graduates of Makerere and Mbarara universities. The quantitative findings are summarised towards the end of each analytical chapter (Six, Seven and Eight).

6.2 Characteristics and Backgrounds of Respondents

In order to explore the role public university education plays in higher education capabilities expansion among students, the study used three categories of respondents (or participants). The respondents were: the new graduates (2001-2010) because they were the latest recipients of public university education; the lecturers who deliver university education; and the senior public service officials who represent public employers who supervise the new graduates at the workplace (see also 5.3 & 5.4).

The new graduates were selected from among the alumni of two public universities in Uganda. The selected universities were: Makerere University, and Mbarara University. The new graduates are those first degree holders who graduated from university during the 10-year period from 2001 to 2010 (see also 5.3). They are graduates of Social Work, Political Science, Sociology, Education, Development Studies, and Business Studies. The new graduates are generally young persons, with about 90% of them falling in the age range of 23 – 35. These new graduates were the key respondents in the study because they had been direct ‘consumers’ and ‘products’ of the public university education processes in Uganda.

This study also covered the lecturers from the same schools and departments from which the new graduates were selected. The lecturers belonged to a wide age range from 30 to 65. Therefore, it was the involvement of both junior and senior lecturers that facilitated the generation of rich information and the comparison of views from lecturers. Basically, this category of respondents covered only those lecturers who had taught at university for at least seven years prior to 30 June 2010 when data collection started.

Finally, the study includes data from nine senior public service officials who were purposively selected from three government ministries. The ministries were: i) the Ministry of Education and Sports; ii) the Ministry of Gender, Labour and Social Development; and iii) the Public Service Commission. The officials were interviewed to generate qualitative data regarding the relevance and quality of knowledge, skills, learning, and capacities that public universities in Uganda offer to the students. These

public service officials are at the 'receiving end' of the university products (new graduates) that are emerging from the public university education processes.

6.2.1 Interviews with respondents

Interviews were done with 14 new graduates who were located through snowballing processes (see also 5.5 & Appendices D, E, & G). The interviews provided rich information regarding university education processes and higher education capabilities. They were conducted at different locations such as restaurants, university canteens and offices. Meanwhile, interviews with lecturers were done in their respective offices after appointments were fixed. Similarly, interviews with senior public officials were done in their respective offices in Kampala City. All interviews were recorded verbatim using two digital recorders. The researcher ensured confidentiality and, as much as possible, created a relaxed atmosphere. The interviews were later on transcribed and the text analysed to generate information for this study.

6.2.2 Focus groups with respondents

Three focus groups were constituted during the study (see also Appendix F). The first one comprised seven members from the Department of Social Work and Social Administration of Makerere University. A discussion with this focus group was carried out in the morning hours (9:00am to 10:50am) in an open space at the Makerere University Guest House. During the interview, the participants were relaxed and talked freely, probably because the researcher had earlier on studied at that department and was familiar with some of the focus group members. However, the discussion yielded contradictions regarding some issues which the researcher probed in order to understand the university education processes. Six respondents came on time and the interview started; the seventh respondent, who happened to be the most senior person, joined after about an hour and participated in the last 40 – 50 minutes of the discussion.

The second focus group was drawn from among members of the Department of Development Studies at Mbarara University. It comprised one gentleman and five ladies, including a head of department. The discussion with this group was conducted in a

computer laboratory in the Department of Development Studies block. Members were very relaxed and talked freely in a lively discussion. All the six members were total strangers to the researcher. The focus group was organised by the head, Department of Development Studies, after clearance was obtained from the Deputy Vice-Chancellor of Mbarara University. The members articulated issues of development and development theory, including the capability approach, from a technical perspective.

The third and last focus group discussion took place at Mbarara University in the School of Education. The group had ten members and the interview took place in a science laboratory in the New Science Building. It was characterised by a relaxed atmosphere, although some noise occasionally slipped in through the windows from the nearby highway. The group ranged in age from about 31 to the late 50s. It was organised by the head, Department of Science Education.

6.2.3. Questionnaires with respondents

A total of 190 questionnaires were distributed, targeting 178 respondents, who were sampled to complete the questionnaires (see also Appendix H). Two research assistants were used to distribute and collect the questionnaires in Kampala City and the surrounding areas; and the third research assistant collected data from Mbarara Municipality and the surrounding areas. The three research assistants were first briefed on the snowballing method of locating respondents and the thoroughness and criteria required in the distribution and collection of questionnaires (see also 5.5). A total of 173 questionnaires were received back, but only the first 166 questionnaires correctly completed in time were considered. Of the 166 questionnaires, 122 were from new graduates of Makerere University and 44 were from new graduates of Mbarara University. These 166 questionnaires were quantitatively analysed and the findings are indicated in these three chapters (Six, Seven and Eight).

In this study, it was important that respondents are sampled from different departments to obtain fairly representative data for quantitative analysis. The respondents' university and department are indicated in Table 6.1.

Table 6.1: Respondents covered in the survey(questionnaires)

	University	Department	No. of new graduates	Percentage
1	MUK	Science, Tech.& Vocational Education	24	14.6
2	MUK	Social Science & Arts Education	23	13.9
3	MUK	Development Studies	15	9.0
4	MUK	Foundations & Curriculum Development	00	00
5	MUK	Social Work & Social Administration	19	11.4
6	MUK	Political Science	16	9.6
7	MUK	Sociology & Anthropology	25	15.1
8	MUST	Management Science	12	7.2
9	MUST	Science Education	12	7.2
10	MUST	Development Studies	20	12.0
		Total	166	100.0

Source: Field Data

Key: MUK = Makerere University Kampala; MUST = Mbarara University of Science and Technology

Table 6.1 shows the distribution of questionnaire-respondents by department for the 10 sampled departments under study. In this table, Makerere University accounts for 122 (73%) and Mbarara University has 44 (27%) of the respondents. This is because of the differences in university population sizes, where Makerere University is a very big university compared to Mbarara University (see also 5.3).

In addition, it was important that the time of completion of university by the respondents be indicated since the scope of the study was a 10-year period (2001 – 2010) (see also 1.7 & 5.6.1). Table 6.2 summarises the data on the number of new graduates (respondents) from the different years under study.

Table 6.2: Year of graduation by questionnaire respondents

Year of graduation	Number of new graduates	Percentage
2001	15	9.0
2002	9	5.4
2003	15	9.0
2004	12	7.2
2005	17	10.2
2006	17	10.2
2007	21	12.7
2008	22	13.3
2009	24	14.5
2010	14	8.5
Total	166	100.0

As shown in Table 6.2, there is a variation in the distribution of respondents across the years covered by the study. A slightly bigger number occurs in the last half of the study period. This bigger number captured was because the most recent graduates were the easiest to access since they were in bigger numbers and had not yet dispersed 'very far in the world'.

It should be noted that the total number of respondents who actually participated in the study was 166 (new graduates who completed the questionnaires) + 14 (new graduates interviewed) + 09 (lecturers interviewed) + 23 (lecturers in focus groups) + 09 (public officials interviewed) = 221 respondents. The 221 respondents out of the 243 respondents the study had targeted represent a 91% response rate (see also 5.4).

In qualitative interviews, quantitative questionnaires and focus groups, the respondents were asked a number of questions generated from what some scholars refer to as "a provisional 'start list' of codes [developed] prior to fieldwork" (Miles and Huberman 1994:58) that the researcher had developed. The 'start list' was guided by the objectives of the study, which had three sub-variables, namely: curriculum content; teaching processes; and learning processes (see also 6.1). The three sub-variables formed the major objectives (and later on themes) that were discussed in relation to student higher

education capabilities expansion. As already explained elsewhere, in this sixth chapter, only one objective of the study (the first objective) is addressed (see also 1.4).

6.3 Curriculum Content and Higher Education Capabilities Expansion among Students in Uganda: An Overview

Whereas it was considered a cumbersome task to analyse the curriculum content of public universities in Uganda, the researcher found it prudent to explore the principles and practices that characterised the universities' management of the curriculum and the corresponding pedagogies. The curriculum content of the schools and departments selected for study was analysed. In essence, the researcher browsed through seven prospectuses and 37 course outlines, running through the years 2001 to 2010, from six out of the 10 departments under study (see also 5.4). The course outlines were mainly constructed from the prospectuses. Actually, the prospectuses and the course outlines provided an input in the issues that were covered by the questionnaire, individual interviews and focus group discussions. For example, the respondents were interviewed on their experiences and feelings about the curriculum content, relevance and quality.

In this study, efforts were also made to understand the curriculum processes in terms of formulation, implementation and evaluation and how these processes have facilitated the building of students' higher education skills and capacities. The interviews, focus groups, document reviews and questionnaires yielded information on the perception of respondents about curriculum content.

Like at most universities in the world, each school or department at all the public universities in Uganda determines its own curriculum in terms of content, teaching and learning strategies. Public universities in Uganda, especially the teaching faculties, have a high level of autonomy when it comes to the teaching and learning processes, unlike administrative and financial functions in which government has reasonable control and intervention. Public universities in Uganda are seen as custodians of knowledge and skills, with their experts placed in their respective intellectual 'compartments', i.e. the faculties, schools or departments whose academic decisions are not easy to challenge,

let alone understand. This 'guru' posture allows public universities in Uganda to undertake many unilateral decisions regarding what is taught and how it is taught.

Therefore, Makerere and Mbarara universities have their departmental experts determining the curriculum and proceeding to teach it the way they choose to. The lecturers, under the guidance of their academic leaders, usually the school deans and heads of department, design, review, teach and evaluate their curriculum periodically as and when they deem it necessary. Unlike non-university public institutions of learning that obtain their curriculum from the National Curriculum Development Centre (a semi-autonomous body of the government of Uganda), public universities in Uganda have their curriculum internally generated and managed. It was not until 2003 that the National Council for Higher Education (NCHE) started demanding that universities submit detailed course descriptors to the council for accreditation before such courses are taught at any university. Even then, the NCHE just accredits courses as universities determine the course content and pedagogies. Indeed, prior to 2007, some courses in public universities in Uganda were accredited without the submission of detailed course outlines to the NCHE, thereby posing education quality problems.

The NCHE is a relatively new semi-autonomous body formed by an Act of Parliament in 2001. The body focuses on policy matters of higher education and issues guidelines and standards on the running of higher education institutions, including public universities in Uganda. Owing to its limited human resource establishment, the council cannot effectively delve into university operational matters and this creates room for sub-standard curriculum to emerge in some departments in public universities in Uganda.

In this section, curriculum content is analysed on the basis of two specific sub-themes, namely: i) theory and practice integration that reveal the extent to which the curriculum links theoretical learning to the application of these theories on higher education capabilities expansion; ii) the professional relevance of the curriculum that explains the feelings of respondents about the importance and applicability of what is learnt at university to the enlargement of higher education capabilities.

6.4 Theory and Practice Integration in Public University Education Curriculum

Society expects educated people to not only be able to articulate what they know but also to convert such knowledge into practice. The current study, inter alia, explores the extent to which respondents feel that the students assimilated both knowledge and skills from the courses they studied at university.

Respondents' satisfaction with the curriculum

Through interviews and focus group discussions, a number of issues came up that reflected the students' experiences regarding the appreciation of theory and practice integration in the university curriculum. The majority of new graduates indicated that theory and practice integration was reasonably balanced and relevant in terms of higher education capabilities expansion. One respondent observed:

It (curriculum) really empowered me in that I always aspire for leadership positions wherever I am. Since I finished my bachelor's degree I have never attained a position below management. ... I always aspire for the positions of management and leadership. Trying with reason to implement what I studied (New Graduate, Interview MPS5)

In such a case, the new graduates appreciated the gains from the curriculum content, and indeed a capability developed. This capability relates to the sociality and participation capability already explained in 5.10.

A contrary view, however, expressed dissatisfaction regarding the integration of theory and practice in the university curriculum. Some new graduates believed that the university curriculum still had some deficiencies. Indeed, one respondent mentioned:

Ah, I would think that ... the education process should be ... more practical, and everything given theoretically should also be put in practical terms so that it is not about getting a first class degree but rather about internalising practical skills that are required in the places of work (New Graduate, Interview NGPS1).

As for the lecturers, they argued that the mix of theory and practice was reasonable and at an acceptable level. One respondent mentioned:

I think the curriculum does not have a serious problem in terms of the way it has been structured. The problem emerges when it comes to actual implementation of this curriculum. First of all we have the theoretical bit where we actually teach in

class and the practical bit. If you look at a social worker and also maybe other courses, such as education and indeed the whole university ... [there is a practical bit of the study] at the same time they are scraping it (practical bit or fieldwork) because of insufficient placement outlets (Lecturer 06 in Social Work, Focus Group SWFM1).

A similar observation was made by another respondent, who reported:

If you have students taking social sciences, social work and they are over 2000 and you want all these to go for internship, the question is: Where are they going? Who is going to supervise them? Where are the logistics? So, when it comes to translation of this curriculum into practice it becomes problematic. Now when it comes to these students going in the industries or factories again it is the same case. Factories look at students going to their places as an added cost. So, they (factories) try to avoid them (students) (Lecturer 02 in Social Work, Focus Group SWFM1).

The problematic implementation of fieldwork practice frustrates the curriculum objective of enabling students to acquire skills and capacities. Moreover, the practice of offering fieldwork practice as an option, given the insufficient number of organisations for placement, contradicts the useful practice of theory application. This limited use of fieldwork is reportedly due to a huge university student population that cannot be absorbed in the workplaces where the universities would have desired to send them as interns. Therefore, the problem of limited placements in the work environment appears to constrain the desire of universities to integrate theory and practice in their curriculum. This limitation is likely to be contributing to the overall low levels of higher education capabilities expansion among students.

Respondent conceptions about the curriculum content

The study further established that some senior public officials have reservations about the curriculum content in terms of mix of theory and practical material. These practitioners argue that public universities in Uganda teach a lot of things that are largely irrelevant in relation to the workplace expectations. The irrelevant knowledge and skills disadvantage the graduates in terms of job access. As one respondent reported:

I also have children who are at the university, but when I look at what they are doing, ah! If for example I start with social sciences, I did social work and when I look at the content on the transcript today, I think it is too fragmented... But these days you are limiting the students, and if they are no opportunities in that area

they (students) get stuck. The curriculum is limiting. Secondly, I think there is also too much of theory, and it is too theoretical(Public Official, Interview P2)

Another senior public official revealed:

When you look at the curriculum for most of our [public] universities, I think it is wanting: wanting in a sense that it is exam oriented. ...today the student is focused on passing. If he can cram and go to the next semester; that is what is in the universities nowadays, because it is not about knowing: it is about just cramming to reproduce and then go to next level because at the end of the day passing is what counts (Public Official, Interview P1)

Another one observed:

I think the curriculum would not be much of a problem, for me in my courses they were okay – the course I went through: I have no problem with it. My only problem [was that it]... was basically theory-oriented. ...maybe if they (lecturers) gave students more case scenarios, or maybe if they (lecturers) came to workplaces, and they ask for cases that we have [the universities would benefit from the cases]...(Public Official, Interview P4)

Some officials in the public sector believe that the curriculum is more theory-oriented than practice-focused. The theoretical orientation limits the level of skills development owing to lack of opportunity to practise what is learnt in class. As revealed by the responses from the senior public officials, the university curriculum was perceived to be fragmented, deficient, limiting students' opportunities, and theoretically oriented. Therefore the perception of the curriculum by the senior public officials is largely negative. Moreover, from the perspective of the senior public officials, the lecturers rarely approach the workplaces for ideas on how to improve on the integration between theory and practice in the university curriculum. For example, cases are used in teaching only on a small scale. The lecturers who use the case-teaching method prefer to download cases from the internet or adapt some from textbooks.

Incidentally, the new graduates' conception of the relevance of the curriculum was largely positive. For example one respondent indicated: "The content I would say, it was nice. It was well intended, in my view... At the beginning of the semester we would get a course outline. Many items down the list and interestingly many of them are related to what I intended to do. If I could relate that [content] to the field [requirements]; the

content was nice”(New Graduate, Interview MSW8).From the perspective of this respondent, considering the content per se, the curriculum had the potential to expand some knowledge and skill applicable to the world of reality. This view is, however, contrary to the one expressed by senior public officials indicated above.

In the quantitative questionnaire, the new graduate respondents were requested to state their opinion about whether or not the university curriculum integrates practical learning with theoretical learning (see Appendix I, question 204). Their responses are summarised in Table 6.3.

Table 6.3: New graduates’ perception of the curriculum content as integrated

Questionnaire measure	Number of respondents	Percentage
Strongly agree	2	1.2
Agree	12	7.2
undecided	6	3.6
Disagree	121	72.9
Strongly disagree	25	15.1
Total	166	100

As Table 6.3 shows, the majority (88%)of respondents considered the level of theory and practice integration within the curriculum to be low. The 88% arises from the 72.9% who disagreed and the 15.1% who strongly disagreed. Therefore, using this perception data, it is possible to speculate that thepublic university curriculum is more theoretical than practical.

A review of some course outlines (2001-2010) from the departments covered by this studyfurther revealed that most of themhad not listed practical methods of instruction. The outlines mainly listed approaches such as ‘lecture’ and ‘discussion’. In practice, some lecturers improvise creative ways of making the curriculum more balanced. For example, such lecturers use a blend of teaching methods that translate theory into practice. One respondent reported:

When I am teaching, I normally use examples that are of day-to-day. I contextualise theory into practice. ... If I am talking about lesson planning and

scheming then I let them scheme. Let them have lesson samples for us to look at. When we are talking about what the contents of a teaching file are, we encourage them to have a teaching file which will be assessed. ... In this way I am trying to link the theory and practice(Lecturer in Education, Interview FCSM1)

These creative and practical ways of operationalising the curriculum, although rarely practised in public universities in Uganda, increase the higher education capabilities expansion among students. This increase is because the integration of practice and theory makes the curriculum holistic and increases the opportunities for learning.

However, some lecturers believe that the university curriculum should have a lot of theory in its content. Such lecturers expect students to appreciate theory and internalise its applicability. As one lecturer argued:

At university level, this is where we have expertise. We are not teaching apprenticeship: we are teaching people who can use theory to comprehensively address problems. For example, it could be a research problem or it could be poverty... They (students) should be able to apply theory, but they do not want theory; and they do not know what brought them to university. This is different from any other college. University is about real theory and then being able to apply it. That is all(Lecturer 07 in Social Work in a Focus Group, SWFM1)

This argument, inter alia, reveals the lecturers' conception of what students should take from the university, which is predominantly theoretical knowledge but also the application of theory to real-life situations. By implication, in such a lecturer's classes a lot of theoretical teaching is offered although students hate theory. Students argue that theory is complicated and that it is irrelevant to the workplace. Hence, there is a mismatch between students' expectations and lecturers' expectations of the curriculum. This contradiction could partly explain the deficiencies in higher education capabilities developed at public universities in Uganda.

Curriculum coverage

Regarding the level of coverage of the university curriculum, most lecturers feel that it is exhaustive and, therefore, caters for a wide range of issues that the students need to learn from the specific disciplines. For instance, one respondent reported:

I think the curriculum is exhaustive enough; we have had curriculum reviews for the last seven years... And in the department now we are implementing a new curriculum, which has factored in new developments within the higher education sector globally, in Africa and in Uganda in particular. ...and I think it is a good curriculum despite a few limitations here and there(Lecturer in Sociology, Interview LSAM1)

Overall, new graduates and lecturers rate the curriculum highly in terms of exhaustiveness but as fair in terms of linking practice and theory. Similarly, among the 166 questionnaire respondents 43.4% agree and 7.2% strongly agree that the university education curriculum was exhaustive (see Appendix I, question 201). To the contrary, in qualitative interviews, the senior public officials are largely doubtful about the exhaustiveness of the university curriculum. They also expressed reservations about the balance between theory and practice in the university curriculum. They tend to believe that there is much more theory in the curriculum than is necessary.

It appears that, owing to the tenuous link between practice and theory, the curriculum of public universities in Uganda limits education capabilities expansion among students. Otherwise, students seem to learn best when a balance exists between practice and theory in pedagogy. More weaknesses are apparent in the curriculum in cases of early specialisation of courses. In the view of senior officials in the public sector of Uganda, when students specialise at the first degree level their flexibility and job access are limited. Actually, the senior public officials argued that all weaknesses in the curriculum end up making the university curriculum irrelevant to the workplace needs.

6.5 Relevance of Public University Education Curriculum Content

The relevance of what is taught to somebody by any educational institution is very important in that person's life. Relevance of curriculum content could be viewed in terms of professional relevance, relevance to individual needs and relevance to national development needs. In this study, the respondents revealed a number of issues regarding the relevance of the curriculum of public university education to different stakeholders.

Stakeholder perception of curriculum relevance in public universities in Uganda

Kasozi (2003:125) explains:

The relevance of education to any given society should, and must, be one of the major indicators of quality education. The aim of any useful education is to integrate the student into his society and enable him to contribute to its development. ...university education must be relevant to the life of the masses.

Kasozi’s argument underpins some the qualities of a useful education, namely relevance and the socialisation and developmental nature of education. However, development is possible if students are able to gain access to a relevant curriculum that facilitates the acquisition of the necessary knowledge, learning and skills together with opportunities for putting these education capabilities into practice.

On the five-point Likert scale in the questionnaire, the new graduates were asked to indicate their opinion about the relevance of the university curriculum content. Their responses to the statement “the university curriculum was appropriate for my learning needs” (question 304, Appendix I) are summarised in Table 6.4 below.

Table 6.4: New graduates’ perception of the curriculum content as relevant

Questionnaire measure	Number of respondents	Percentage
Strongly agree	18	10.8
Agree	70	42.2
Undecided	7	4.2
Disagree	35	21.1
Strongly disagree	36	21.7
Total	166	100

Table 6.4 reveals that 53.0% (42.2% agree and 10.8% strongly agree) of the new graduate respondents considered the curriculum to be relevant to their individual learning needs. This is an indicator of the perceived relevance of the curriculum by the students. However, up to 42.8% either disagreed or strongly disagreed that the curriculum was relevant. By implication, a small majority considered the university curriculum relevant.

Similarly, the lecturers are confident that universities have a relevant curriculum which meets the needs of their key stakeholders, such as the students and employers. The curricula of the public universities in Uganda are actually among the best-designed components of the public university education processes. The curriculum is revised about once in three to six years and the content appears relevant to the socioeconomic development needs of Uganda. As one respondent observed:

I think the curriculum was quite relevant, because what I was taught is what I am experiencing in the field. I was taught a number of things in the curriculum, things which are related to my course, even things which can make me get knowledge whether in class or out of class. So according to the curriculum used at that time when I was at Makerere University, I think it was very good (New Graduate, Interview NGME4).

This observation reveals a positive perception of the curriculum as relevant. Indeed, the students joining public universities in Uganda from secondary schools interface with a university curriculum of specialised courses. Such courses have the potential to make a contribution to knowledge and skills development. Therefore, maybe the lecturers and some of the students find the curriculum relevant because of those specialised programmes.

Participation of stakeholders in curriculum relevance enhancement

To keep the curriculum relevant, public universities in Uganda follow the guidelines from the NCHE that present, among others things, the minimum standards for the curricula of higher education institutions in Uganda. The universities are expected to benchmark with several employers regarding what the employers require, and then the universities integrate the employers' requirements into the curriculum (NCHE 2011:19). In the public universities in Uganda, the consultative engagements with employers are low in departments such as that of Management Science at Mbarara University and clearly absent in most other departments, especially at Makerere University. In effect, the reviews widely miss out on the input of external stakeholders (such as public officials), consequently losing out on capturing field experience. Employers consider this exclusion improper and irregular. As one government executive observed:

Take a situation, if I wanted to revise a curriculum, what I would do is to take a situational analysis. If I have produced teachers, I go to schools and talk to the head-teachers or directors or owners of private schools. I leave that, I go to students and so on. ... So you would know where to change and what to add. So those are things that I would really want to see [happening in our public universities (Public Official, Interview G3)]

The lack of involvement of employers may, in some cases, lead to superficial programmes being offered at public universities in Uganda. As some senior public officials explained, some course nomenclatures at public universities in Uganda do not reflect the subject matter content or courses: the courses are simply delinked from the labour market requirements. In some cases, courses are even fragmented in the sense that students are taught a little bit of 'everything'. This fragmentation of curriculum content results in the development of insufficient levels of higher education capabilities as students end up being not properly grounded in their disciplines.

However, the respondents indicated that internally, within the universities, most departments use the participatory approach to curriculum content design to increase curriculum relevance. During major reviews of degree programmes, departments or schools agree on the new designs of the curriculum. As a respondent revealed:

When we are designing the curriculum and also when we are making it, it is not done by an individual like me, but in reviews it is more of a faculty kind of exercise where every lecturer is involved and you are guided on what to include in the curriculum and what not to include in the curriculum (Lecturer 03 in Development Studies, Focus Group, DSFB1)

These participatory review processes, inter alia, enhance the relevance of the curriculum to the learners. The curriculum reviews also consider the capacity of the teaching staff to handle certain courses. Departments review how they teach, what they teach, the resources available for teaching and, in some cases, the purpose of teaching what they teach. In addition, the reviews prepare the ground for the external examinations to be sat in the foreseeable future.

Loopholes in curriculum relevance

In spite of the value of joint consultations, many individual lecturers clandestinely make adjustments to the courses they teach. The lecturers then go ahead and distribute the individually adjusted course outlines to students, thereby creating a loophole for sub-standard material to be taught.

Loopholes are also evident in the curriculum with regard to its relevance to higher education capabilities expansion. Whereas education processes at university level are meant to address the domains of what Hoffmann (2006:3) calls learning to know, learning to be, learning to live together, and learning to do. Apparently, these four domains embrace all the higher education capabilities. However, the public university education processes in Uganda are not fully delivering on those four domains. To this end, higher education capabilities of practical reason, sociality and participation, learning dispositions, and science and technology are insufficiently addressed in the public university education curriculum. For example, one respondent indicated:

I think one of the limitations in the curriculum is the social networking skills; things such as letter writing, writing good applications and basic social skills have not been incorporated in the curriculum. We have had situations where the students who have done well here, some of them are having difficulties in adjusting at the workplace. I am not sure if this is the responsibility of the university but I also think that, it (the university) would help this student better (Lecturer in Social Work, Interview LSWM1).

Another respondent said:

I think it (curriculum) was rich; but not so much because, my aim of going to campus I thought from there they would teach me what I would do in my office. But, I found it different; I am doing something different. So, what I studied did not help me so much..." (New Graduate, Interview MDS6).

These observations indicate some deficiencies in education capability development processes emanating from the university education curriculum. In fact, the knowledge and skills gap not addressed by the curriculum, as revealed by these respondents, happen to be essential skills at the workplace. By the way, a graduate without the essential skills has problems in adjusting to their place of work.

The knowledge and skills gaps arising from irrelevant or deficient curriculum content may cause graduates to suffer other problems such as unemployment and public ridicule. As one public official said:

What I see after people have left university, many of them cannot find a job. So what are the reasons for that? One of them could be that the curriculum, the university curriculum does not relate closely with the labour market. We would assume that the education system would be filling the labour market requirements. But, maybe because we do not have enough labour market information, and they [universities] simply teach [anything](Public Official, Interview G2)

Another respondent argued:

I would want to think that they (lecturers) are only doing their noble duty of teaching because the education system was not designed by them. ...So for them they are doing their professional knowledge; whether they believe in what they are teaching or not, that is a different story(Public Official, Interview P5).

These views from the senior public sector officials reflect the perception of the employers regarding curriculum relevance to education capability development vis-à-vis the labour market requirements. The views, nonetheless, contradict the general thinking of university lecturers, who believe that the curriculum is largely relevant. The differences may be partly a result of mismatched interests or divergent conceptions of teaching and learning processes, including teaching intentions. For example, one lecturer argued:

We as a university our role is limited to churning out graduates who can perform particular tasks and it is up to the private or public sector to absorb them. And if they cannot do that, I think that is the limit to which the university actually can go (Lecturer in Social Work, Interview LSWM1).

This argument may be a revelation of a delinked relationship between public university education processes and the labour market requirements. This *laissez-faire* kind of approach by lecturers to public university education has inadvertently almost ruined a big part of a generation of young people graduating from 2001 to 2010. There is some evidence that the quality of graduates from public universities in Uganda in the last 10 years is sub-standard and that their education capabilities, therefore, do not match the employers' expectations. For example, the World Bank (2004: 29) and Muwonge (2009: 62) reveal that new graduates in Uganda lack skills which they should have acquired from

the universities. In fact, some employers describe the new graduates as incompetent and slow at coping with workplace demands.

The continued interest of public universities in Uganda in teaching courses that are not very relevant to the labour market is partly attributed to the monetisation of university education and partly to other factors. For example, the more sessions a lecturer teaches the bigger the income he receives. It is also possible that, some teaching courses have been created in degree programmes not only for broadening students' knowledge but also for income-generation. Some public officials know about this 'anomaly' in the curriculum and are seemingly slowly developing a negative attitude towards graduates from public universities in Uganda. In fact, one respondent alleged "It [curriculum] is all about money. Money, money, money..." (Public Official, Interview P2).

Another respondent wondered:

Could it be true that the people who are revising the curriculum are business-oriented only and are only looking at making money for those institutions; and are not minding about what is going to happen to their products? Maybe that could also be an issue! (Public Official, Interview P5)

These observations reveal negative perceptions about public university education in Uganda. Similarly, Mamdani (2007: 109) abhors the academic programmes at Makerere University that the University Senate haphazardly passes in total disregard of the capacity, competence or even formal mandate of a particular school to teach such a programme. The resultant effect is the release of graduates with very limited higher education capabilities. To this end, the linkage between the university education curriculum and the labour market gets distorted.

Curriculum relevance of public university education: an assessment

In spite of the limitations of the curriculum regarding relevance, the majority of the lecturers show satisfaction with the relevance of the curriculum they are teaching because its coverage is, in their view, rich and addresses the concerns of students. In addition, the students consider the curriculum as relevant but poorly taught. As for public

officials, the curriculum is not very relevant, given the knowledge and skill deficiencies they find in the new graduates.

Of course, to a certain extent, the curricula of public universities in Uganda empower students in terms of imparting analytical skills, general exposure to some new ideas, understanding individual rights, and also increasing their freedom to engage in politics and any other issues related to society. This empowerment enables university graduates to be potential change agents for development. Moreover, the empowerment is in line with what Kasozi (2003: 55) reports that society expects universities to lead the way in generating and spreading correct and relevant knowledge. This knowledge is normally spread through the university students, graduates, and lecturers who engage in social development affairs. Nevertheless, the quality of higher education capabilities acquired from the public university education processes in Uganda is debatable, as revealed in the current chapter.

The doubt about the quality of higher education capabilities could also be a result of curriculum design. The design of the curriculum in departments other than those of education is marred by a number of weaknesses related to clarifying the statements of learning outcomes, learner objectives and delivery methods in their course outlines. Besides, the formulation of the curriculum in public universities in Uganda does not fully meet the four principles for consideration advocated by Barnett (2009: 438), namely (a) be reasonably *demanding* to enable 'resilience' to form; (b) offer contrasting insights and perspectives to allow 'openness' to develop; (c) demand presence and commitment on the part of the student to enforce 'self-discipline'; and (d) contain enough space and spaces to facilitate the unfolding of 'authenticity' and 'integrity'. These principles, especially number (c), have apparently not been fulfilled in public university education processes in Uganda. Students' commitment to studies is generally average and in some cases low. Meanwhile, the lecturers seem to be helpless in enforcing self-discipline among students. The end result of such weaknesses is a loss of the opportunity for students to expand their higher education capabilities.

The foregoing analysis in sub-sections 6.4 and 6.5 has attempted to explain both qualitatively and quantitatively the contribution of the curriculum content sub-variable of public university education in Uganda to higher education capabilities expansion. This contribution can further be quantitatively analysed. Therefore, under sub-section 6.6, the researcher presents a quantitative analysis of the curriculum sub-variable and higher education capabilities expansion. Quantitative analysis, in this context, enables us to determine the correlations between curriculum content and higher education capabilities expansion among students.

6.6 Correlation Analysis of Curriculum Content and Higher Education Capabilities Expansion

The researcher performed a correlation analysis. Correlation analysis was done to assess the contribution of curriculum content to higher education capabilities expansion. According to Kumar (1996:9), correlation analysis aims at discovering the association between two or more aspects of a situation. In this section, the researcher analysed whether there was a relationship between curriculum content and higher education capabilities expansion among students. This analysis was in line with the first objective of the current study that sought to examine the contribution which the content of university education curriculum in Uganda makes to higher education capabilities expansion among students (see also 1.4 & 6.1).

A correlation analysis generated inferential statistics that revealed how curriculum content relates to higher education capabilities expansion. With the use of the Statistical Package for Sciences (SPSS) the responses from the questionnaire (see Appendix G) on the sub-variable “curriculum content” were quantitatively analysed. The results are shown in Table 6.5.

Table 6.5 Correlation between curriculum content and higher education capabilities expansion

		Curriculum content	Capabilities expansion
Curriculum content	Pearson's correlation	1	.490(**)
	Sig. (2-tailed)	.	.000
	N	166	166
Capabilities expansion	Pearson's correlation	.490(**)	1
	Sig. (2-tailed)	.000	.
	N	166	166

*** Correlation is significant at the 0.01 level (2-tailed)*

As Table 6.5 (above) indicates, the correlation between curriculum content and education capabilities expansion is positive and significant ($r = 0.490^{**}$ $p < 0.01$). Correlation is at significant levels of 0.000. These statistics imply that curriculum content is positively related to the higher education capabilities expansion among students in public universities in Uganda. The contribution of that correlation is strong because correlation (r) is at 0.490. In other words, changes in curriculum content are likely to have a corresponding effect on higher education capabilities expansion among students, and the reverse is also true. Moreover, when correlation between two factors has such significance, the two factors are indeed interdependent and merit being in one study.

6.7 Regression Analysis of Curriculum Content and Higher Education Capabilities Expansion

A simple regression analysis was also done in order to establish whether curriculum content predicts higher education capabilities or not. The analysis was further aimed at generating a coefficient of determination that would explain the variation in higher education capabilities expansion explained by curriculum content. The findings are indicated in Table 6.6.

Table 6.6: Regression analysis for curriculum content and higher education capabilities expansion

Model	Unstandardised coefficients		Standardised coefficients	t	Sig.
	B	Std. error	Beta		
1 (Constant)	2.448	.210		11.637	.000
Curriculum content	.404	.056	.490	7.199	.000
Model	R	R square	Adjusted R square	Std. error of the estimate	
1	.490(a)	.240	.235	.38766	

a Predictors: (Constant), curriculum content; Dependent Variable: Education capabilities expansion

Table 6.6 (above) shows the effect of curriculum content on a dependent variable (higher education capabilities expansion) measured by a standardised regression coefficient (beta). Beta is used to determine whether the independent sub-variable (curriculum content) has a controlling effect on higher education capabilities expansion among students. The results show that, statistically, curriculum content standardised regression coefficient (beta) was 0.490. The coefficient of determination (R^2 or 0.490^2) indicated 0.240 or 24%, implying that curriculum content as an independent sub-variable dimension of public university education accounts for 24% of the variations in higher education capabilities expansion (dependent variable) in public university students in Uganda. Thus this finding implies that curriculum content is positively related to students' education capabilities expansion in public universities in Uganda. However, other variables could account for the rest of the variance in higher education capabilities expansion among university students in Uganda. Indeed, the quality of the university graduate is not only affected by the curriculum content but also by other factors, such as the teaching and learning processes, as Chapters Seven and Eight in this thesis reveal.

6.8. Summary

In this chapter, the role of the curriculum content (a sub-variable of university education) in higher education capabilities expansion has been explored. The findings indicate that the mix between theory and practice indicators under curriculum content is unbalanced for the larger part of the curriculum: there is more theory than practical teaching. This imbalance seems to limit the potential for the curriculum content to develop higher education capabilities among students. However, professional relevance of the curriculum to the development of higher education capabilities among students is generally high in almost all departments in public universities in Uganda. The lecturers are generally happy with the curriculum content although senior public officials believe that the relevance is quite limited owing to inadequate practical skills that they notice in the new graduates. In the following chapter (Chapter 7) the researcher analyses the teaching processes as a sub-variable of public university education in relation to higher education capabilities expansion. Chapter Seven, therefore, supplements the findings in Chapter Six.

Chapter Seven

Presentation, Interpretation and Discussion of Results: University Teaching Processes

7.1 Introduction

Chapter Six analysed the first theme (and objective) relating to curriculum content as a sub-variable of university education. It was concluded in Chapter Six that although the curriculum has relatively relevant content, the mix between theory and practice is not well-balanced. However, in general, the university curriculum is fine and acceptable to the students and lecturers although it is doubted by senior public officials. In the current chapter, the focus is on the second objective of the study, namely to analyse the extent to which the university teaching processes contribute to higher education capabilities expansion among students in Uganda (see also 1.4). The chapter analyses the findings of this study, regarding the influence of teaching processes on the advancement of education capabilities in students. The higher education capabilities covered in the study are: learning dispositions; sociality and participation; practical reason; and science and technology (see also 2.4 and 5.10). Therefore, the examination of the teaching processes is a partial analysis of university education and supplements the analyses in Chapters Six and Eight where the findings covering the remaining two objectives of the study are presented successively (see also Figure 4.1). Just like for Chapter Six, the sources of data for this chapter are the same as those already described in 6.1 and 6.2.

7.2 Teaching Processes and Higher Education Capabilities Expansion: An Overview

It was conceptualised by the researcher that, at university level, higher education capabilities expansion, among other things, depends on the teaching processes at university. Hence, improving teaching processes enhances the expansion of higher education capabilities among students (see also 2.4.2 & 4.2.1). By implication, the way people are taught affects how much they know, retain and what they subsequently

practise. Teaching makes sense when it leads to learning; hence the teaching processes are important in the learning processes and have an indirect impact on the learning outcomes. In fact, one education philosopher argues:

Teaching may be compared to selling commodities. No one can sell unless someone buys. We should ridicule a merchant who said that he had sold a great many goods although no one had bought any. But perhaps there are teachers who think they have done a good day's teaching irrespective of what people have learned. There is the same exact equation between teaching that there is between selling and buying (Dewey 1933: 35).

By implication, if teaching does not positively impact on the learners' behaviour then the teaching has not been of significant importance. That is why, in the university context, lecturers are expected to teach in order to pass on knowledge and skills to their students. Indeed, some lecturers take an interest in ensuring that students learn and change their attitudes for the better. At university level, the process of teaching is, therefore, instrumental in the development of higher education capabilities in a student.

7.3 Teaching Strategies in Public University Education in Uganda

As already explained in Chapter Four, a teaching strategy is a "plan for someone else's learning" and it includes the presentations which the teacher might make, the exercises the teacher has designed for students, the materials which will be supplied or recommended for students to use, and the ways in which the learning outcomes will be evaluated (Toohey 1999: 152). In the public universities in Uganda, different lecturers use different teaching strategies in the teaching processes. The strategy of most of the lecturers is to ensure that the students learn the subject matter at hand. Such lecturers endeavour to think through their lessons and pay attention to issues such as students' learning needs and, therefore, learning outcomes. For example, one lecturer reported:

One thing I have always wanted even when I am supervising students on a research project is to be able to link, even in class I want them to link, ideas from one piece and from one course to another. They should be carrying ideas, these concepts, and then getting them and see how they apply in different courses all the time (Lecturer 07 in Social Work in a Focus Group, SWFM1).

Another lecturer argued:

Of course they are various skills of teaching, methods of assessment, critical thinking skills... Then issues to do with negotiations; life skills really ...in essence the pedagogical skills, that is what I would want to develop in general, so that when they go out they have a hands-on experience. Skills of confidence, because a number of them fear to stand in front of the class and teach(Lecturer in Education, Interview FCSM1).

Such concerns as facilitating students to internalise the subject matter, if well addressed in the teaching processes, help students gain knowledge and skills. In some cases in public universities in Uganda, the lecturers' strategies point to an interest in their students' learning. In such situations, lecturers' teaching strategy is to ensure that at the time of graduating from university, students have internalised the knowledge, skills and attitudes necessary for practising their professions.

Participatory strategies

Respondents reported that at both Mbarara University and Makerere University the lecturers, to a certain extent, involve students in participatory teaching processes. The lecturers use teaching approaches that require students to do some activities during the learning processes. As one respondent revealed:

I want the students to become independent thinkers. I do not want to create a scenario where when students leave here, they own my knowledge [only]; they must own their knowledge [too]. ... I want them to generate their knowledge, and when they generate their knowledge, I am completely sure they will use that knowledge or even build on it to explore more when they reach the field (Lecturer in Science Education, Interview LESB2).

Such approaches to teaching facilitate creative thinking and are helpful to students. However, some students are reluctant to participate in the teaching activities planned by the lecturers. One respondent reported:

We still try to involve students although the challenge is that there are some students who do not want to actually participate. For example, when you give a group coursework, some students do not want to appear. They only want to append their names to the list of group members and in that case they miss out on the objective of the assignment, namely to involve them in action (Lecturer in Social Work, Interview LSWM1).

From this report, it appears that the teaching strategies of lecturers are being frustrated by some students who want to have it easy. Such students are likely to miss out on some knowledge and skills development.

However, some students enjoy the participatory approaches to teaching. The participants refer to the sessions as beneficial. One respondent remarked:

We had a lecturer who used to teach us industrial psychology. I would say I still commend that lady. She would come, discuss the topic, gives us examples... Then she tells us after every lecture we would make our own notes. After every lecture he would give us questions; we go and discuss in our own groups. The next lecture we would make presentations about what we studied in the previous lecture. ... We discuss that, we make relevant examples, we give our practical interpretation of the chapter and how it applies to the outside world. ... I can assure you much of what I studied with that lady I can still recall it: it is still exciting me up to now (New Graduate, Interview MSW8).

It appears that involving students in learning through tasks and discussions is beneficial to students. In general, although participatory teaching strategies exist in public universities in Uganda, they are rarely used. Most of the teaching is non-participatory. Lecturers prefer non-participatory methods such as lectures because they are easier to prepare and deliver. This imbalance between participatory and non-participatory strategies curtails the achievement of the teaching outcomes, such as higher education capabilities.

Teaching intentions

In the public universities in Uganda some teaching strategies are aimed at broadening students' learning. Strategies for broadening students' knowledge and skills are helpful to students' future life. But such strategies are rarely applied in the public university teaching processes in Uganda. For example, there is a unique course at Mbarara University called 'Service Course'. It is a course that is offered by the Department of Development Studies to all undergraduate students across all first year programmes at the university. The course is compulsory for all first year undergraduate students such as those in Medicine, Computer Science, Management Science, Nursing, and Education who are not even part of the Development Studies programme. The course is eclectic

and, therefore, appeals to students from different programmes. The provision of the service course is hinged on the premise that development is not by only one approach but several approaches and is multidisciplinary. Indeed, the lecturers at Mbarara University believe that because students come from different backgrounds and enrol in different disciplines at the university, it is possible to foster coherent approaches to development through offering the service course. The strategy of teaching a service course is in line with what Watson and Ashton (1995: 86) explain that students from different learning backgrounds need a curriculum that has a wide range of understanding of the world so as to internalise a wide range of issues. Therefore a cross-cutting course blends several disciplines and benefits a broad spectrum of students.

Similar teaching intentions are evidenced in the Department of Education at Mbarara University. As a lecturer reported, "We are aiming at producing someone who is a holistic one, with the approach of dealing with learners and the society. Not someone who is isolated" (Lecturer 03 in Education, Focus Group, EDFB2). These views reflect the positive contribution of teaching strategies to higher education capabilities expansion among students. The teaching strategies are in line with what Biggs (1996: 361) advises that for teaching to be effective, teachers should be clear about what they want students to learn and should indicate what students have to do in order to demonstrate that they have learned at the appropriate level. Biggs further proposes that teachers should be more student-centred in their pedagogical activities and intentions. However, quality standards constrained by big student numbers and resource scarcity in public universities in Uganda limit such positive intentions.

Furthermore, it appears that, in their teaching, some lecturers in public universities in Uganda intend to prepare students for international work environments. This strategy involves offering programmes and courses that have a blend of both local and international outlooks to specific disciplines in terms of content and pedagogical orientation. For example, public universities in Uganda endeavour to procure modern textbooks as teaching resources similar to those used by other universities internationally. This practice is instrumental in the universities' attempts to uplift the

students of Uganda to international standards. However, there are some stakeholders, including students, who overemphasise the use of local teaching materials, which inadvertently limit the graduates' exposure and scope in acquiring the necessary higher education capabilities. As one respondent remarked:

I would say there are some of our students who still think in terms of the local situation: they are parochial. They ask why we should teach those things that do not work in Uganda; but we continuously remind them that we are training them to be international persons ...and we tell them, 'for us we know that the education we give you cuts across borders'(Lecturer 03 in Education, Focus Group, EDFB2).

A teaching strategy that goes beyond imparting local knowledge is likely to be beneficial to the students. Such a strategy enhances students' innovativeness and creativity, thereby enlarging their higher education capabilities. For example, some public universities in Uganda are also teaching the students to be good citizens who will bring about development after their university education. In some cases, the teaching staff, for instance at Mbarara University, take an interest in nurturing values in students. Specifically, in the Department of Education, lecturers appear to groom students to become nationalistic and to internalise professional ethics and values such as cooperation, honesty and integrity because of the belief that good teachers are those who have values. Indeed, such values enhance not only an individual's education capabilities but also general capabilities such as independence of mind and opportunities for employment.

The researcher sought the views of new graduates on what they perceived to be the teaching intentions or strategies of their lecturers. The responses were generally negative. For example, in the study questionnaire, one of the statements on teaching strategies which required new graduates (respondents) to express their opinion was "my lecturers took interest to ensure I acquire relevant skills" (see Appendix I, question 402). The responses to this statement were tabulated as Table 7.1 (below).

Table 7.1: New graduates' opinion on whether lecturers were interested in imparting relevant skills in students

Questionnaire measure	Researcher's interpretation	Number of respondents	Percentage
Strongly agree	Very interested	16	9.6
Agree	Interested	14	8.4
Undecided	Undecided	16	9.6
Disagree	Disinterested	76	45.9
Strongly disagree	Very disinterested	44	26.5
Total		166	100

As Table 7.1 reveals, up to 72.4% (45.9% disagree and 26.5% agree) of the new graduates believed that their lecturers were disinterested in ensuring that students acquired the relevant skills. Probably, the teaching intentions or strategies were focused more on personal interests than on helping students. In such circumstances, the expansion of higher education capabilities was likely to be negatively affected.

Teaching strategies of public university education lecturers: an assessment

Lecturers in public universities in Uganda reported that they were imparting knowledge, skills and attitudes that are useful to the nation; but some public officials doubted this claim. In the opinion of some public officials, the university students are insufficiently equipped to meet the labour market requirements. In fact, when it comes to rating the competence of new graduates (2001-2010), some public officials doubt the level of graduate proficiency. For example, as one respondent reported:

I think the content is [okay and constitutes] what they should be learning, but when you interact with a number of them (new graduates), one gets a feeling that the teaching has a problem with the depth. I do not know how teaching is done these days at university. It is like these [students] are being scratched at the top. It is like the professors no longer go into reasonable depth to expose these students to some of these phenomena or issues (Public Official, Interview P3).

The backdrop to this scenario is the introduction by public universities in Uganda of very many new courses in the last 10 years. The courses are ostensibly meant to meet the labour market requirements, although it is possible that their real aim is to generate money for the universities. In fact, Mamdani (2007: 108-110) mentions some Makerere

University faculties that started courses mainly for income-generation in the late 1990s, and thereafter, when such faculties did not have the professional competence to teach the courses they had started.

In fact, some public officials have a low opinion of some of these courses. For example, a senior public official observed: “Our education system is supply driven. You just wake up today and say, ‘I think if we started this course people would come’. You brand it entrepreneurship – now it is the talk of the day. But what skills are they (lecturers) imparting?” (Public Official, Interview G3).

Another senior public official, while commenting on teaching strategy, observed:

If I can read the mind of a typical lecturer ... it is about survival. We know the number of strikes we have had at Makerere [University Kampala]; they are saying that, ‘you are paying us little money’. Even when government tried to increase [their pay] they are still dissatisfied. So in my opinion they are looking at it [course creation] as an opportunity for them to enhance their pay or income. (Public Official, Interview P5)

These comments by some of the senior public officials, who count among the actors in the labour market, mirror the public sector perception of the university education strategy. Apparently, the public service officials have a negative opinion of the many courses at the public universities in Uganda in terms of usefulness and relevance. This perception is, however, in contradiction to what the lecturers portray as useful and market-driven courses. These differences in opinion among stakeholders (lecturers versus public officials) on the issue of teaching strategies are a revelation of the tenuous connection between the university and the world of work. And, as Boyatzis (1995) observes, lecturers’ goals affect students’ learning outcomes because teachers tend to conduct classes in accordance with their goals, and this affects how much and how well the students can learn. To this end, the divergent stakeholders’ perception about what should be taught, how it should be taught and what should be excluded affects the teaching outcomes from public university education processes. Specifically, the university student in a public university in Uganda is (negatively) affected in terms of developing the requisite higher education capabilities.

Some employers believe that the responsibility of the lecturers in public universities in Uganda towards the students is also not well developed. Such employers, as already explained, argue that lecturers are mainly interested in earning an income or developing their personal academic profiles. Hence, students have to find a way out when they run into learning difficulties or have psycho-social problems. In fact, there are limited counselling and guidance opportunities and resources at the public universities in Uganda that can help the students improve on their learning dispositions, practical reason, sociality and participation. As one respondent reported:

When you look at our public universities, they are characterised by strikes. So how do you expect such a situation to tame a student? Every time you hear that Makerere's (Makerere University) lecturers are on strike. And when the lecturers go on strike the students are not in class and they also do the same. And, you find the whole environment is in confusion; and you get someone disgusted, 'ah if only I can finish this [degree] and I go away'. There is no reading satisfaction: people read because they want to finish (Public Official, Interview G1).

This observation suggests a low opinion on the part of some public officials regarding the teaching processes at public universities in Uganda. However, the observation also reveals the reality at public universities in Uganda where limited attention is, indeed, paid to students' psycho-social welfare. This half-hearted attention to teaching negatively affects the higher education capabilities expansion processes. Meanwhile, the student is the primary victim of a disorganised system. However, the education capabilities expansion processes are not only influenced by the teaching strategies (plans), but also the teaching approaches (methods) which the lecturers use.

7.4 Teaching Approaches in the Public University Education System in Uganda

Lecturers at public universities in Uganda use a limited number of teaching approaches. The choice of an approach or a method is influenced by teaching resources, individual interest in teaching, course design, and pedagogical competences. However, at the two public universities in Uganda studied, 24 (65%) of the 37 course outlines perused did not indicate the methods of instruction. Only 12 (32%) course outlines showed the teaching methods that were to be used. Of the 12 (32%), about a half (17%) revealed at least one

alternative teaching method to the lecture approach. Such alternative methods included tutorials and discussions but were presented on the course outlines with a tentative promise: for example, to be used subject to availability of teaching logistics. In practice, as further revealed by interview and focus group results, the lecture method of teaching is the dominant form of teaching.

Lecture approach

Like in most universities the world over, teaching in public universities in Uganda is largely through the lecture approach. Lecturers prepare lessons which they deliver to classes with minimal student participation. The lecturers are the experts and the students are basically passive consumers of knowledge (also see 4.2.1). The lecturers give some notes, usually dictated during lectures, to students. This approach seems to be the norm and is widely used by the lecturers. For example, a respondent confirmed:

...we were being taught by lecturers. They used the lecture method,...I would say that they used to give us more than 25% knowledge of what they were supposed to; because they would give us comprehensive notes and we would go to our small library and we would just add on something small so that we have something to move on with (Management Science New Graduate, Interview MSNG1).

One lecturer clarified: "We give a lot [of notes] because the facilities are not as, you know, diverse as they are in those developed countries" (Lecturer in Education, Focus Group, EDFB2). Another lecturer explained: "Undergraduate students are normally very comfortable with dictating notes, like a typical teaching of a technocrat" (Lecturer in Development Studies in a Focus Group, DSFB1).

Yet another lecturer revealed:

Since I joined the department, first as a student, then now as lecturer, the most popular method has been the one of dictating notes in three hours of lecture per week and giving out handouts which students hate and do not like at all [*laughter from entire focus group members*] and students do not read... And, they do not like lecturers who give out handouts most of the time... When I am interacting with students they tell me: 'That woman is good but she gives a handout... Why cannot she dictate for us notes?' (Lecturer 03 in Social Work, Focus Group, SWFM1)

Some lecturers argue that the lecture method is the most appropriate because of learning resources such as textbooks and seminar rooms are inadequate. But due to limited student participation, this method limits the expansion of higher education capabilities.

In fact, in some classes, even when lecturers want to vary the teaching methods, student-related factors, such as big numbers and students' reluctance to participate in learning, negatively influence the lecturers' plans on how to approach the teaching processes. Quite often the lecturers end up concentrating on the lecture method. A respondent argued:

...being a bachelor's degree, I appreciate the fact that they taught us more. Because it was quite challenging as you would go to the university and they would tell you, 'You are going to do Political Science' and you would wonder; 'what is Political Science?' You have no idea. To me it helped me a lot because they would give you much more than maybe than what was expected, at times (New Graduate, Interview MPS5)

It appears that due to such challenges as introducing totally new knowledge, the participatory methods are not widely practised in the teaching processes at public universities in Uganda. And, as Hativa (2000: 71) indicates, the lecture approach tends to leave students with less knowledge and skills than what the lecturers are capable of sharing.

While the lecture method can be enhanced with other complementary learning resources such as textbooks, handouts, assignments and tests, in some instances it is not the case at public universities in Uganda. The lecture method, in spite of its dominance, is poorly implemented. From document reviews, the researcher established that an earlier study on university education in Uganda had revealed:

In most Ugandan universities, lecturers appeal to memory rather than the critical faculties of students. There is an uncomfortable level of memorisation and mere absorption of what is taught which must be reversed. I have made private investigations of the many universities I have visited on this issue by asking students how they are taught. What I have found is disturbing. A lecturer acts like a colossus while the students sit at his feet and swallow what he dictates. In the majority of cases, lecturers give notes and require students to write down everything – including periods and commas (Kasozi 2003: 124).

Kasozi's writings are concerned with the period that the current study focuses on (2001-2010). The message in the quoted text suggests that the lecture method has lowered the quality of teaching in public universities in Uganda. Inevitably, these weaknesses of the lecture method in the teaching processes negatively affect the education capabilities expansion among students.

Group discussions approach

Some lecturers are aware and have demonstrated that the lecture approach is not the best teaching method but they only use it out of convenience. They either directly dictate class notes in the lecture rooms or issue them to students to make copies. In small classes (of less than 100 students), some lecturers facilitate students' involvement and participation in sessions, including deciding on some topics for discussion. For example, in a course paper called "Children, Youth and Social Work" in the Department of Social Work and Social Administration at Makerere University, students participate by researching on a given topic and then making class presentations. The presenters are subjected to questions from the class members, who explore the relevance and applicability of whatever is being presented. The discussion teaching approach is popular in that particular class. However, this approach cannot be easily replicated in classes of 500 or more students because of the logistical difficulties in organising groups, selecting topics for discussion, finding time and controlling the quality of the presentations.

Handouts and notes

In some cases, lecturers have developed a system of providing relevant, but scarce, learning materials, such as book chapters or journal articles, to students. The provision is done through placing such materials at the available private photocopier centres within the universities. However, even when the lecturers improvise and make detailed texts available to students, as already indicated elsewhere in this chapter, the handouts are detested. The student perception of a handout is that it is a burden. Most students do not like the journal articles and book chapter extracts because such handouts generate more work for them.

In addition, sometimes the students perceive the distribution of extract handouts by lecturers as a ploy to cover up the lecturer's shortcomings in teaching. For example, a respondent revealed:

Incidentally, this [distribution of the chapter extracts or journal articles] was not a streamlined system of 'have this material and read it like this'. But it was sort of panic. When time runs out, someone does not have time to come and teach; he photocopies and 'throws' [at students] a handout. There is a gap there: something I can say serving a purpose that it is not intended to. It (handout) was a stopgap measure kind of (New Graduate, Interview MSW8).

This perception seems to have increased students' dislike of the handouts. Furthermore, the respondents argued that the handouts have financial implications since students pay for individual copies. At times, to minimise the financial costs, some creative students form a group or groups and pool financial resources for buying just a copy of the article for the entire group to use. The copy is rotated among group members to read.

Students at public universities in Uganda prefer notes which the lecturer has refined, simplified and usually shortened. As one respondent observed, students want lecturers to "interpret notes in class; give them a finished product; and their [students] duty is to cram it and reproduce it. They are not interested in widening the knowledge. Maybe they do not understand the essence of university education" (Lecturer 04 in Social Work in a Focus Group, SWFM1). Such summarised lecturer-dictated notes limit students in terms of how much knowledge and skills they acquire from a given session or subject. In the process, some students remain at a mediocre level of knowledge and skills acquisition.

In some cases lecturers post the notes and even coursework questions on the university website for students to download and use. Almost all the lecturers use the internet as a source of teaching materials. However, internet use by lecturers as a depository for class notes, though evident, is still on a small scale and fewer than 20% of lecturers use the internet for that purpose. For example, Makerere University has an internet facility, internet laboratories, and an e-learning forum which many non-ICT-related faculties are

not yet fully utilising. This low internet use implies low levels of development of science and technology capability both for the lecturers and the students. In addition, the hatred for detailed handouts seems to limit the students' opportunities to enhance their learning dispositions and practical reason capabilities.

Field work placement approach

Fieldwork is another teaching approach used in public university education in Uganda. Fieldwork involves students getting out of class and trying out the knowledge and skills in a real work environment. Fieldwork is an extension of what students do in class. It gives students an opportunity to apply the theory part learnt in class to a real-life situation. Indeed, many university stakeholders agree that fieldwork is a real-life opportunity for students to learn. For example, one respondent attested: "My personal testimony is that ... I learnt more in fieldwork than I ever did in the classroom" (Lecturer in Social Work in a FocusGroup, SWFM1). However, less than a quarter of the courses at public universities in Uganda have fieldwork practice as a part of the curriculum and a compulsory component.

Where fieldwork practice takes place, for example in the Department of Social Work and Social Administration at Makerere University, the Schools of Education at Makerere University, and the Department of Education at Mbarara University, students go out in the field and return with reports after a specified period. At the end of every academic year, fieldwork students are sent to the community to work with practical agencies. They are supposed to be guided while in the field but at times this is not the case. Actually, one participant reported:

I attended fieldwork [placement] three times. I was supervised twice. One of the times, I was never supervised. And remember, in our faculty for instance in social sciences and humanities, it is mainly social work that has mandatory fieldwork. But, it is no longer given a lot of attention: some students are never supervised; others find it very, very hard to get placement. In the past, I hear, they used to be helped by the department to get placement but that is not longer the case: students have to go out there and look for placement on their own. It is a challenge! ... Then, the reports; students write reports, at times they are never assessed (New Graduate, Interview MSW8).

There appear to be problems in the use of the fieldwork approach to teaching at public universities in Uganda. The reported limited lecturer attention to such a practical teaching method might be disadvantaging students in acquiring knowledge and skills.

Ideally, the aim of fieldwork is to enhance the students' skills further so that when they complete their undergraduate studies they are able to fit in the world of work better. Therefore, making fieldwork compulsory compels every student to internalise the practical realities of the profession. This approach is essential for skills acquisition and for improving the capacities of the individual students. Other departments studied, such as those of Sociology and Anthropology, Development Studies and Political Science and Public Administration at Makerere University do not have compulsory fieldwork because their courses are usually considered by the universities as non-professional courses. In addition, these departments have big student numbers that make it difficult to find sufficient placement outlets. Therefore, a certain category of graduates are denied one of the best learning experiences (fieldwork). Consequently, they miss out on enlarging certain education capabilities.

Project and practical work approaches

In relation to fieldwork, public universities in Uganda use the project work approach in teaching the students. Students are enabled to come up with topics for their projects and these are verified by the lecturers, who are subject specialists. Every student executes a project in the second or third year as part of learning the practice in a particular discipline. Project work helps students acquire knowledge and skills about the particular study area in which they are doing their projects. At the end, each student writes a report that reveals his level of involvement and concentration in that particular project. The project is graded and included on a student transcript. During one interview, a respondent reported:

These projects, we develop them very well by the way. ... When we get our postgraduate students here; and we get students from different areas including our own students, our own students excel: they are very good. We find that they are more or less revising what we gave them here as undergraduates. We always see this happening in the postgraduate classes where they [our alumni] are always very good (Lecturer 04 in Education, Focus Group, EDFB 2).

Project work is helpful if it is systematically and professionally managed. However, in public universities in Uganda managing projects has some problems relating to the big numbers of students that create a work overload for the project supervisors. In addition, lecturer concentration on and interest in project work appear to be low, though the situation is different at the Department of Education at Mbarara University. Therefore, in some cases students are not enabled to grasp the requisite knowledge and skills through engaging inproject work.

The other approach used in public university education processes, although on a small scale, is practical work. This involves doing a sample of real work, usually within or outside the university environment. For example, as in-house practical work, the Schools of Education in all public universities in Uganda use peer-teaching. By the time the student-teachers graduate from university they have participated in the peer-teaching exercise at least once. One respondent revealed: "I normally go in for a peer teaching, micro teaching session, even for a big class of 250. If I am on methods of teaching, I show them and I allow them to show to us and others to critique them" (Lecturer in Education, Interview FCSM1). Practical learning, for example, through peer teaching facilitates students to internalise the education capabilities of learning disposition, practical reason, and sociality and participation. In some cases, students have to be monitoredclosely and even given assignments relating to the practical learning.

However, lecturers at public universities in Uganda sometimes are not keen to follow up onpractical learning. Probably, they assume that the students are adults who can guide themselves in the learning processes or it the neglect is due to other reasons. For example, a respondent reported:

If I am studying social work, I should expect at least like 25% of my course to be practical. Can I be able to do counselling for instance? Can I be able to go out in a refugee settlement camp and see what takes place there and have a feel of what is there and have an interaction with people who have been there before me? Unfortunately that is not possible these days. It is all covered under the statement of no resources. But in my view it is not all about resources; I think we are also lacking the commitment... for example we had a student association for my

department. The association would organise outreaches. We went to a refugee settlement camp, ...we travelled many places. But, all these times we went, we did not have a single lecturer to be there for and say he is guiding us(New Graduate, Interview MSW8).

The scenario portrayed by this respondent is of limited attention to practical work or fieldwork by the lecturers. The students seem to be left without guidance in such an important learning process. It is possible that through this approach of 'self-teaching' limited knowledge and skills may be obtained.

Coursework and group work assignments

Coursework is one of the approaches that lecturers use at the public universities in Uganda. Coursework compels students to do private research, thereby making them learn more. Coursework is either individual or group coursework. In the teaching processes, lecturers at public universities in Uganda encourage students to form groups. These study groups are mainly constituted for discussions and at times handling group assignments. Students learn a lot through groups and interact with one another. But, even for individual coursework, students learn a lot as they do private research and documentation. For instance, a respondent reported:

As we were being taught, especially in the Department of Political Science, I loved it when they gave us individual coursework. It would give us the chance to go and read ahead; read widely unlike if they had given us group coursework. You know, with group coursework there is a tendency of maybe leaving others to do the work. But this time it (individual coursework) engaged me as a student and I got to know a lot more than they (lecturers) were giving me in class alone(New Graduate, Interview MPS5).

As for group work, a respondent remarked:

We were given group work and it made life quite easy. For example, in the education class I was in, we were divided in groups. So, we would be given assignment to go and carryout research then we would go to present. I was lucky to be among the people who presented and I think I loved the teaching because it helped me so much in my own learning and maybe standing before people(New Graduate, Interview NGME4).

Group-work and individual coursework methods make it necessary for students to do self-teaching and learning, and explore additional information that may not be given in the

classroom. As scholars attest, group learning enables students to present their ideas, develop problem-solving skills, learn from each other, develop team spirit, and help them clarify personal values (Stone 1997:7 and Armstrong 2003: 902). Indeed, lecturers continue to encourage students to form study groups and give students group assignments. However, this happens in isolated cases and the practice is not fully institutionalised in most departments in public universities in Uganda.

Nevertheless, just like in practical work and fieldwork, students at public universities in Uganda abuse the group-work and individual coursework teaching methods. Actually, some students are not committed to coursework and group work. Such students improvise shortcuts such as free-riding in group work or sub-contracting out coursework. Free-riding involves students absenting themselves from group work activities only to turn up and append their signatures to the work completed by colleagues just before it is handed in to the lecturer for assessment. Meanwhile sub-contracting out involves students paying somebody else (such as a classmate or a recent graduate, usually unemployed) to do coursework on their behalf. Quite often students successfully beat the university system on this matter of group work or coursework management. In such a case the concerned students lose out on the opportunity to enlarge their higher education capabilities.

Furthermore, some students, even when they do the coursework or group work themselves, do not give enough attention to the assignment thereby turning in sub-standard assignments. Such students take their studies for granted and pay limited attention to them. For example, as a respondent mentioned:

We give them assignments. ... This semester we gave an assignment, I think I gave an assignment in the third week of the semester ... I said 'you have three weeks within which to do this assignment'. I told them how to look for information... I explained everything on the basics of getting information..., [and] they have access to information. The outcome is that I waited for one and a half months. Actually, they would bring their work to my office, I would look at them and they would have one reference which I mentioned in class, which is in the library and then I would take it back and say: 'This is not enough'. Finally we collected the assignments ... [and] out of 700 students we teach, maybe about

70% of them did not do adequate research on the assignment(Lecturer 02 in Social Work in a Focus Group, SWFM1).

Apparently, this case and other related ones reflect both a carefree student population and a relaxed teaching system that tolerates students who evade academic responsibility in their university studies. The students are taking advantage of the university's tolerant system, albeit to their own learning disadvantage. Moreover, when there are loose controls in the management of academic assignments and other teaching approaches, the students fail to develop those higher education capabilities such as practical reason and learning dispositions.

In some cases, lecturers have abandoned coursework altogether in favour of written tests which are easier to administer and to assess. In most cases, tests last for 30 - 50 minutes and, therefore, demand limited written material from the student. Tests also produce little material for marking on the part of the lecturer. One respondent revealed:

I would say that it (the teaching process) has been [negatively] affected because if you see what used to happen, say in the past; there was emphasis on coursework. Students would be doing coursework; they would have done research, and then present in tutorials: that has died out. Today, the universities are encouraging tests, where a lecturer goes through some material, and then administers a test (Public Official, Interview P1).

This practice of emphasising tests as opposed to coursework is even known by some members of the public outside the universities. Tests, because of their limited rigour, are considered inferior to take-home coursework assignments. The use of tests only in assessing certain courses, especially in the social sciences, has had negative implications for education quality control (see also 7.5). It seems that, the extensive use of tests encourages rote-learning and limits knowledge and skills development among students.

Blended methods of teaching at public universities in Uganda

There are other creative ways of teaching that lecturers at public universities in Uganda use. Some lecturers use role-play and discussions and others use a blend of teaching methods (see also 4.2.1). In employing such creativity the concern of the lecturers is to enable students to learn as much as possible from their courses. One lecturer pointed out:

Another strategy we use to make our students learn is to bring them role models. And the students [learn], in their different courses. Others are doing mathematics, biology, chemistry, and physics which means it is not the same. So what they are encouraged to do is to get prominent scientists in their own field of specialisation; read about them, find the commonalities, find the differences, and then draw their (students') lines. In the long run you find they have picked the momentum to do what they feel they should do (Lecturer 01 in Education, Focus Group, EDFB2).

From another department, a respondent confirmed:

I think it is a mixture [of teaching methods]. I cannot say that I use one; it is a mixture of lecture, question and answer, and mixture of demonstration and mentoring. It is a blend, given the kind of students that we have, you cannot say 'I will only use a lecture method', because if you use only a lecture method, there are students who will not be able to follow you from the beginning up to the end (Lecturer 03 in Development Studies, Focus Group, DSFB1).

Similarly, a new graduate of Mbarara University observed:

The teaching processes were really good. As usual we had lectures, we had group discussions, tutorials, guest lecturers, and we used to get experts from foreign universities, say USA, and they used to come and give us that international exposure on entrepreneurship skills and how to manage businesses (New Graduate, Interview MSNG2).

These creative ways of teaching at the public universities in Uganda depend on class size, teaching resources, course content and individual lecturer's motivation and creativity. For instance, in small classes (less than 100 students) such as in Science Education or in Social Work, lecturers are more likely to blend their methods. However, blending may be difficult in classes of non-professional courses in Development Studies and in Sociology.

It appears that, individual motivation and the conception of teaching determine whether or not a blended approach to teaching will be used by a lecturer. Therefore, the higher education capabilities developed are, inter alia, a function of the teaching approaches used by a particular lecturer and of his resourcefulness. In practice, blended approaches are used on a limited scale in public universities in Uganda: lecturers concentrate on the traditional lecture method.

In the survey questionnaires, the respondents were asked to express their opinion about the effectiveness of the teaching methods they had experienced as students at university (see also Appendix I, question 501). Table 7.2(below) summarises the responses that were tabulated.

Table 7.2: New graduates' opinion on teaching methods used by lecturers as being effective

Questionnaire measure	Researcher's interpretation	Number of respondents	Percentage
Strongly agree	Very effective	19	11.4
Agree	Effective	35	21.1
Undecided	Does not know	10	5.8
Disagree	Ineffective	78	47.2
Strongly disagree	Very ineffective	24	14.5
Total		166	100

A general trend in the responses indicates that new graduates perceived the teaching methods as ineffective. As Table 7.2 shows, up to 61.7% (47.2% disagree and 14.2% strongly disagree) of the new graduates found the teaching methods or approaches ineffective in conveying the intended knowledge and skills. Such teaching methods, as already explained in this sub-section, are largely non-participatory (also see Appendix I, question 507). In effect, the teaching methods appear to be inadequate.

Deficits in university teaching processes

The absence of the tutorial method is one of the higher education capability deficit-causing practices at public universities in Uganda. Traditionally, in university teaching

processes, tutorials refer to that extra teaching by a lecturer, usually a junior lecturer (tutorial assistant), after the main lecture has been finalised. A tutorial group tends to have only a few students (10 - 25) discussing in-depth the main lecture content. However, owing to the big number of students in most classes at public universities in Uganda, coupled with less than the required number of teaching staff and the necessary teaching resources, the use of tutorials has diminished. Today, almost all university teaching takes place in the main lecture-room and very little outside it. Incidentally, some of the stakeholders who understand the value of the tutorial method find this practice undesirable. For example, one respondent remarked: "I very much, myself, think that tutorials would have worked better; but our numbers are really, really overwhelming. Although I know that tutorials are very important, I keep on postponing them..." (Lecturer 04 in Development Studies, Focus Group, DSFB1). In effect, students in public universities in Uganda miss the benefits of using tutorials owing to their (students') big populations, which are not matched by the requisite teaching resources.

It should be noted that the lack of tutorials limits opportunities for students to share what they know with fellow students. The limited sharing of knowledge is not very helpful, because higher education capabilities such as sociality and participation are, inter alia, enhanced through interaction with fellow students. As Exeter et al. (2010: 763) advise, it is important to engage students in learning processes and thereby shift away from the lecture method to more participative and student-centred modes of teaching. The participative methods, if well used, enhance learning outcomes, thereby benefitting the students. However, as already explained elsewhere, these participatory methods are used only on a small scale.

This study also explored the knowledge and skills of new graduates in Microsoft Office computer programmes, especially Word and Excel (see also 5.10). It was established that there were some basic science and technology deficits among the new graduates in these two computer programmes. For example, in the questionnaires, the new graduates were asked to state their opinion of university education as a source of knowledge and

skills for the Microsoft Office package (see also Appendix I, question 407). The opinions expressed about the statement were tabulated and are presented in Table 7.3 below.

Table 7.3: New graduates' response on university teaching processes as a source of computer skills

Questionnaire measure	Number of respondents	Percentage
Strongly agree	22	13.3
Agree	44	26.5
Undecided	19	11.4
Disagree	67	40.4
Strongly disagree	14	8.4
Total	166	100

As shown in Table 7.3, a minority (39.8%) of the respondents agreed or strongly agreed that they can use the Microsoft Office computer package arising out of university teaching. Up to 11.4% were undecided; probably they could not recall gaining computer knowledge from the university teaching processes. Less than a half of the respondents (38.8%) either agreed or disagreed that the university teaching processes had aided them to learn how to use a Microsoft Office package. This data suggests that the public universities in Uganda are not doing enough in computer knowledge training. Therefore, one of the common deficits among students is basic computer knowledge.

From interviews, the researcher noted that, whereas the Information and Computer Technology (ICT) schools/departments are considered robust at both Makerere and Mbarara universities, the functional integration of ICT within the university system, for example the level of support to other schools, is rather weak. The ICT experts at the public universities in Uganda concentrate on their specialised teaching departments and give extremely little support to non-ICT departments in terms of troubleshooting computer operational problems, and even computer knowledge and skills teaching. For example, a member of staff observed, "We have the Faculty of Computer Science but they are also overwhelmed. We ask them to teach our students computer skills; but you see it is an extra burden: they do not like it" (Lecturer 04 in Development Studies in a

Focus Group, DSFB1). This explanation, inter alia, reveals that there are limited numbers of ICT staff in public universities in Uganda or that there is poor planning regarding who should teach computer skills to non-ICT students. The result of this scenario is a science and technology capability deficiency among the university students.

With the exception of the Schools of Education, most lecturers at public universities in Uganda lack the pedagogical skills yet they (lecturers) are deeply involved in teaching. At university job-entry level, lecturers are hired on the strength of their superb grades in their first degree course. Slowly, they upgrade their qualifications without necessarily being trained in pedagogies. Overtime, each lecturer, through trial and error, forms his own style of teaching guided by what seems to work. Due to this unsystematic way of learning how to teach, quite often the teaching processes are disjointed, erratic and haphazardly executed. Consequently, lecturers in some cases do not impart the intended knowledge, skills and attitudes to the required standards. However, at Makerere University some efforts were made from 2006 to 2008 by the School of Education to train lecturers in other schools in the basics of pedagogy. The training targeted the entire university and lasted one to two weeks per group. It appears the duration and coverage of the training programme was insufficient since the lecturers seem to have remained stuck in erratic approaches to teaching. Hence, the higher education capabilities expansion process among students has been negatively affected.

This finding is in line with what Stark (quoted in Hativa 2000: 17) posits: "Deficiencies in pedagogical knowledge negatively affect all aspects of university teaching. When planning their lessons, most instructors think solely about the content and how to present it." Furthermore, lecturers rarely consider pedagogical concerns such as the clarity and appeal of their presentations or even adaptation to particular students. For this reason, when students are poorly taught, they learn little, and vice versa (see also 4.2.1 and 4.2.2). Therefore, it is possible that shortcomings in pedagogical skills in lecturers at public universities in Uganda inadvertently incapacitate the process of higher education capabilities expansion among students. Nevertheless, through quality assurance measures the problems associated with sub-standard teaching can be minimised.

7.5 Quality Assurance Measures in Public University Education in Uganda

There are some quality assurance measures in place that are intended to keep the teaching processes and curriculum content management at the public universities in Uganda on track. In fact, the National Council for Higher Education (NCHE) issued a number of measures for quality assurance to be followed by institutions of higher learning. These measures, inter alia, cover teaching and learning processes. The council spells out benchmarks to assess quality levels of teaching and learning. For example, the NCHE regulations demand that what is taught in tertiary institutions should be relevant to the job market and the nation (NCHE 2006: 22; 2008: 19). These regulations are supposed to be observed by all institutions of higher learning, including public universities (see also Appendix K). However, as the researcher demonstrates in this sub-section (7.5), some of these regulations are violated by public universities in Uganda.

Although quality assurance is a cross-cutting item in university education processes, most of the quality assurance measures used in public universities in Uganda are related to or embedded in the teaching processes. It seems little is being done in other spheres of public university education, such as, among others, in the learning processes; in information access by students; and in the establishment of appeals mechanisms for students. Instead, quality assurance measures focus on the teaching processes, especially the teaching methods, for instance in fieldwork, group work and coursework.

Fieldwork

In fieldwork, among other quality assurance measures, the public universities in Uganda send out students with guidelines as a way of ensuring that they remain focused on their course of learning. The university departments that have a fieldwork component also send assessment forms to field supervisors who are expected to monitor the students and thereafter give feedback to the concerned university departments. In addition, lecturers make follow-up visits to the field. Field visits are a form of student supervision by lecturers aimed at ensuring that students learn the subject matter as expected. During field supervision lecturers are expected to meet the field supervisors and students and

discuss progress on the basis of the guidelines. This practice enhances the quality of university education outcomes.

In some aspects of fieldwork placement, it appears there is a lot of seriousness about enforcing university education standards. For example, in the Departments of Education, students undertake school practice for eight to 10 weeks. School practice is professionally and tightly managed, especially at Mbarara University. One respondent described the practice as follows:

They [students] are in the schools placed there from day one to the very last day. And the supervisors, the lecturers here, go to see them there and they discuss a lesson plan and come to discuss that lesson. The principle is that you must discuss a lesson with the student to get to know the areas on which to improve on and you know how he could have done it better (Lecturer 02 in Education, Focus Group, EDFB2).

Mbarara University has designed a form which the school headteachers use to evaluate student-teachers. The completed forms are collected and analysed, and the outcome contributes to the final score of the candidate on the school practice course (paper). For instance, in case a student-teacher scores low on school practice, or engages in unprofessional conduct, he has to redo the practice, and this can delay his graduation by up to a year or more. To minimise bias and enhance quality, every student-teacher on school practice gets supervised by three lecturers successively. Supervision is carried out in addition to the work of external supervisors from other universities and/or from the Ministry of Education and Sports, who make impromptu field visits. These quality assurance measures are intended to ensure that students acquire the teaching skills and knowledge they require. Indeed, the outcome is that teachers from Mbarara University are superbly rated by the employers, and their employment level is above 95%.

Whereas public universities in Uganda, in a way, use fieldwork as a quality improvement method, its implementation in most departments is riddled with quality problems that make it less effective than it should be. For example, one respondent explained:

If you look at the application of fieldwork, the way we are doing it, you wonder whether the students learn. We lack in terms of our ability to supervise them: the

man-hours, the resources... It is like it has been routinised that the students have to go for fieldwork(Lecturer 02in Social Work in a Focus Group, SWFM1).

Another respondent revealed:

It (fieldwork supervision) is like you are doing on-spot check instead of helping the student. And even the time we go to the field is towards the end [of fieldwork placement period]. So, at what point are we going to help the students and help them to find the learning opportunities that are available within that context so that they can now apply [the theory]?(Lecturer 03in Social Work, Focus Group, SWFM1).

The focus groups and interviews revealed that the reality of field at public universities in Uganda has some loopholes. Firstly, without much consideration, the students are simply sent to certain agencies that appear relevant to their profession or are willing to accept them for internship. Secondly, the supervisors, who are required to follow up fieldwork students, use scanty guidelines from the relevant university departments. Thirdly, lecturers are allocated a wide geographical area for coverage on their fieldwork itinerary yet for personal reasons, such as the need to make savings on the field allowance, they will want to rush and finish the supervision as soon as possible. Fourthly, in some cases, students who do not fulfil the minimum load for fieldwork coverage (for example 10weeks for social work) are rarely penalised, let alone detected. Students tend to getaway with this mischief because the university-staff-supervisory process is itself apparently inefficient. It seems that the students lose the opportunity to enhance their knowledge and skillsbecause of an inefficient fieldwork system.

Furthermore, quality control opportunities are lost in fieldwork when the work-based supervisors are not prepared to receive the students to enable them to continue with the learning process.For example, when going out onfieldwork, students take to their work-based supervisors the supervision guidelines from the university.However, the supervisors rarely read theseguidelines. In fact, the majority of employers or work-based supervisors consider students on fieldwork placement or internship asan inconvenience at the workplace. Interns are viewedas occupying positions that do not exist and as potential loss-makers owing to their inexperience. Hence most students are given insufficient attention and guidance during their fieldwork placement period. When this

reality coincides with a disorganised supervisory university system, fieldwork gets negatively affected: the scenario creates a full cycle of inefficiency, learning gaps and ineffectiveness. Ultimately, this limited rigour in the management of fieldwork placements compromises the quality of graduates yet fieldwork is supposed to be used as a teaching quality improvement method. In terms of capabilities, such students exhibit lower-than-expected higher education capabilities by graduation time.

Group work, coursework and examinations in quality assurance

Quality assurance attempts also exist in some other teaching approaches. For example, in the group-work approach some lecturers double-check with students, to ascertain who has participated and who has not. Students who do not participate are required to do another piece of work. Similarly, coursework, although on a small scale and riddled with plagiarism problems, is ideally meant to contribute to the quality of teaching and learning in the university education processes (see also 7.4).

Lecturers use the moderation of coursework, tests and examinations as a quality assurance intervention. In practice, lecturers are instructed to submit the examinations they have set for their courses to their respective heads of department, who will then review them in a meeting with the lecturers. As mentioned by a lecturer: "It (moderation) is like a peer review: I give my colleague my paper that is set and many times it is a head of department who moderates, or heads the moderation exercise" (Lecturer in Science Education, Interview LESB1). This review enhances the quality of the examination through group refinement. However, the level of seriousness of moderation differs across colleges and departments. For instance, at Mbarara University examination moderation is taken more seriously than at Makerere University. In fact, it is possible to violate the moderation procedure at Makerere University where, for example, a junior lecturer can set an examination, process it and administer it singlehanded. The loopholes in enforcing full coverage in moderation practice creates room for poor quality examinations and the consequent problems, such as wrong assessment of the knowledge and skills the students have acquired from the university.

At Makerere and Mbarara universities, coursework is also used as a mid-term assessment tool to determine how students are progressing with their degree programme. Coursework is offered twice a semester and in some cases it is alternated with a test. Coursework in undergraduate courses accounts for 30% of the final score whereas the final examination accounts for 70% of the final mark. As a quality control measure in the teaching processes, students must do coursework before they are allowed to proceed to the final examinations. It is a requirement that a minimum coursework score of 15 out of 30 marks be obtained by each student in a given course before the student is allowed to sit for the final examination in that course. This requirement compels students to concentrate on studies in order to pass coursework, tests and the final examinations.

As a quality control measure examinations are supervised with vigilance to ensure that nothing goes wrong in the examination process. The students are sparsely distributed in different rooms to eliminate any form of sharing of unauthorised academic materials during examination time. A respondent reported:

Here we have written examinations and when the students are sitting [examinations] there is also invigilation of examinations. There is someone who sits there to make sure that these students are the ones responding to these questions: it is not being done by someone else [*hearty laughter*]. And there are examination numbers. So we have very strong examination rules and regulations which govern all this process of examinations. That is what we have done here. (Lecturer 02 in Education, Focus Group, EDFB2)

This tight supervision system forces students to prepare themselves to work alone in the examination room. In order to pass the examination, the students get committed to their studies, especially towards examination time. They participate less in leisure activities than usual and spend more time in the library and in group discussions. Quite often this commitment is in the last few days to examinations. Actually, the students get involved in rote-learning, which is effectively a surface learning approach. And, as Balasooriya, Toohey and Hughes (2009: 792) reveal, surface approaches to learning give limited skills to the students and they tend to lose the knowledge and skills shortly after the

examinations. As a result, surface learning approaches at public universities in Uganda have contributed to limited higher education capabilities expansion.

In addition, public universities in Uganda use cases in teaching as one of the quality intervention measures. Cases, for instance group cases, demand a lot of concentration on the part of the students; they do research, hold discussions and make presentations which are essential for internalising the subject matter taught in a course. Moreover, in the case of presentations, students also contribute to the lecturers' knowledge of the subject matter, thereby enriching his teaching of the same topic in subsequent years. However, the use of the case method in the 10 departments covered by the current study, at less than 5% of all the teaching sessions, is on a very small scale. The low level of case method use limits students' higher education capabilities expansion because the students lose the benefits of case studies. In fact, Armstrong (2003:901) mentions some benefits of case studies, such as the exchange of ideas, analysis of experiences and the promotion of enquiry.

Class attendance monitoring

To encourage students to stay focused on their studies and not to wait for last-minute rote-learning, some lecturers monitor class attendance. The monitoring exercise is both institutionalised (such as at Mbarara University) and an individualised arrangement (for example at Makerere University). Particular lecturers may take roll calls or register students' attendance each time there is a lecture. Class attendance lists enable lecturers to track students' commitment to studies. A respondent reported that at Mbarara University:

...each individual lecturer has an attendance list for the students to ensure that they are attending lectures. And, administration normally comes in to give a hand. If one [student] misses lectures for about three times then you [sic] are at liberty to forward that person to the faculty administrator and the student is normally summoned and asked to explain (Lecturer in Science Education, Interview LESB1).

Where a class attendance register is used, especially at Mbarara University, students tend to keep time and to be in class before the lecturer enters it. The lecturer later takes

away that register for custody. A class register serves as a quality control measure as it requires a student to attend.

On the contrary, class attendance is generally not enforced in most departments at Makerere University, for example, in the College of Humanities and Social Sciences and in the College of Education and External Studies. In fact, in these two colleges at Makerere University attendance appears to be optional. One respondent said:

...what I remember, if we were to do anything like registration of attendance; people (students) would get a piece of paper and you pass it over under the lecturer's door or the class leader would pass it over to the lecturer. This [registration] was done once in a while. If there is no person to really pressurise and say, 'members we have not registered', no one bothered (New Graduate, Interview MSO7).

Attendance registers, though rarely used, could help a lecturer to know students who are active in terms of attendance and those who are not. However, there is also the risk of forging attendance registration when the system is non-stringent. It is only the tests, coursework and examinations that are compulsory. Because attendance is erratic it is not uncommon to find a class of 600 students being allocated a room with a capacity to seat 500 students. This anomaly arises from the fact that less than 80% of the students in the humanities and social sciences attend lectures.

To a large extent the senior lecturers (senior in terms of age and service) are more attached to such quality assurance measures than the junior lecturers. The senior lecturers devise ways and means to ensure that students produce quality work and encourage the use of up-to-date references. However, some students are lazy and quite often circumvent the controls that the lecturers put in place. As one respondent explained:

Some students come to the university and pay tuition and do not want to attend lectures. Sometimes, things become hard for the lecturer to track adults to come and attend lectures. And, at the end of the day, those are the people who come to the job market and paint the university bad. So it is a challenge not only to the lecturers but also to the overall administration... (New Graduate, Interview MPS1).

Such low class attendance by students poses a teaching dilemma at public universities in Uganda. Students cannot acquire all the knowledge and skills expected of them when they are just looking for a qualification while not attending classes.

Some lecturers have become more creative in following up these students who do not attend classes. For example, in cases where it is possible, tutorials are one of the quality control measures. In such cases, tutorials are used as avenues for testing students to establish whether or not they have internalised the concepts and issues intended to be learnt. Tutorials help students to share and reflect on the learning materials. To this end, higher education capabilities such as learning dispositions, sociality and participation, and practical reason are augmented through the discussions in a tutorial session.

Staff competence assurance

Quality assurance at public universities in Uganda is also handled through the employment of relatively intelligent lecturers. These are the lecturers who graduated at the top of the academic notch especially during their bachelor's degree studies. It is a policy at public universities in Uganda and a requirement by the NCHE that for one to be appointed in a university teaching job at entry level, one must have a first class or second upper class degree (NCHE 2011:7-9). Actually, one respondent attested that "the first quality assurance measure was to employ lecturers with the necessary skills and expertise" (New Graduate, Interview MSNG2). This practice is widely followed in the public universities in Uganda although there might be a few exceptions. As Mamdani (2007: 111) reveals, in some cases, especially in the private wing of the public universities in Uganda, for example in the evening programmes at Makerere University, some departments do not emphasise lecturers' intellectual competence but instead focus on mundane issues such as individual lecturer availability and social connections. In the process, the quality of teaching is compromised and at times the students miss out on enlarging their higher education capabilities.

The public universities in Uganda are deeply involved in staff development programmes as part of the quality assurance measures and also career development. Junior lecturers

are facilitated to upgrade their academic qualifications with a view to making them better teachers. Staff development is mainly through direct university training, staff delegation, granting study leave, or lobbying and co-funding staff development programmes. Development programmes are undertaken depending on opportunities and the availability of resources. One respondent reported:

We also ensure continuous professional development of staff members. We actually do not miss any opportunity we deem is good to help us improve on our teaching styles and generally our academic behaviour. And, you know, if you have quality teaching then the product is also of good quality (Lecturer 08 in Education, Focus Group, EDFB2).

Indeed, such skills improvement programmes contribute to the overall university education quality as lecturers get equipped with additional new skills which they apply in their classes. However, some staff development programmes undertaken by public universities in Uganda teaching staff are not very relevant to what the staff teach. Attendance in such programmes is informed more by the individual need to travel and, maybe, take a break from the drudgery of university teaching. When lecturers train in knowledge and skills outside their departmental disciplines and mandates there are almost no useful higher education capabilities gained which they can later pass on to their students.

Peer reviews

To keep the quality of teaching on course, peer reviews and staff meetings are used in public universities in Uganda. Peer reviews are applied both in course content determination and examination management. Actually, lecturers at public universities in Uganda also make curriculum reviews so as to keep abreast with good practices worldwide. The reviews are made during specially designated staff retreats or in-house meetings. In an interview, a respondent said:

...we sit together and then each of us presents what they teach, and how they teach it. So in summary we use course outlines. We give course outlines for the various subjects we teach and this clearly tells you what you are going to teach and how; because we include the methods, content and references (Lecturer Science Education, Interview LESB1).

Joint reviews of the curriculum content are important because they help the individual course managers to refine the course content. These reviews are supplemented with external examiners' assessments of university examinations and courses.

Teaching evaluation by students and external examiners

In public universities in Uganda external examinations are another quality assurance measure used. The universities engage external examiners to scrutinise the examinations and assess their strengths and weaknesses. The external examiners analyse the course outlines, the examinations set, the marking schemes, and the marked scripts. Through both written reports and in departmental meetings, the external examiners give feedback to individual lecturers and departments on the quality of examinations and courses. However, they do not inspect the teaching resources and teaching quality. Little attention is also paid to the relevance of programmes to higher education capabilities expansion among students and to the labour market requirements. Moreover, in more than half of the departments covered in this study, external examiners are intermittently engaged. This on-and-off approach to the engagement of external examiners creates loopholes for sub-standard work to go through the system unnoticed. Hence, the expected knowledge and skills are sometimes not developed in the students.

In some cases, students also evaluate their lecturers' teaching. Evaluations, though on a very small scale, are done through students providing feedback on the teaching processes. However, the practice of students evaluating courses and lecturers is not yet in place in most faculties at public universities in Uganda. Where course evaluations exist, the practice is haphazard. As one respondent indicated, "We had a coordinator. So, he would try to move around and ask students how the lecturers were going on and we would be free and give him information as per the situation" (Management Science New Graduate, Interview MSNG2). In addition, a respondent observed:

At the end of the semester, we carry out what we call assessments. Our students have forms which they use to assess our performance as lecturers, and also annually we at academic level, we have the staff appraisal system that looks into

how we are conducting our responsibilities and duties and all these really contribute to quality assurance(Lecturer in Education, Focus Group, EDFB2).

Students' evaluation is important as it keeps the lecturers informed of their teaching status regarding relevance and quality. It is even a requirement by the National Council for Higher Education (Uganda) that students assess the academic staff. The council requires that the students' evaluation be collected, analysed and evaluated and thereafter be shown to the course lecturer(s) for appropriate action (NCHE 2011: 11-12). However, it appears that evaluations are not implemented in the way the NCHE demands. Actually, sometimes evaluations of lecturers by students do not happen.

Respondents indicated that in the last decade (2001-2010), public universities in Uganda had limited room for students to assess their lecturers. For example, a lecturer said, "We have not done it (evaluation) on the side of the students, we do it informally where you ask for feedback from students, but standardised formal evaluation, we just hope to implement it soon" (Lecturer in Development Studies in a Focus Group, DSFB1). In fact, the whole culture of students evaluating lecturers is foreign, especially at Makerere University. For example a respondent indicated:

We did not to do evaluation...No, no we never had that. ... We used to hear that if you ever report a lecturer, you would never graduate. The lecturer will lose your marks and nothing will happen...and eventually it embroils all students in fear. I cannot say anything about a lecturer because he will victimise me. So that was the state of affairs back then(New Graduate, Interview MSW8).

No clear reasons are available for such an anomaly. Students did not seem to know their rights and the legal backing at hand. For example, although only recently, the NCHE has declared:

All instructors, lecturers or professors at university level shall be assessed by the students in a standardised format at the end of each course. Students shall assess academic staff performance to help individual staff to address his/her weaknesses. It can also help improve teaching through the improvement of content, professional development and general openness to criticism(NCHE 2011:11).

Although the importance of evaluation is acknowledged, even by those who do not practise it, some departments such as that of Development Studies at Mbarara University, and the College of Humanities and Social Sciences at Makerere University, do not have avenues for students to evaluate the lecturers and the teaching processes. Therefore, the benefits of students' feedback on the teaching processes are lost and the primary loser is the student who would benefit from improved teaching.

Lecturer performance monitoring by management

According to the different administrative manuals at public universities in Uganda, heads of department are supposed to implement the evaluation of lecturers' performance. At Makerere University, for example, staff performance appraisal is expected at least once a year (Makerere University 2009:48). In practice, however, the departmental management teams, especially at Makerere University, rarely guide and evaluate staff. Quite often management assumes that lecturers know what to do, although this may not necessarily be the case.

Some junior lecturers need guidance, performance standards and performance evaluation. However, these management practices are rare at public universities in Uganda. One respondent said:

I must say that I am disappointed. I am disappointed because even when I joined university in 1996 I was just given a course outline to go and teach, with no guidance, with no help but because I had this education background, I was saved. But, I would not have needed all this [lack of orientation] to happen. All the years that I have been here, it has really been a personal endeavour. Once, as a head of department you have a departmental meeting and you issue out a teaching load that is all you see about the head of department. He will come in probably when one of the lecturers has absconded from duty (Lecturer in Education, Interview FCSM1).

Another respondent echoed similar sentiments:

Let us take public universities. One gets the impression that actually lecturers are not accountable to anybody in these higher institutions of learning. They are supposed to account to their students, university leadership; but you get the impression that the command – the supervisory structure of tertiary institutions – is more or less collapsed to the extent that a lecturer would come to class when he or she feels like. ... I was also a student at postgraduate level in 2004 and I

experienced this myself [*sarcasticlaughte*r]. It is so disturbing, you see; you kind of agree on procedure that when you have a complaint, you address it to the lecturer, head of subject, head of department, then to the dean. But it is like nobody is bothered to rectify the problem. Why I am saying this, and I think it goes back to why the quality of graduates these days is kind of wanting(Public Official, Interview P3).

A different respondent reported:

I did not see anybody, like any inspector, supervising the lecturers to see whether they are in classes or not. It was the initiative of the students to do like: 'Youmembers yesterday we missed this person. According to the timetable; today we have not seen him... What can we do?' Then you try to look around; then go to his office; but no one from the administration would take any measure to look for a lecturer [and find out] why he has not taught or why he has not been in class(New Graduate, Interview MSO7).

The image of public universities in Uganda portrayed by these three respondents, as far as supervising lecturers to monitor their interest, performance and commitment isconcerned, is one of *laissez-faire* administration. This 'hands-off' approach to management is unhelpful and leads to mediocre lecturers remaining in the public university educationssystem in Uganda. This behaviour may contribute to students missing out on the opportunity to enlarge their higher education capabilities.

Respondents completing the survey instrument were availed with some statements regarding quality assuranceabout which they were invited to state their opinion. The opinions on a statement, "I always felt that someone was supervising my lecturers to ensure that they teach well", suggest weaknessesin the supervision of lecturers (see Appendix I, question 610). Table 7.4 summarises the tabulated opinions.

Table 7.4: New graduates' opinion on whether lecturers are supervised

Questionnaire measure	Number of respondents	Percentage
Strongly agree	11	6.6
Agree	25	15.1
Undecided	5	3.0
Disagree	103	62.0
Strongly disagree	22	13.3

Total	16	100
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As Table 7.4 shows, the majority (75.3%) of the respondents felt that the lecturers were not being supervised. Of these, 62% disagreed that there was supervision of lecturers and 13.3% strongly disagreed. Only 21.1% (6.6% strongly agree and 15.1% agree) of the respondents felt that there was always someone monitoring the performance of the lecturers to ensure that they taught well. From these data, there is an indication that teaching staff supervision is low. This weakness may inadvertently cause a loss of higher education capabilities expansion among students.

Interviews with the new graduates further revealed that, even when performance monitoring is done, it appears to be haphazard. It is not systematically conducted. For example, one respondent revealed:

The dean would always move around and the Academic Registrar was always 'on their necks'. Things to do with coursework and test were highly demanded... and teacher participation in class was highly monitored by the Registrar and Dean and even the Deputy Dean quite regularly (New Graduate, Interview NGME4).

These findings on the staff performance monitoring are similar to what an earlier study on Makerere University had established:

Staff performance appraisal is ... irregular and conducted in an archaic method. The staff and the supervisors do not sit together to agree on the targets and standards of performance before staff appraisal is done. No standards or targets of performance, let alone performance indicators were determined and agreed upon with employees neither have performance measures been emphasised to the employees (Nasimiyu 2009:87).

Actually, Nasimiyu further reveals that staff performance appraisal at Makerere University was not implemented during the period 2002 to 2009 (Nasimiyu 2009:83). This lack of rigorous supervision and performance monitoring of lecturers inevitably creates room for poor quality teaching and learning. It is possible that such administrative weaknesses are a disincentive to higher education capabilities expansion among students.

Use of penalties

In some isolated cases, public universities in Uganda use penalties on staff and students as a quality measure. In the case of lecturers, penalties have been instituted for non-complying lecturers, for instance those who do not teach a given number of classes are warned, fined or even dismissed. Similarly, students face penalties as part of enforcing high academic standards. For instance, students who are caught cheating in examinations are dismissed from the university. This penalty is administered after the student has undergone a rigorous disciplinary process to ascertain the level of cheating. However, the disciplinary processes are too cumbersome and elaborate to guarantee organisational justice. For example, once a student is alleged to have cheated in an examination, a lecturer or examiner is required to file a complaint against such a student and provide evidence, witnesses, and details of the alleged offence. The case is reported to the head of department for consideration. Then, the lecturer and the student will appear before a designated school disciplinary committee for cross-examination. Thereafter, the issue is forwarded to the University Senate for final resolution.

The disciplinary stages notwithstanding, there are some practical delays embedded in the bureaucracy that at times frustrate the entire process. Quite often, lecturers opt to let the offences pass without penalty rather than consume valuable time in detailed organisational justice processes. Possibly, this system weakness is known by students and they often exploit it to their advantage, thereby getting away with a multitude of academic offences. Hence, teaching quality is also negatively affected by the lengthy justice procedures at public universities.

Effectiveness of quality control measures

Quality control measures at public universities in Uganda are generally weak regarding the management of what is taught, how it is taught and for what purpose. The departmental administration systems are generally not strict about the quality of the education processes. The leadership has an unrealistic trust in the competence, diligence and commitment of their teaching staff in matters of quality control. For

example, whereas at Mbarara University there is tracking of how courses are being taught, at Makerere University little is being done about this matter of quality control.

A lecturer at Makerere University reported:

The students keep grumbling among themselves about a lecturer who is not doing a good job, but will not take it up. Very few would really take it up. So, really, the systems are not in place... If you look at assuring the day-to-day quality processes, these are lacking. (Lecturer in Education, Interview FCSM1)

These weaknesses could have been addressed if the students had an opportunity to assess their teachers. The study qualitative data suggest that even when a quality assurance intervention is undertaken at public universities in Uganda, it comes with limitations such as being irregular or not rigorous. This irregularity is common in staff supervision and evaluation, which the public university administrative bodies seem to neglect.

Some pedagogical weaknesses are not detected by the university administration system, other quality loopholes are underestimated, and yet others are inadvertently promoted. For example, regarding the marking of tests and examinations one respondent pointed out, "[i]n assessment, I know some of us are taking shortcuts to see how [to simplify work] ... I think that we ask students in a way that will make it easy for us to mark..." (Lecturer in Sociology, Interview LSAM1).

Another respondent observed:

I am thinking that one of the problems is that we are being so lenient with the students. We do not enforce [standards]: I mean they are not adopting this learning style and things like that because even when we should have failed them, we make them pass because they have to move on (Lecturer 01 in Social Work in a Focus Group, SWFM1).

The passing of students with sub-standard scores reflects badly on the quality of graduates from public universities in Uganda. It also indicates a system weakness that allows non-qualifying students to go through it unfairly as students do less than expected of them. For example, they read less than expected and look for opportunities to avoid academic work. In fact, as scholars agree, the style of assessment of learning is very

important because it strongly influences the learning approach students adopt in their studies (Thomas & Bain quoted in Kember; Leung & Ma 2007: 623). In addition, Trigwell and Prosser (1991:251), Trigwell et al. (1999: 58) and Kek and Huijjer (2011: 203) reveal that students' approach to learning, the quality of learning and the learning outcomes are highly influenced by the learning environment (see also 4.3.1).

The respondents reported that the learning environment at public universities in Uganda is one of excessive freedom and leniency. Hence, even as efforts are made to impart certain higher education capabilities, assessment in public university education processes in Uganda appears relaxed and the learning environment seems to encourage students to adopt surface approaches to learning.

Decline in quality of student and student outcomes: an assessment

The respondents indicated that the quality of new graduates from public universities in Uganda has generally declined. Some public officials who work with the new graduates perceive them to be sub-standard and poorly developed in terms of the common competences expected of a graduate (see also Appendix A). The impression these public officials have of new graduates with regard to knowledge, skills and capacities is seemingly negative. The new graduates are viewed as lacking higher education capabilities and, at times, as immature. For example, a respondent reported:

Employers now complain of [the quality of] accountants, 'that Makerere [University] is no longer producing accountants'. But how many are produced every year? About 150 of them! It is because they just teach things at surface level... The quality trend is going down and [this is] because the intake of most of these public universities is high. Go to Makerere University here especially now in the private wing, they just [admit]...as long as somebody pays money he will enter the private wing. And they just teach and you know somebody pays money promptly and they just pass out (Public Official, Interview G1),

Another senior public official observed:

By the way, I should say, the quality is on a declining trend: it is not improving. And I think the problem is [that]...they (public universities in Uganda) started this private arrangement. They concentrated on the numbers to maximise the revenues and in the end they compromised the quality. That is what I have seen.

Every year I get interns [and I have watched quality decline](Public Official, Interview G3).

A third respondent explained:

You see the problem is not the university, but it starts from the primary. There was a time when the system broke down and our education system went into limbo. ... Because of that limbo, many things went wrong at primary and secondary [school] levels. And, university really received the students from our primary and secondary [schools]. So, when things are not being done properly in the primary and secondary levels do not expect much [to be done at the university]. ...you cannot change somebody much in three years at university. That is why you can find a graduate who cannot speak English (Public Official, Interview E1).

These observations underscore the belief that the quality is declining and this implies that public universities in Uganda are not developing the education capabilities expected of a graduate. Respondents described public university education in Uganda as stuck at surface learning that allows the academically 'undernourished' students to also graduate. The perceived decline in public university education standards is also reported in other documents:

Following the numerous occasions on which I have been honoured with invitation to deliver some keynote address to the students community at Makerere University, I have noted a profound decline in the general standards, and above all a humiliation of the university leadership, the students community, and the nation at large (Wavamuno 2004:1).

Therefore, as the World Bank (1995: 46) indicates, student outcomes, educational experiences or learning environment define the quality of education. Hence, public university education in Uganda in the period 2001 – 2010 may be described as being of low quality and probably as having declined.

As already indicated elsewhere in this chapter, most respondents seemed to believe that the quality of public universities in Uganda is declining. This view was advanced by all the three categories of respondents, namely: lecturers, new graduates, and senior public officials. For example one respondent admitted:

I think the quality is going down. If I compare the generation of people that have gone through the university, I think now the quality is going down but I would add and say I am not totally blaming it on the university. Because the criteria of admitting people at the university is clear, and secondary and primary schools

have not done a lot to groom the pupils and students that go through their schools, so they have loaded that burden to the university and the university admission process is such that the person with certain number of points and weights will be admitted. Unfortunately some of those people may not necessarily be of the calibre the university speculates. So, ultimately the products that will come out will not be as good. So, that is why the university products or students coming out of the university is kind of declining(Political Science New graduate, interview PSNG1).

Another one remarked:

...if you look at the graduates of the 1980s, they used to go to the university when they were very few. They used to take up a fewer number of students from 'A' level (advanced secondary school) which the university could efficiently take good care of. Whether in terms of books, the numbers were okay. They would be taught by a lecturer attending to something like 20 students in a classroom: that was okay and monitoring was fair. ... Today you are thousands and thousands. You [sic] do not have jobs; you [sic] are just going there to try your luck or something. So, even when you are coming out you are thinking totally differently: the minds are totally on money(New Graduate, Interview MSO7).

Apart from the big numbers of students at university, already explained in this thesis, some other reasons have been advanced to explain the poor quality of public university education in Uganda. One line of argument, that the researcher re-emphasises here, is that the poor quality of new graduates is due to the poor quality of basic education, which creates a poor foundation for university education. Incidentally, according to one respondent, a senior public official from the Ministry of Education, the quality of primary and secondary education is improving and slowly the graduating students are getting better and better. The official advances this argument basing on the fact that the new graduates of public universities in Uganda who go abroad for master's degrees are praised. But, it is well known that the famous universities abroad tend to admit the best of the best from the public universities in Uganda. These superb graduates going abroad account for less than 1% each academic year, and these are not representative enough of the reality about the education capabilities of the students from the public universities in Uganda.

Actually, lecturers absolve themselves of the responsibility to develop education capabilities among students by arguing that the university is a free place where a student

decides on what to learn and what not to learn. In fact, the university lecturers expect students to develop (maybe on their own) competences such as report-writing skills, research skills, speech-writing, as well as the basic computer skills of preparing PowerPoint presentations, and using Microsoft Word and Excel programmes. However, students do not effectively utilise the university learning environment to develop such skills. In research skills, for example, lecturers expect first degree holders to be at a level of research understanding that can enable them (graduates) to perform academic research. Competently writing proposals, collecting data, analysing it, writing a research report and finally disseminating the research findings are some of the research skills expected of students. Whereas the university lecturers have high expectations of their graduates, in practice, however, as already seen, the lecturers do not appear to teach students rigorously enough to acquire the skills they expect them to have. As a result, students complete the university education processes before they have acquired the requisite knowledge and skills.

As already indicated elsewhere in this thesis, the inadequate effort that lecturers invest in teaching seems to reflect the lecturers' perception that university students are mature enough to motivate themselves in higher education capabilities development endeavours. Hence, the students are more or less left alone to determine their own education outcomes. Yet the students may be lacking the resilience and commitment to do academic work that they require to study systematically on their own. Actually, many students of public universities in Uganda simply laze around during their university days, so that some of them end up acquiring very low skills levels from the university education processes. This scenario is similar to what Sambo (2006: 317) found out in Nigerian universities, that the relevance and delivery of university education were generally deficient. For example, employers were generally found to be unhappy with the graduates' low levels of communication, analytical and collaborative skills. By implication, university teaching processes may not always satisfy the expectations of the stakeholders regarding the education outcomes. In the following two sub-sections, the researcher presents the inferential statistics on the teaching processes and their contribution to higher education capabilities expansion.

7.6 Correlation Analysis for Teaching Processes and Higher Education Capabilities Expansion

Correlation analysis was carried out to quantitatively ascertain the link between teaching processes at public universities in Uganda and higher education capabilities expansion. As already indicated (under sub-section 6.6), correlation analysis helps to discover the interdependence between two or more aspects of a situation (Kumar 1996:9). In this study, the researcher analysed whether there was a relationship between teaching processes and higher education capabilities expansion among students. The analysis was in line with the second objective of the study, namely: to analyse the extent to which the university teaching processes in Uganda contribute to higher education capabilities expansion among students (see also 1.4. and 7.1). Using the Statistical Package for Social Sciences (SPSS) the responses from the questionnaire on the sub-variable *teaching processes* were quantitatively analysed (see also Appendix G). The results of the analysis are shown in Table 7.5.

Table 7.5: Correlation between teaching processes and higher education capabilities expansion among students

		Teaching processes	Education capabilities expansion
Teaching processes	Pearson's correlation	1	.562(**)
	Sig. (2-tailed)	.	.000
	N	166	166
Education capabilities expansion	Pearson's correlation	.562(**)	1
	Sig. (2-tailed)	.000	.
	N	166	166

**** Correlation is significant at the 0.01 level (2-tailed)**

Table 7.5 reveals that teaching processes have a strong and positive correlation of 0.562(**) with education capabilities expansion, and a significance value of 0.000, significant at the level of 0.01. This implies that the teaching processes at public universities in Uganda are positively related to higher education capabilities expansion among students at a significant correlation level of 0.562(**). The contribution of that correlation is strong because correlation (r) is at 0.562. By implication, when the teaching processes are improved, higher education capabilities among students expand correspondingly, and the reverse is also true. Moreover, when correlation between teaching processes and higher education capabilities expansion is strong, then these two factors are indeed associated and merit being in one study.

7.7 Regression Analysis for Teaching Processes and Higher Education Capabilities Expansion

A simple regression analysis was performed to determine the influence of the teaching processes on the higher education capabilities expansion. Indeed, regression analysis helped to explain that teaching processes predict higher education capabilities expansion among students. The analysis generated a coefficient of determination that explains the variation in higher education capabilities expansion explained by the teaching processes. The findings are indicated in Table 7.6 below.

Table 7.6: Regression analysis for teaching processes and higher education capabilities expansion among students

Model		Unstandardised coefficients		Standardised coefficients	t	Sig.
		B	Std. error	Beta		
1	(Constant)	2.183	.205		10.671	.000
	Teaching processes	.491	.056	.562	8.706	.000
Model	R	R square	Adjusted square	R	Std. error of the estimate	
1	.562(a)	.316	.312	.36777		

a. Dependent Variable: higher education capabilities expansion; Predictors: (Constant) teaching processes

In Table 7.6 (above), the regression model results between teaching processes and higher education capabilities expansion show a significance value of 0.000. This value confirms that the relationship between teaching processes and higher education capabilities expansion is positive and significant. Furthermore, the standardised coefficient of teaching processes is positive (.562). This suggests that holding other variables constant, teaching processes would result in improved higher education capabilities expansion among students by a magnitude of 0.562 units.

The results further indicate that the R squared (R^2) = 0.316 or 31.6%. This means that the independent sub-variable dimension (teaching processes) accounts for 31.6% of the variations in higher education capabilities expansion among students at public universities in Uganda. Thus, an alteration in the teaching processes would result in a corresponding effect on higher education capabilities expansion by 31.6%. The remaining percentage could be attributed to factors other than teaching processes. The other factors may include curriculum content, learning processes, environment, and individual characteristics (see also 6.7 and 8.6).

7.8 Summary

Analysis of the views of respondents suggests that the teaching processes at public universities in Uganda, in spite of being similar to the ones commonly applied in universities the world over, are riddled with management and implementation problems that result in sub-standard teaching. The respondents revealed that lecturers use teaching methods such as fieldwork, group work, tests and presentations but the dominant methods are lectures and tests in spite of their perceptible limited value in higher education capabilities expansion among students. To the contrary, the use of tutorials and fieldwork is very rare in spite of the high value of such methods in enhancing higher education capabilities (such as practical reason, sociality and participation) among students. This contradiction in the choice of teaching methods, the justifications notwithstanding, has probably negatively impacted on the quality of students graduating from public universities in Uganda in terms of possession of higher education

capabilities. Probably, owing to the reported weaknesses in quality control measures, tenuous connections between teaching processes and higher education capabilities expansion have ensued. The apparent weak link between public university education and higher education capabilities among students exists even when the potential correlation between the two has been statistically demonstrated. Quality assurance measures, for example, in the form of staff performance appraisals, moderation of examinations, use of class attendance registers, use of external examiners, penalties and so on are intermittent, thereby creating loopholes in the process of higher education capabilities expansion among students.

Chapter Eight

Presentation, Interpretation and Discussion of Results: University Learning Processes and Extraneous Factors

8.1 Introduction

The first theme (and study objective) relating to curriculum content was analysed in Chapter Six. Thereafter, Chapter Seven analysed the second theme (and study objective) concerning teaching processes as a sub-variable of university education. In Chapter Seven, it was concluded that the teaching processes seem to be riddled with management and implementation problems that may result in sub-standard teaching. In the current chapter, the researcher analyses the third theme based on the third objective of the study, namely: to assess the contribution which the university learning processes in Uganda make to higher education capabilities expansion among students (see also 1.4). Therefore, the current chapter presents and analyses the findings of this study, focusing on the influence of the learning processes on the advancement of higher education capabilities among university students. As already indicated in Chapter Six (6.1), learning processes are a subset of the public university education processes, which is a broader concern of this study (see also Figure 4.1). Just like in Chapters Six and Seven, the higher education capabilities this chapter focuses on are: learning dispositions; sociality and participation; practical reason; and science and technology (see also 2.4 and 5.10). Hence, this chapter presents a partial analysis of university education, thus supplementing the analyses in Chapters Six and Seven, where the findings covering the first two objectives of the study are presented consecutively (see also Figure 4.1). The sources of data for this chapter are the same as those already described in 6.1 and 6.2.

8.2 Learning Processes in Public Universities in Uganda and Higher Education Capabilities Expansion in Students: An Overview

The study investigated the dominant forms of learning employed by students at public universities in Uganda in order to determine the link between student learning processes and higher education capabilities expansion among students. It was conceptualised from the theoretical and literature reviews (in Chapters Two, Three and Four) that learning processes are a subset of the independent variable, university education processes (see also 4.5). From the conceptualisation in Figure 4.1, the data collection process followed and the inquiry yielded information that centred on the broad theme of learning processes that was further categorised in terms of: learning strategies and approaches; and individual involvement in research.

8.3 Learning Strategies and Approaches at Public Universities in Uganda

As already indicated in Chapter Four, “a *learning strategy* describes the learning activities students apply to study the learning material”; for instance selecting the main points in a text, thinking of examples, memorising certain points and so on (Ferla, Martin and Schuyten 2009:185). Learning is done through many ways. Some people learn by doing something or by listening to the spoken word; others learn by reading words, and/or observing a given phenomenon. The learning strategies and approaches in this chapter are closely related to the teaching strategies and approaches already discussed in Chapter Seven.

Group work and coursework

While the lecture method is the most common teaching approach at public universities in Uganda, when it comes to learning strategies and approaches most respondents attested that university students learn through methods other than listening to lectures. The most common ways in which public universities in Uganda facilitate learning is through groupwork and individual coursework (see also 7.4). For example, a lecturer reported:

If you form them (students) into groups, you can see some of them learn from each other on how to do particular things: how to go about writing a piece of assignment; how to go and ask for a placement for internship. You know,

collectively, there is collective learning(Lecturer 06 in Social Work in a Focus Group, SWFM1).

By implication, if used correctly, group work is beneficial because it enhances the development of some education capabilities such as practical reason, and sociality and participation. As one lecturer explained:

Another way of learning to 'live with others' and 'learning to be' is through the use of the group work method of teaching. Many times we give them (students) group work which builds their teamwork skills that enables them to live with others positively and cooperatively(Lecturer 08 in Education, Focus Group, EDFB2)

Therefore, when the students are in groups the group members learn from one another. Group members benefit from the talents of their colleagues thereby enhancing learning benefits for all members. For example, students learn social skills through group work.

However, from new graduates' testimonies, universities employ group work mainly as an assessment method and less as a teaching method meant to foster learning. One respondent reasoned: "To the best of knowledge...if you are too many in a class, for instance in OD, where we were over 100 students, if joined into groups he would easily mark in a shorter time. He would mark easily the few scripts..."(New Graduate, Interview, MSO7). In fact, group work is used mainly for the convenience of the lecturer since it reduces the workload to be assessed by, for example, reducing the number of scripts to be marked. Using group work as an assessment tool in some cases diminishes the learning benefits of this method. This arises from the fact that some students engage in free-riding, whereby some group members do not participate in group assignments but only turn up to append their signatures to group work before it is handed in to the lecturer for assessment.

Informal approaches to learning

Through day-to-day personal interface with their lecturers and university administrators, students at public universities in Uganda are enabled to learn new things, especially relating to everyday life and character formation. Students quietly pick their role models from among lecturers and university administrators. For example, things such as

ambition and concentration are learnt by students from, among others, the university staff. As one respondent indicates, “basically, our students learn from lecturer-student interaction because we do not give lectures as in what they are supposed to do” (Lecturer in Science Education, Interview LESB1). Therefore, for students to obtain the relevant general and complex capabilities, their university rolemodels (lecturers and administrators) must be having those capabilities. Atuniversity, role models in terms of possession of higher education capabilitiesare available although few.

Atpublic universities in Uganda, lecturers also invite experts from the workplace to come and talk to students. These experts in the field are usually working with relevant agencies that offer services such as education, health, employment, trade, refugee care, probation, rehabilitation services and so forth. The interaction between students and these experts enhance students’ learning. Students get an opportunity to listen to field experience and they are enabled to apply the concepts they have learnt. Therefore, students enhance their education capability enlargement through such an opportunity.

Internship

Students at public universities in Uganda learn through internship or fieldwork placements. Internships or fieldwork enable the students to learn directly from the practitioners. Fieldwork includes the attachment of students to social care agencies in the community, schools, government departments and parastatals where there is actual work that facilitates learning. In the current study, a focus group discussion revealed that “they (students) go for internship in a recognised institution. And, while there they get first-hand information when they go to societies to learn and then get the experience on what people are going through” (Lecturer in Social Work in a Focus Group, SWFM1). Similarly, in Development Studies at Mbarara University, hands-on training is encouraged through field placements. For example, students are sent to slums in the neighbouring Mbarara Municipality, where they are able to learn a lot from the experience of interacting with suffering people. Through such experiences, the students may learn the need to lobby for better urban policies.

Personal reading

Students at public universities in Uganda also learn through reading on their own, guided by reading lists supplied to them by lecturers. Lecturers encourage students to use the library and touse the internet. All these multiple sources of information provide learning opportunities. Indeed, one respondent reported:

Actually, in some of the classes we tell them [students] to read in advance, before we go and talk about something... because as a lecturer I give about 35% of what a student should know in that particular course. I only facilitate the learning process for the student. A student is supposed to take his learning seriously and use the library(Lecturer in Social Work, Interview LSWM1).

Students' motivation to read is quite often a result of the demands of coursework assignments that are received from lecturers. Students read as individuals and then discuss coursework questions or topics. Personal reading is helpful in understanding of subject matter.

Learning online

Online learning is one of the learning avenues students use. This approach is getting popular at public universities in Uganda. Students access the internet and download learning materials posted by their lecturers on a university website. These materials could be notes made by the lecturers or relevant articles from different publications. Because of the availability of reading materials on the internet, some students even avoid lectures. As one lecturer revealed:

Information Technology has just many wonders. ...our lab has internet there. Therefore, most of the time students go in the computer laboratory when coursework questions are difficult. Some students consult the e-resources, which I think they use to learn more than [what we teach](Lecturer 01 in Development Studies, Focus Group, DSFB1).

Students argue that the internet has the learning materials that they need to learn the subject matter. In the process, some students miss out on explanations and illustrations given by the lecturer in class. Quite often, the end result is insufficient knowledge and skills development among students. Therefore, when not properly managed, internet use in learning can disadvantage a student in expanding higher education capabilities.

Discussion method

In public universities in Uganda, students also learn a lot from group discussions. Students consider discussions to be one of the most effective ways of learning. As one respondent said: "Learning in discussions is useful because you get to learn a lot in a short time as opposed to reading on your own" (New Graduate, Interview MPS5). Another respondent observed: "As a student, specifically what I used to do, I would use revision to internalise what I got from the lecture room. Then from there, it would be group discussions to bring different ideas together to come up with one concrete solution to the problem" (New Graduate, Interview MSNG2). Yet another respondent revealed:

I would do a lot of individual learning as I would go to the library and carry out research. Then, we would also do group learning and we would do a lot of sharing with my friends and we would consult with lecturers in case we had not got what we wanted. So we would do a lot of things regarding learning (New Graduate, Interview NGME4).

Group discussions help students in sharing ideas if preceded by intensive private reading. The discussions facilitate the sharing and building of knowledge and skills such as practical reason. However, academic discussions with the major objective of learning as opposed to passing examinations or coursework are very rare at public universities in Uganda. Actually, in interviews nobody reported to have discussed topics for the sake of learning: most students discuss for the sake of passing examinations.

Respondents reported that the lecturers who take an interest in students' learning give them topics or questions for discussion. The discussion topics provide a focused approach to learning the subject matter. As one respondent reported:

Actually, our teaching culture is more of lecturer-individual learner and then we use questions to teach. Many times we encourage them to answer question; they make presentations in class..., and personally I give takeaway homework for presentation in class (Lecturer in Science Education, Interview LESB1).

These class presentations are very fruitful because they make students learn through participation and this enhances the retention of knowledge and skills. Presentations enhance confidence-building and learning disposition. However, the presentations are

rarely used at public universities in Uganda. In fact, only three out of nine lecturers interviewed reported to have been using the class presentations method.

Evaluation of learning strategies and approaches

The students of public universities in Uganda quite often wish to get very good degree grades, but they pay limited attention to what it takes to acquire the higher education capabilities. To acquire the education capabilities one needs to use deep learning approaches (see also 4.3.1). However, to many students at public universities in Uganda, learning, especially reading notes, is for the sake of passing the impending examinations and not for assimilating the subject matter. For example, new graduates were asked their opinion about the statement, “I used to revise my notes when there was no examination in the pipeline” (see also Appendix I, question 704). Their responses on the five-point Likert scale are summarised in Table 8.1 below.

Table 8.1: New graduates’ view on whether students revise notes when there is no examination in the offing

Questionnaire measure	Number of respondents	Percentage
Strongly agree	4	2.4
Agree	10	6.0
Undecided	1	0.6
Disagree	102	61.4
Strongly disagree	48	28.9
Total	165	99.3
Note: One respondent did not score this statement		

According to the data in Table 8.1, an overwhelming majority (90.3%) of the respondents disagreed and strongly disagreed that they used to revise notes even when there was no approaching examination. Most of the respondents seemed to have taken the revision of notes as essentially a means to prepare for examinations as opposed to acquiring knowledge and skills. It may, therefore, follow that when examinations are in the offing, such students will learn what they believe is likely to be set in the examinations.

This situation at public universities in Uganda is similar to what Biggs and Moore (1993:311) refer to as, "surface-motivated students [who] focus on what appear to be the most important topics or elements and try to reproduce them accurately. Because of this focus, they do not see interconnections between elements, or the meaning and implications of what is learned". This learning approach is limited in helping a student internalise the intended key learning outcomes. For example, by focusing on cramming, students miss out on learning benefits, such as what Hoffmann (2006: 3) calls learning to know, learning to be, learning to live together and learning to do. In fact, at public universities in Uganda, there are generally low levels of practice of deep learning in spite of the availability of different learning opportunities and resources such as libraries, internet laboratories and class notes. Therefore, as some students take 'shortcuts' to acquire their degree certificate, in the process they do not acquire the expected higher education capabilities.

In fact, the concentration levels of some students at public universities in Uganda are inadequate. The students' interest and resilience in studies are low. They are similar to what Marton and Saljo (quoted in Exeter et al. 2010: 763) refer to as disengaged learners, who settle for taking notes during lectures, memorising facts and important points, while targeting the minimum pass-mark in a given subject. But, as Toohey (1999: 13-15) explains, surface learning approaches are a result of time stress on students; the nature of the assessment system; course unit design; and students' limited decision-making on their own learning. Indeed, at public universities in Uganda most of these conditions exist; for example some assessment systems do not test critical thinking and problem-solving, but instead allow students to pass by regurgitating information from lectures and books (see also 7.5).

The surface approaches to learning by students of public universities in Uganda seem to be an extended and probably exaggerated part of a wider national 'system' of examination-focused learning. At many stages of the lower education system in Uganda, a lot of interest is focused on examination passing than on knowledge and skills acquisition and retention. As one respondent explained:

I think many of them transfer their learning styles of primary and secondary schools into the university setting. And the university has kind of encouraged it; it has nurtured it. But for a few that are grown up academically, you find them a little more of research-oriented. They would like to come and borrow a book from you; they surf the internet and visit the library quite often. If you opened up a discussion group on the internet then they are there active. [However] many of them would like to throw it back to you the way you gave it. Others would like to do it differently, and then you can gauge that this person has really learnt: there is value-added in his learning(Lecturer in Education, Interview FCSM1).

Another respondent echoed similar sentiments:

The learning processes are there and we try them; but the problem is the client group (students). You know, before learning takes place everybody does their bit. Personally at my level as a senior person and a professional social worker I am doing my part, but my students; my goodness! They depend on my sketchy notes (Lecturer 07 in Social Work in a Focus Group, SWFM1).

Indeed, only a few are academically 'grown-up' and, therefore, are focused students. The majority of the students appear not serious. In such cases, lecturers are disgusted with students' reluctance to study. Indeed, some students simply want a degree certificate without going through the rigours of university studies. For example, students have all sorts of excuses for avoiding classes or for not reading ahead of the lecturer before they go to class. Such students inevitably disadvantage their education capabilities expansion opportunities.

Furthermore, in the questionnaire responses similar patterns of students' limited interest in learning emerged. For example, question 708 in the questionnaire required the respondents to indicate whether they used to be "more interested in acquiring knowledge and skills than in high grades"(see also Appendix I). The responses were tabulated and are presented in Table 8.2 below.

Table 8.2: New graduates' opinion on whether they were more interested in acquiring knowledge than high grades at university

Questionnaire measure	Number of respondents	Percentage
Strongly agree	6	3.6
Agree	47	28.3
Undecided	11	6.6
Disagree	75	45.2
Strongly disagree	26	15.7
Total	165	99.4
Note: One respondent did not score this statement		

From the data in Table 8.2, it can be noted that only 31.9% (3.6% strongly agree and 28.3% agree) were interested in acquiring knowledge and skills as a primary objective in their university studies. Others were either primarily interested in high grades (50.1%) or unsure of what was their main focus out of these two alternatives. Data in Table 8.2 may further imply that the majority of students enter university not focused on knowledge and skills acquisition. This orientation may lead to low levels of higher education capabilities expansion as students struggle to obtain high marks using any accessible means, legal or illegal.

Considering the qualitative responses in the interviews, some students at public universities in Uganda can be classified as what Marton et al. (2004: 409) describe as people looking at education in terms of “learning as acquiring knowledge” where knowledge is viewed quantitatively, and understanding measured in terms of ability to reproduce what one has learned instead of “learning as transformational” where learning is an instrumental component in developing a person (see also 4.3). Higher education capabilities are acquired better by the latter than the former category of learners. Students focusing on transforming their education capabilities tend to get involved in deep approaches to learning that quite often demand doing research of whatever kind on their own. And, as Jungert and Rosander (2009: 139) attest, students' learning can be enhanced if they become active participants in the learning processes and in the development of the learning atmosphere and not simply as passive recipients. However, as indicated in this sub-section (8.3), the learning processes at public universities in

Ugandeseem to be not well-guided: students are not informed of how to learn. This role of teaching them how to learn appears neglected by the public university lecturers and the entire university management system. The neglect allows students to avoid their academic responsibility through dodging classes, free-riding in group work and avoiding doing rigorous research in their relevant disciplines. In fact, research levels at the two universities are low.

8.4 Level of Research in Public Universities in Uganda

The study explored the level of research in public universities in Uganda owing to the conceptualised link between research, as an indicator of the learning processes sub-variable, and higher education capabilities expansion. Research in a university setting is apparently instrumental in higher education capabilities expansion among students. Research and generation of research products are some of the useful ways of involving students as active participants in the learning processes. The products of research benefit society in general and the individual researcher in particular. The individual researcher develops inquiry skills and enhances his mastery of the subject area under research.

In addition, in some cases employers recognise the high quality of education capabilities in students who are taken through research practice. Sometimes, public universities in Uganda receive feedback on the quality of their teaching and research. One lecturer reported about positive feedback from the students she had guided in research:

Me I have had my students call me: ‘Madam thank you very much for being hard on me when I was doing my research, because that is what I am facing here in the field... Thank you so much during the time of my research, the skills, and the cautions that you gave me...’ So I think research is helpful; it is the practical element of the course (Lecturer 04 in Development Studies, Focus Group, DSFB1).

Indeed, research is a very relevant component of the bachelor’s degree level in some courses at public universities in Uganda because it exposes students to the realities of the world and enhances their writing skills which they use during and after the university. Those who have done it come to discover or understand the challenges that businesses, communities or organisations face. In some cases this discovery launches students on a

path to thinking about the possible solutions to different problems in life. In the process of thinking, they are developing higher education capabilities such as practical reason and learning dispositions.

Research teaching and practice

At the public universities in Uganda, research is taught in some departments, such as Social Work and Social Administration; Sociology and Anthropology; and Political Science and Public Administration at Makerere University. Research is also taught in the Departments of Development Studies both at Makerere and at Mbarara universities. A respondent reported:

Research paper is normally given at the end of the course and every student is supposed to write a dissertation. In second year, our students are introduced to research methods by the lecturers... And in the third year they go through the process of proposal development, collection of data and at the end of the semester report writing(New Graduate, Interview MSNG2).

In some departments, such as Management Science, Development Studies, and Social Work and Social Administration, research methods is a compulsory and core paper and includes a dissertation for every undergraduate student. But, in other departments, such as Sociology and Anthropology, Political Science and Public Administration, and Education, research is offered as an optional paper.

Where research is offered, students are taught the basic research skills and are allocated supervisors who guide them throughout the process of formulating their research designs, collecting data, analysing them and writing research papers. This entire process of research enhances knowledge and skills development. In fact, a respondent noted:

Research is a good learning process for students because we have students who go to do a research on their own [thereby] becoming more mature. Actually, when they leave university they have developed more confidence especially in terms of undertaking a research project and executing it (Lecturer in Social Work, Interview LSWM1).

The research theory paper is taught in the first and second years of university studies. Students build on that knowledge to carry out their research work in the third and final year. Where the lecturers concentrate on research teaching, a positive impact in terms of higher education capabilities expansion among students is made. In such a case, the quality of students improves, especially when they are taught by well-informed lecturers.

When developed, research skills enhance students' confidence in writing papers, both academic and practical-oriented ones. Writing research papers significantly improves students' higher education capabilities that are transferrable to the workplace. Among other things, the research process cultivates a lot of discipline in students, making them informed and useful citizens. For example, a respondent explained the value of research thus: "You find out what you don't know. You want to know the reason why it happened and it is good. Maybe, something has been disturbing your mind and you want to know the reason why and you go out and you find out" (New Graduate, Interview MDS6).

Another respondent explained:

The value of research to me is that it empowers students, they get knowledge and learn to speak from an informed point of view unlike if you do not engage in research, you will always be gambling. 'I hear things are like this...' But if research is done, it gives you that confidence when you are speaking out on a particular issue (New Graduate, Interview MPS5).

Research also enables students to link theory to practice and to test theory application during their studies. One respondent revealed his experience:

That [research] paper really widened my brain and it polished on my skills of interaction in the communities and at different levels. For this reason, while I was doing it [the research]... I went to the mass media; I moved to the radio; I evaluated their programmes... Then I went down to the communities trying to evaluate; you know, how the radio is doing... and did so many other things. It was really so nice to me and widened my view (New Graduate, Interview MSO7).

This testimony shows that the benefits of research are real. Indeed, research is crucial in the higher education capabilities expansion process. However, few courses at undergraduate level at public universities in Uganda have a research component.

Student participation in research

The study attempted to find out the rate at which students participate in research study and/or practice by writing a research paper. In the questionnaires, a direct statement was presented to respondents, seeking their opinion, namely: “My bachelor degree studies involved a research study course” (see also Appendix I, question 803). The opinions of respondents are summarised in Table 8.3 below.

Table 8.3: New graduates’ response on whether their bachelor degree studies involved a research study course

Questionnaire measure	Number of respondents	Percentage
Strongly agree	10	6.0
Agree	35	21.1
Undecided	2	1.2
Disagree	107	64.5
Strongly disagree	12	7.2
Total	166	100

Table 8.3 reveals that the majority (71.1%) of new graduates did not participate in research studies and/ or practice during their time as students at university. This statistic implies that at undergraduate (first-degree) level research teaching is not widely practised in public universities in Uganda. Limited research teaching and practice hinders students from acquiring some higher education capabilities such as learning dispositions, practical reason and science and technology.

Qualitative responses revealed similar information on research. For example, in the Department of Political Science and Public Administration as well as those of Development Studies and of Sociology and Anthropology at Makerere University the research paper is optional, in spite of its benefits, as already indicated in this sub-section.

Therefore, some students do not select it. As one respondent reported:

Starting with our year (2006), research became an option. Ah, and the claim was that there was no funding for it. So you can now see that most students would prefer to go through university without doing research because of the problems related to it. Problems like supervisors being away, [and] supervisors making it hard for them to actually pass the research. So it becomes an option. About 90% of the students leave the university without doing practical research and that is a

limitation in their areas of work, and for our case being civil society. If you have not done research, in civil society it becomes very challenging(New Graduate, Interview MPS1).

Another respondent confirmed:

Dropping the research paper also stretches even to other faculties, for instance in FEMA (Faculty of Economics and Management) where research is optional, and many of them, my friends, dropped it. ...the perception is that if you do research, when it is optional you will not finish; because the supervisors will not be there. You will take a lot of time to do it.No one will be there for you to guide you. Therefore, students who have options of doing research or opting out of it, they end up opting out of it to avoid all those perceived eventualities(New Graduate, Interview MSW8).

As indicated in the two quotes, students who opt for the research paper meet some university-based problems that frustrate their involvement and interest in research. The big number of students and the limited number of supervisors seem to a big limitation to students' participation in research practice. Therefore, some students consider the research paper burdensome; however, a few students may also not appreciate the value of research.

It was also noted that some students would like to do the research paper but the problems associated with it discourage them. For example, a respondent revealed:

I would think that every student would like to do research if it is conducted in a way that is professional. It is supposed to be a process that is enjoyed by every student at the university. But the history of research at the university has been such that it delays students' graduations because lecturers are away. Lecturers are away on further studies abroad or maternity leave and they make it hard for the students [doing research] to receive their marks. So of late it is a relief that it is not there because of its related problems(New Graduate, Interview MPS2)

In addition, research is reportedly discouraged by the dearth of teaching and learning resources such as lecture rooms, library space, and learning technologies at public universities in Uganda. Hence, research opportunities, though available in the public university education processes in Uganda, are not fully exploited by the students owing to limitations within the university education system. Most new graduates tend to lack elementary research skills. For example, even among the students opting for research,

most seem not to know that plagiarism is an academic offence and this anomaly could be a result of poor training at university level.

Technology use and plagiarism in research

There seem to be quality problems in the research reports of undergraduate students at public universities in Uganda, ranging from editorial issues to substantive matters such as misrepresentation of facts or intellectual dishonesty. In fact, cases of plagiarism and impersonation are sometimes discovered during the assessment of students' research work. For instance, a respondent revealed:

...one of the challenges which have come up is that we do not tend to detect plagiarism. But when you have a very big number of students most of them logging on the internet you get problems. People are just doing a lot of things on the internet and they just put things right there. Those students who are 'sharp' will always do these things very fast. So, when they are many students to supervise and you find that you are also teaching, and also doing research, it becomes really a very big challenge to get the real quality work from these students. And, those who are 'bright enough' will always employ other people to write for them the work. So, when the number is big, really, you cannot critically supervise the students' work to the best of your ability...(Lecturer 02 in Development Studies, Focus Group, DSFB1).

Another respondent explained:

I would say, yes, we do not have mechanisms to guard against plagiarism... I did not see any such programme as anti-plagiarism. After all I submitted a hard copy of my work; I did not hand in a soft copy... Professors would have been able to detect plagiarism if they were there to read the work in detail. For some people who can sit and read students' work, fine, they can avoid such problems... There is a habit, people will get this book and quickly run to objectives then, rush to findings and conclusions and after a few things they have finished. They will not look at the literature... So I can say plagiarism within our systems where lecturers are not reading students' work, cannot be avoided (New Graduate, Interview MSW8).

From the respondents' perceptions, it appears that the supervisors and examiners cannot easily detect plagiarism and the use of impersonators (researcher-mercenaries) owing to the big number of students doing research. It could also be a question of low commitment on the part of the lecturers. The big numbers seem to limit the time available

to supervisors to concentrate on the research papers. The overstretched staff-team may not develop the necessary knowledge and skills among university students.

Moreover, the level of use of science and technology at public universities in Uganda is still low compared to universities in developed economies. Otherwise, science and technology departments would have made plagiarism detection software available. Such software seems to be unavailable at any public university in Uganda, including Mbarara University, which is a university of science and technology. In fact, a respondent complained:

We have talked about it (plagiarism detection software), but also those things would come with personnel and training of our staff, and also resources... We have managed to detect [some] plagiarism at a level that we are. Students have been made to repeat courses, and also we are aware that those science and technology programmes come with a cost of training; and really it is something that has come up in one of our meetings (Lecturer 04 in Development Studies, Focus Group DSFB1).

As already indicated elsewhere, the level of computer information and technology proficiency is relatively low among staff and students at public universities in Uganda (see also 7.4). The quality of research equally gets affected by this deficiency at the universities. Moreover, the limited number of teaching staff seems to create room for the low quality of research products. Consequently, the potential higher education capabilities developable through research are compromised.

Research in public universities in Uganda: an evaluation

Some problems that constrain research practice, however, originate from the difficulties that the students themselves face and such problems limit the quality of the research papers. For instance, one respondent explained that “some of us were faced with problems of [lack of] finances because we were private students and nothing would come our way in terms of funding. And another one was a problem of accessing data” (New Graduate, Interview MSNG1). As one respondent revealed:

The major limitation is funding; students complain that there is no money. So, many times...students say ‘I do not have the money to do research. Where do you get the money to do the research?’ So, even then when we talk of, for example,

writing research papers, we are like: 'the computers are not even enough'. So they are like: 'How?' Fortunately, we are still liberal; we receive handwritten work [*sarcastic laughter*] in form of coursework (Lecturer in Science Education, Interview LESB1).

Such challenges limit the quality of research papers and consequently the development of the research skills. Research is therefore not demystified at public universities in Uganda and this creates fear in students, leading them to opt out of the research paper. The history of research at university has been such that it delays some students' graduation because lecturers are away or are too busy to supervise the students assigned to them. So the fact that research has of late become an option in some courses is a source of relief to some students. Therefore, where research is optional, dropping the research paper is, therefore, an academic survival strategy for a student who wants to graduate on schedule. The resultant limited participation by students in research leads to loss of knowledge and skills that would have otherwise been acquired by them at university.

Indeed, it appears that research is handled haphazardly and the acquisition of the expected knowledge and skills is often missed. However, even some of those students who are interested in the field research paper are denied the opportunity to do it owing to the scarcity of research resources. Furthermore, the selection criteria for students to be considered for practical research are sometimes not clear. For instance, a respondent revealed:

Me I was not very lucky, I studied research as a course but I did not do [practical] research because we were so many; that is what they (lecturers) told us. And, you know we did the research paper and they had to choose like 20 to do the real [practical] researching. ... I do not know how they chose the small number; but they put up a list and said these ones would go on with the research; that the supervisors were not enough (New Graduate, Interview MDS6).

The existence of a very limited number of student researchers, although dictated by the very high student-supervisor ratios, disadvantages students. Some of the students interested in doing a research paper thus miss out on the opportunity to develop research skills.

In departments where classes are characterised by big numbers (more than 100) and the research paper is compulsory, lecturers seem to be 'overloaded' with supervisees. For example, in the Department of Development Studies at Mbarara University, lecturers struggle to effectively supervise students because of the big numbers. A respondent observed:

We are not unique [*sarcastic laughter*], we have big numbers but we are obliged; that it is part of our work and we have to do it. And, we give extra attention to the research report. For example, if the semester is ending in May you find that the research reports are being handed in June-July. So we always extend that time to make sure that at least most students finish their research report. We put into considerations constraints on teachers; the teachers who are teaching, examining and they are also supervising research (Lecturer 04 in Development Studies, Focus Group DSFB1).

Another respondent confirmed:

Interestingly, research is such an activity that needs a lot of effort; but within our circumstances...it is very difficult for people to concentrate on research very, very well. Why? In the first place, student numbers are very, very high. Therefore supervisors cannot fully accommodate and give them enough time. Two, limited commitment among the stakeholders themselves: the lecturers... I should say the benchmarks for good research are there, but other factors, such as commitment, lack of resources, and so on are hindering practical and relevant research in the university (New Graduate, Interview MSW8).

Indeed, the lecturers seem to be overwhelmed by the big numbers of undergraduate students to supervise each year. According to the respondents from Mbarara University, the number, for example, ranges from 6 – 22 supervisees every last six months of an academic year. Secondly, the perceived limited commitment to research is a disincentive to research proliferation. These two factors, inter alia, impact negatively on the quality of research papers and research-related education capabilities developed by students.

Similarly, the new graduates' writing skills do not measure up to the standard expected of a graduate (see also Appendix A). These days, some students graduate from public universities in Uganda when they lack basic writing skills, whether for academic papers or general papers. The deficit is acknowledged by both the new graduates and the lecturers. As one respondent revealed:

There are those competences that are lacking in research; knowing what I should quote and be creative, put it in my work and acknowledge it for others to read. Although we are teaching writing skills, we are still lacking by international standards. They (students) are actually lacking and we need to do something about it(Lecturer 04in Development Studies, Focus Group DSFB1).

Another respondent observed:

Some supervisors do not read the students' work: work has been approved but you read many typing errors, many conceptual errors and many research-related errors. So I can say research has been going down over time. If you picked 10 dissertations for instance, move into the Department of Social Work pick 10 from the last 10 different years, you will find that the trend is coming down. The effort on research is decreasing, because of the concentration, because of the resources available to invest in research for students: the trend is coming down(New Graduate, Interview MSW8).

The quality of research skills in general and writing skills in particular seems to be declining. There is a feeling that students do not receive enough guidance to hone their skills. Even when lecturers teach something, at times they do not refine it to the required high standards to enable the students to acquire higher education capabilities (see Appendix A). It appears that sometimes students are left at a mediocre level of knowledge and skills proficiency.

In this chapter,quantitative analyses were also done at inferential level to determine the correlation between learning processes and higher education capabilities expansion. The inferential statistics helped to establish the effect of the learning processes sub-variable on highereducation capabilities expansion among students in Uganda.

8.5 Correlation between Learning Processes and Higher Education Capabilities Expansion

Correlation analysis was performed in order to quantitatively explain whether or notlearning processes in public university education in Uganda relate to higher education capabilities expansionamong students. The analysis was in line with what Amin (2005: 382) holds, i.e. correlation describes the relationship between two variables. In this study, with the use of the Statistical Packagefor Social Sciences (SPSS), the responses from the questionnaire on the sub-variable *learning processes* were quantitatively

analysed(see also Appendix G). This analysis also helped to measure the magnitude and direction of the relationship between learning processes and higher education capability using Pearson's product-moment correlation index. The results of the analysis are presented in Table 8.4.

Table 8.4: Correlation between learning processes and higher education capability expansion

		Learning processes	Capability expansion
Learning processes	Pearson's correlation	1	.506(**)
	Sig. (2-tailed)	.	.000
	N	166	166
Capability expansion	Pearson's correlation	.506(**)	1
	Sig. (2-tailed)	.000	.
	N	166	166

*** Correlation is significant at the 0.01 level (2-tailed).*

As shown in Table 8.4, the learning processes (independent sub-variable) indicates a positive correlation coefficient of 0.506(**), with a significance value of 0.000, significant at the level of 0.01. By implication, the learning processes are positively related to higher education capabilities expansion among students at a significant correlation coefficient of 0.506(**). This relationship implies that, all factors held constant, when there is any positive change in learning processes, there will be a corresponding change in higher education capabilities expansion among students, and vice versa.

8.6 Regression Analysis for Learning Processes and Higher Education Capabilities Expansion

In addition to correlation analysis results, regression analysis was performed to establish whether or not learning processes predict higher education capabilities expansion in

students at public universities in Uganda. The analysis revealed a significant level of predictability, as presented in Table 8.5

Table 8.5: Regression analysis for learning processes and higher education capabilities expansion

Model		Unstandardised coefficients		Standardised coefficients	t	Sig.
		B	Std. error	Beta		
1	(Constant)	2.374	.211		11.230	.000
	Learning processes	.429	.057	.506	7.514	.000
Model	R	R square	Adjusted R square	Std. error of the estimate		
1	.506(a)	.256	.252	.38356		

a. Predictors: (Constant), Learning processes; Dependent Variable: higher education capabilities expansion

Table 8.5 (above) shows that learning processes have a standardised regression coefficient (beta) of 0.506 and where R squared (R^2) equals 0.256 or 25.6%. This computation means that learning processes explain the variations of the dependent variable (higher education capabilities expansion) by 25.6 %. The finding suggests that university learning processes are positively related to higher education capabilities expansion among students by 25.6 %. By implication, learning processes have a significant effect on higher education capabilities expansion among students at public universities in Uganda. The 25.6% perception index further suggests that learning processes, as a sub-variable of the independent variable (university education), accounts for 25.6% of the variations in the dependent variable (higher education capabilities expansion), and other factors could be responsible for the rest of the variation (see also 6.7, & 7.7). However, the overall influence of university education sub-variables (curriculum content, learning processes, and teaching processes) on higher education capabilities expansion among students in Uganda is affected by a

number of independent extraneous variables or factors.

8.7 Extraneous Factors Affecting the Influence of University Education Processes on Higher Education Capabilities Expansion

The study explored the conversion factors that affect the role of public university education processes on higher education capabilities expansion among students in Uganda. The extraneous variables are the conversion factors. Actually, an extraneous variable is a factor not measured in the study that may increase or decrease the magnitude of effect between the dependent and independent variables. Such a variable may compete with the independent variable to explain the dependent variable (Amin 2005:95; Kumar 1996:51). Basically, these are the factors that can constrain or facilitate public university education in its contribution to higher education capabilities expansion (see also 4.5). The current study adopted Robeyns' (2003: 12-13) 'conversion factors' that affect the capability expansion process as extraneous variables in the analysis of findings in the current study. The current study contextualises and expounds on Robeyns' (2003) 'conversion factors'. The factors are social, personal, and environment-related characteristics (see also 4.4). These factors are briefly explained because of their relevance to the study.

8.7.1 Social characteristics

Social characteristics are basically community-related factors that affect the relationship between public university education and higher education capabilities expansion among students. Data from respondents suggest that the social characteristics applicable to public universities in Uganda are: students' attitude towards education and their perception of it; lecturers' attitude towards students; the perceived social pressure from university administrations; and peer influence among students.

Students' perception of university education

The study established that the students enter university with unrealistic expectations of university education, given the historical exclusiveness of this level of education in Uganda. From 1949, when real university education began in Uganda, to the early

1990s, very few persons gained access to university education. Even when public university education became widely accessible starting in the mid 1990s, students continued to enrol in university more for prestigious reasons than for knowledge and skills development. This perception has persisted and it derails some students from concentrating on their studies.

In some cases, the perception, on the part of students, of the prestige of university education is exaggerated. As one respondent revealed: "Some of these students who come here (at university) are looking for status in society by virtue of having completed university education" (Lecturer 08 in Education, Focus Group EDFB2). Another one added: "Most people think that reaching the university is the way to go. They must reach the university because being a graduate is prestigious" (Public Official, Interview G2).

Yet another respondent remarked:

People think that when you acquire a degree, you get that paper and you have achieved something. Are they coming here for any capabilities or they are coming here to boast, 'I have got a paper'? They are simply coming to boast! So, the amount of commitment the student is going to put in [studies is low] and all they are looking at is 'I am going to get a paper'. They are not looking at their career, they are not looking forward to see 'this is what I want to be' ...but they are just looking at acquiring a piece of paper (Lecturer 02 in Social Work, Focus Group SWFM1).

Furthermore, a different respondent reported:

Over the years, we discovered, there used to be a tendency of first years (fresh students) coming and carrying on the joy of passing 'A' level (advanced secondary school level) up to the university, to the point, you know, of coming to realise when it is too late, and they are doing exams, and they are performing poorly. They perform badly in the first semester examinations... (Lecturer 07 in Education, Focus Group EDFB2).

Indeed, at the time of enrolment, for some students the excitement of joining overshadows the objectives of university education, namely the acquisition of complex knowledge, capacities, skills and attitudes. Hence, students waste a lot of time concentrating on peripheral activities such as watching television at the expense of education in the false belief that a degree is almost guaranteed even with minimal effort.

Therefore, this kind of thinking among university students, inter alia, curtails the role of public university education in higher education capabilities expansion among students in Uganda.

Social pressure and lecturers' conception of teaching and learning

The social pressure exerted on lecturers, in terms of examination administration, contributes to the low learning levels of students. The respondents indicated that the university administrations expect lecturers to deliver examination marks indicating good passes. In the name of building a reputation, there is lenience in examination assessments at department level to compensate for the poor performance standards and probably for poor teaching. For example, a respondent argued that this practice happens because students have to pass the examinations anyway:

Otherwise if I were to fail my class, more than 50% of them would fail and I would be put to book why my students are failing. But my view is that if a student knew that if "I do not put in enough effort I am going to fail and repeat first year", then he would put in effort...But there are [negative] implications of failing students. So, somehow we pass them (Lecturer 02 in Social Work, Focus Group SWFM1).

This lax behaviour on the part of lecturers contributes to the low levels of higher education capability developed in students. The process is like a game of evasion of responsibility aimed at 'saving face'. In some cases, even when the students do not score the pass mark, they are helped to pass through 'compensation'. Therefore, some students complete university education with limited skills due to the social pressure exerted on their lecturers.

In addition, the seemingly negative feelings among some lecturers, as already indicated elsewhere in this thesis, hinder public university education from expanding student capabilities. In some cases, it is a question of a resigned attitude on the part of lecturers who, for example, believe that their students do not qualify to be at university or that they are unserious students. This thinking affects the teaching approaches negatively, especially where the lecturers believe that, after all, it is not easy to change the students into more responsible citizens. Therefore, the lecturers may teach students less than what the students are entitled to.

Furthermore, the lecturers seem uncertain whether it is their job to transform students into better and scholarly people or whether it is the personal responsibility of these 'adult' students to take care of themselves intellectually. As one respondent lamented:

I try, but the problem is that they are not teachable [*general laughter from focus group members*]some of them I would say 40% of the students whom we get currently, they are not teachable students. They can [only] cram and they cannot put together pieces of knowledge(Lecturer 07in Social Work, Focus Group SWFM1).

A similar sentiment was echoed by another respondent:

...you know for us at university levels we are like [positioned] at the end of the production line... My friend, by the time the tree grows roots, it is hard to bend... So I think we need a real thorough re-orientation of the whole education system such that the person who is receiving the product [is happy with it]. Even when you are trying to refine it (the product), you refine it with some fundamentals (Lecturer 01inDevelopment Studies, Focus Group DSFB1).

Another one asserted:

Me I think, whether there would be something to be done at the university but foundation matters. Given the way people come in [the university], there is nothing much we can do. ...the products of Universal Primary Education; this quota system where government is getting people from districts, the best from [some] districts, yet they would not be the best people to be [enrolled]. They would not even qualify to be at the university in our particular course which requires a lot of analysis. So, whether our curriculum is okay or whether our system of transmitting knowledge is okay, but the products [are not okay] (Lecturer 03 in Social Work, Focus Group SWFM1).

These arguments mirror lecturers' psychological resignation arising out of students' academic incompetence. Indeed, lecturers believe that it is hard to develop skills and capacities in the students they receive at the public universities in Uganda. This thinking may negatively affect the entire approach to the education processes in the university.

However, it is possible that the lecturers' absolving themselves of their responsibility to build the higher education capabilities among students is due to the limited pedagogical skills that thelecturers themselves possess (see also 7.4). This scenario is similar to what Hativa (2000:16) found out, i.e. many university teachers do not have a solid

knowledge and skills base for teaching because they do not receive sufficient preparation in teaching methods in their career progression (see also 4.2.1). Therefore, lecturers' limited pedagogical skills impose limitations on higher education capabilities expansion among students at public universities in Uganda.

However, some few lecturers have found a way to transform students. These lecturers believe that changing a student into a better person is possible. For instance, a respondent offered the following explanation:

At one point we were getting a problem with first year students. Their performance in the first semester in the university was rated poor. This could be attributed to the quality they come in with. But then, this being a professional department by the time they are in the second and third year, they have acquired competencies and skills and change of attitude that qualifies them to be very good teachers (Lecturer 07 in Education, Focus Group EDFB2).

Some lecturers give students quite a lot of assignments. The assignments make students very busy and keep the students focused on their studies. However, such cases are very rare at Makerere University but mainly transpire at Mbarara University. In such a scenario, students are usually busy in the library reading, doing assignments or preparing for examinations.

Peer influence

It is possible that peer influence is a social constraining factor in higher education capabilities expansion among students. Some students with a negative attitude influence their peers and sway them away from following university education fully. As a consequence, students lose out on the knowledge and skills they would have acquired from the university education processes. In this connection, a respondent observed:

There are some who are weak and there are some who are...very great students. But you see they do not exist in a vacuum; they are in interaction. Some of these brilliant ones are let down or pulled down by poor students – the poorly motivated ones. For example, a student reads so that he gets a good degree, good skills, good performance, and then be able to compete with others out there in the job [market]. But these other weak students laugh at him for reading as if he is in secondary school arguing that this is a university [*laughter from another respondent*]. They laugh at him that he is a bookworm and so the environment of the students [is a problem]. They find at the end of the day that they are victims of

circumstances. They perform poorly. They get poor degrees...(Lecturer 07 in Social Work, Focus Group SWFM1).

Peer influence in this context negatively affects both academically weak and strong students. For example, the academically weak students miss out on the sharing of knowledge and ideas from their academically gifted peers. The resultant effect is a loss for both categories of students.

This peer influence scenario relates to what Sen (2002:85) refers to as “collective capabilities” when he describes the situation of groupwork that is “socially dependent” on the capabilities of the members in a group, which when taken away from group synergies cannot cause an impact. In the context of this study, the collective synergy is not at the stage of utilisation or application of a capability but at the formation stage, where in the process of developing an education capability, group behaviour disadvantages this process. To this end, a negative synergy is built, thereby limiting the development of education capabilities in students. This leads to socially influenced processes of education capability failure in a group.

8.7.2 Personal characteristics

These characteristics include individual learner-related characteristics such as intelligence, individual career plans, and level of interest in studies. Some students in Public universities in Uganda who take a keen interest in their studies and are committed learn a lot, especially through self-teaching in libraries and from discussions with peers. Meanwhile, those students who take little interest in learning or who absent themselves from classes miss out on some of the knowledge and skills they should have acquired from the university. Describing the non-interested students, one respondent mentioned:

They (students) even tell you off your head that ‘you are giving us too much’. ...and they do not read. So however much we are trying as lecturers and professionals, we are faced with clients who are not motivated. And, I think this is why I say we have a lot of immature students who do not know what brought them here (Lecturer in Sociology, Interview LSAM1).

Indeed some students in public universities in Uganda complete university when they have attended only ‘bits and pieces’ of their course. During assessment of students’ work,

lecturers find glaring evidence of knowledge and skills deficiencies unexpected of a university student. The deficiencies are partly due to students missing classes and partly due to other factors. Lecturers complain about students' limited learning capabilities noticeable even during the teaching processes.

The differences in higher education capabilities developed among students result partly from some students not taking university education seriously and partly from other factors. For example, some students are less interested in their studies than in leisure activities that are not mentally demanding. One lecturer said:

Sometimes you get frustrated that they (students) are not able to think. You find that you have taught in class and you have given specific examples and you give an examination, which is the way we mostly assess them here... You find that the students are not able to think beyond the example that you gave them. ...almost the entire class will reproduce the same example (Lecturer 02 Social Work, Focus Group SWFM1).

In addition, one public official observed:

From my own personal information I know that most of those people (students) do not attend lectures. So, they have relaxed. They only go there to do coursework; go there to do their own businesses and also go there to do final exams. So, people go to school for the sake of acquiring a qualification but not necessarily knowledge. I have known quite a number of young people who have degrees, but when you interact with them, really, they do not present anything that is of quality (Public Official, Interview P5).

Yet another respondent observed:

I know we try our best, many of us try our best to mentor them, to try to help them, but many of them are not even interested, and specifically the reading culture is down, and it is worsening. I know it is generally bad countrywide; but the kind of students we receive today is actually worse... they do not want to read, they do not want to ask questions, they do not want to concentrate, they just want to be at the receiving end. ...so the student quality is poor (Lecturer 07 in Social Work, Focus Group SWFM1).

Students such as those described by respondents put minimal effort into their studies and simply expect to pass the examinations. In such circumstances, as already emphasised in this thesis, all the students are interested in is the degree certificate. It is,

therefore, unlikely that such students can attain higher education capabilities such as learning dispositions or practical reason.

The researcher found that besides those students who were only interested in acquiring a degree certificate were those who actually focused on attaining the bare minimum mark. This phenomenon came up during individual interviews when one respondent reported:

About 30% is of seriously committed students and the other 70% I can call them mediocre. They just come and attend the lectures. By the way, we had a common saying: 'All I need is surviving a retake'. Someone is aiming at 52% or 55% [the bare minimum passmark] to escape a retake. ... There are in mediocrity: 'as long as I pass'. That is what you will find students telling you: 'at university you read only before exams' (New Graduate, Interview MSW8).

Indeed, this revelation seems to imply that some students are simply looking for a qualification regardless of its value. Usually, students receiving a pass mark are those who, in the wisdom of most examiners, have barely internalised the knowledge or skill required by such a course or paper. One student observed: "Well, but when we went to the university we thought not much was required of us. They told us that there is a lot of freedom in the university so we thought that going to the university was all about freedom" (New Graduate, Interview NGME4). The students in general seem to be poorly self-motivated. Some of the students behave as if they are too young to follow university education. Therefore, such students end up not developing the requisite higher education capabilities.

8.7.3 Environmental characteristics

These are characteristics found within the university education system or even in the national education system that can constrain the process of complex (education) capability development in students at university level. The environmental factors may also encompass the entire Ugandan socioeconomic system where the public universities in Uganda are located.

Lax national education system

It is likely that the education system in Uganda has some limitations to laying the foundation for the eventual expansion of higher education capabilities among students at the university. The education system, especially the primary and secondary school levels, does not adequately prepare students for university education (see also 6.5.2). The primary and secondary education system is already riddled with quality problems. For example in 1997, the Government of Uganda introduced universal primary education (UPE), which is free and compulsory. UPE led to an upsurge in primary school enrolment, which witnessed an increase of more than 100%. However, this increase was not matched by a corresponding increase in resource inputs in the primary education processes. Resources such as classroom accommodation, teachers and scholastic materials have since 1997 been inadequate. This inadequacy means the production of students of sub-standard quality who complete the primary school cycle and enrol in the secondary school cycle (see also 1.2.2). In essence, some students enter the secondary school system when they are poorly prepared for secondary education. Such students are subsequently ill-prepared for the rigours of university education and, therefore, fail to acquire the knowledge and skills expected of a university graduate (see also Appendix A). In this way, the education system ends up negatively affecting the quality of university graduates.

In Uganda, teaching in some secondary schools has degenerated from helping students analyse issues to rote-learning through a question-and-answer kind of approach. The students are heavily dependent on summarised notes from pamphlets usually having content based on prior national examination questions. Students collect most of the questions that were set in the national examinations in a given number of years and attempt to cram the answers to such questions. Similarly, at university students want to do exactly that. For example, as one lecturer observed: "Students do not want to study your modernisation theory, and every topic they have ever analysed; they want you to give them a question on modernisation theory, give a possible answer, then they will study it" (Lecturer in Sociology, Interview LSAM1). The students do not want to read extensively; they are used to the secondary school system where cramming can lead to

passing. This approach enables some students in secondary schools to get marks which they do not deserve only to end up at university in very demanding courses which, at times, they cannot intellectually manage. This surface approach to learning disadvantages students in knowledge and skills development.

Inadequate career guidance

Apart from students being academically underprepared to undertake university education, those at public universities in Uganda also lack career guidance, both at the earlier stage of secondary education and while at university. Secondary schools pay limited attention to career guidance and social skills, mainly emphasising the examinable subjects. By the time some students enter university, they are not sure what they want in life. A respondent reported:

Our schools in Uganda, a few can do that (career guidance). Remember, when people are going to the university, they are so curious. They are so curious about everything. One day, from day one, you step in this class. You find colleagues with whom you were with during 'O' levels (secondary school). They are going for the other course, and then you go. Then you think this is something nice, then you say, 'let me apply for change of course' without knowing what this course is all about ... Students keep on changing from course to course, course to course... No career guidance, to really direct [students]. Say, look here: what do you really want? I want this. What did you apply for? This is what I applied for. What are your expectations in relation to the outside world: the real world? (New Graduate, Interview MSO7).

Interviews with the respondents revealed that students drifted from course to course over a whole semester or even for longer. The course changes waste resources such as money and time. Equally, the public universities in Uganda pay little attention to developing students, more or less believing that the students are adults who know or should know what they want out of life. However, evidence abounds about how these students are not yet mentally adequately focused to know and decide what is good for them in life. In fact, one lecturer described fresh students as simply desperate to enter university so they do not take the trouble to reflect on what they will get from university and what they will do with what they have acquired. The students will accept whatever study programme they are taken on and will plan to explore the benefits afterwards as long as they are likely to get a degree qualification at the end. Therefore, the lack of

career guidance poses a big risk for students in that they are likely to miss out on developing the necessary education capabilities.

Furthermore, even at Advanced Secondary School level the career guidance given to students is insufficient to enable them to understand the alternative courses available at university. High school students have vague ideas about the workplace application of most degree courses. Therefore, on the basis of scanty information, they apply for certain courses at university and get admitted. In some cases, students later on regret their choice of course when it is too late and expensive to change. For example, one respondent reported:

I know somebody who came here and did Social Work and after he had done Social Work, he felt like 'eh! I thought there was economics in Social Work, I should not have done it'. Right now he is completing a bachelor's degree in Economics here at Makerere University. Because he did not understand at all what he was coming for and he had chosen Social Work as number one (Lecturer 01 in Social Work, Focus Group SWFM1).

Another respondent remarked: "When I filled the [application forms for] courses, I said I did not want to take law. During my amateurish kind of thinking, I thought every lawyer is a liar. So I chose Social Work intentionally" (Lecturer 06 in Social Work, Focus Group SWFM1). These reports reveal lack of career development information among students. In fact, some students at times get frustrated by wrong professional choice due to lack of career guidance. Although the majority accept and continue to practise their 'accidentally chosen' profession, deep in their hearts, they are unhappy about their career path. Only a few students achieve contentment later on as they progress within their 'accidentally chosen' profession both as students and, later, as practitioners. However, as their studies progress such frustrated students cannot pay adequate attention to developing the expected knowledge and skills.

In their Advanced Secondary School level some students know what specific profession they want to follow but fail to raise the minimum entry mark for the course of their choice. As a result they settle for the next choice; and in such a case they frequently have

psychological difficulty in adjusting to the second or third choice. Such students remain fixated on their coveted first choice. For example, as one respondent reported:

...some of the students initially do not have any plan for joining the teaching profession. And so when they come here we find a lot of difficulties with them in first year because they are still in the wonderland regarding where they had initially wanted to go, and others eventually get convinced by the way things are handled and by the way we also help talk to them. We talk to them, counsel them, and we, you know, help them understand what it takes to train a person (Lecturer 02 in Education, Focus Group EDFB2).

The role played by lecturers in interesting students in and counselling them to accept the courses they 'find themselves in' is critical. Where university lecturers counsel students on the career opportunities available, profession acceptance is achieved and vice versa. Kember et al. (2009: 264) show that students can have the motivation to study at university without the motivation to enrol in a particular degree course. Therefore, the development of certain higher education capabilities among students from a given degree course is influenced by, among others, both the desire to join the university and the interest to undertake the specific course in which they are enrolled.

University learning environment

The university learning equipment is part of the learning environment 'package' that affects the university education processes in developing knowledge and skills in students at public universities in Uganda. The respondents attested that the university lecture rooms are poorly equipped with teaching aids, thereby impeding the teaching and learning processes. For example, in classes of up to 500 students there might be one to three cordless microphones being rotated to enable the students to discuss with the lecturer. This arrangement creates limitations regarding the extent to which the lecturer can monitor and guide students' learning. Therefore many lecturers simply abandon attempts to involve students and opt for pure lecturing. As one lecturer revealed:

The experience in class is that people who sit in front, they are always eager to ask questions about the concepts and about analysis of issues when a lecturer presents. But the lecturer is using a microphone to communicate to them and the students at the back do not have a microphone, so ... to get their views and to address the issues they raise is limited and that could contribute to their failure to participate (Lecturer in Sociology, Interview LSAM1).

This kind of learning equipment and environment limits student education capabilities expansion. Lecturers have difficulty in teaching big classes. For example, in the event of microphone failure, a lecturer stands in front of the class and just talks to the class. In some cases, about a half of the class will listen to him and the rest of the class may resort to holding private conversations. This situation limits the level of learning and it could be an indication of administrative system failure whereby the university infrastructure is unsuitable for teaching and learning purposes. Therefore, the class environment and equipment, inter alia, constrain the education processes in building education capabilities among students at public universities in Uganda.

The lecturers' work is further constrained by factors such as big numbers, limited learning resources (such as internet access), teaching resources (such as computers), poor remuneration, limited space and so forth. From the testimonies of the respondents, it appears that the private wing of public universities in Uganda operates like a poorly-managed business system as far as enrolling new students is concerned. As already indicated elsewhere, the private section is seemingly bent on attracting more and more students and the big number of students has negatively affected academic standards. For example, one respondent reported that "the education standards [at public universities in Uganda] have kind of gone down. The lecturers are overstretched [in their work]. ... So, that one can be a disadvantage [to students] (Public Official, Interview P5). In fact, signs of lecturer-stress and frustration are evident at the public universities. As one respondent indicated:

And because of the environment, you can take stock of what has been happening at Makerere University for the last three years. Almost every semester, there must be a strike. Even Kyambogo [Public] University, even Gulu [Public] University; and it has spread. But now all these universities are characterised by strikes of lecturers. What do you expect? That is what makes a student say, 'I wish I could finish [and get out of the university]' (Public Official, Interview G1).

This kind of dissatisfaction among lecturers can create tension in the teaching and learning environment at public universities in Uganda and negatively affect students' concentration on their studies. This kind of environment limits the amount of knowledge and skills students acquire in the course of their degree programme.

In addition, as already indicated elsewhere, access to computer and internet facilities is low. The limited computer laboratory services curtail the students' learning opportunities. As one respondent remarked:

On ground (in reality), Faculty of Arts had only one computer service centre which was next to the Department of Mass Communication whereby there was something like 10 computers in relation to what number of students (over 3,000) in the Faculty of Arts. This is one of the biggest faculties. Ten computers! It is nothing. We used to fight for them... 'I am the next, I am the next, I am the next...' remember time would be flying (New Graduate, Interview MSO7).

Another respondent said:

The capacity of the computer laboratory in your faculty [of Humanities and Social Sciences] is very, very, very insufficient. Because let's say roughly, we would have, say roughly, 30 computers. A few of them would be internet linked... the infrastructure is grossly inadequate for the population of about 3000 students (New Graduate, Interview MSW8).

The scarcity of computers to use, as already hinted on in this thesis, constituted a big constraint to teaching and learning. In the current age, a university student, regardless of intended profession, should have full access to computer services. However, when computer access and use are highly restricted, then the process of higher education capabilities expansion among students at universities gets hampered.

In both the interviews and questionnaires, new graduate respondents revealed negative assessments of the university learning environment. For example, in the survey, students were required to indicate their opinion on the statement: "The university environment was appropriate for learning" (see also Appendix I, question 609). Table 8.6 summarises the responses to that statement.

Table 8.6: Perception of new graduates about the university environment as appropriate for learning

Questionnaire measure	Number of respondents	Percentage
Strongly agree	10	6.0
Agree	31	18.7
Undecided	7	4.2
Disagree	97	58.4
Strongly disagree	21	12.7
Total	166	100

Only 24.7% of the respondents felt that the university environment was appropriate for effective learning to take place (6.0% strongly agreed and 18.7% agreed). As Table 8.6 further shows, the majority (71.1%) of the respondents did not perceive the university environment as suitable for their learning expectations. Therefore, it is possible that the environment is one of the factors hampering the university education processes from expanding higher education capabilities among students.

The environmental limitations to student education capabilities expansion exist against a backdrop of the majority of students being privately sponsored. Private students make direct fees payments to the public universities in Uganda, which have a mandate to spend such funds at source. Even if the fees are insufficient one would expect the provision of basic learning infrastructure such as functioning microphones to be prioritised. Therefore, the absence of such infrastructure presents a situation within the learning environment that limits interaction between the lecturer and the students and might be constraining the development of higher education capabilities, such as practical reason and sociality and participation, among students.

From document reviews, the researcher also found some earlier writings that explain the learning environments in the public universities in Uganda. For example, Wavamuno (2004: 1) noted:

It has always been unbelievable scene to see university students crowded in poorly ventilated rooms with the majority seated in corridors, and writing against walls... Most lectures are no different from public rallies, largely conducted on loud speakers. I have seen students carrying chairs from one building to another whenever they go for lectures in an attempt to secure themselves seats in tiny rooms.

Similarly, a visitation committee on Makerere University observed: "Most of the buildings were built in the colonial period to serve the needs of the 1940s, 1950s, and 1960s". The Committee therefore recommended: "To restore the quality of higher education in many faculties and departments to the internationally acceptable levels, government should undertake rehabilitation, modernisation and expansion of the infrastructure" (Visitation Committee Report 2007:79). The scenario described by these different writers depicts a non-conducive environment for effective university teaching and learning.

Scholars have observed that environmental characteristics or structural constraints are limitations to the expansion of individual capabilities and achievement of functionings, to the extent that individuals may even become complacent about the status quo. Walker and Unterhalter 2007: 6), for example, hold that:

Our choices are deeply shaped by the structure opportunities available to us so that a disadvantaged group comes to accept its status within the hierarchy as correct even when it involves a denial of opportunities. Such adapted preferences can limit individual aspirations and hopes for the future.

Over time, the students find themselves just coping with the learning environment in the universities. In the context of the current study, the limited development of higher education capabilities among students may, therefore, not be due to the students' limited mental ability to acquire the necessary knowledge and skills, but due to lack of the overall infrastructure to foster the development of capabilities expected of a university graduate (see also Appendix A).

Government influence

The government of Uganda has a strong hand in influencing the number of students admitted to public universities. Already, as indicated in this sub-section, public universities in Uganda have both government and privately sponsored students.

Although the majority of the students at public universities in Uganda (about 80%) are privately sponsored, the government influences the numbers to be admitted. For example, under the influence of government, student enrolment trends at public universities in Uganda from 2001 to 2010 were generally upward. However, the learning and teaching resources increased at a lower rate than the student population. As one respondent pointed out; “The students are so many and that, in a way, stifles the opportunity for interaction, participation and discussion with students” (Lecturer 04 in Social Work, Focus Group SWFM1). Limited opportunities for interaction and discussions negatively affect the students’ education capability development process. This mismatch negatively affects the quality of the university education processes.

Furthermore, the Government of Uganda recently introduced the ‘district quota system’ as an affirmative-action policy for district-balancing of access to university education. Under the quota system, the government offers a fixed number of scholarships, usually 10, per district. By December 2010, there were 112 districts in Uganda. Therefore, about 1120 students benefited from the scheme that year alone. Beneficiaries are the best 10 candidates in each district. They have to be residents studying in that district and not to have qualified for the central government scholarship fund. The central scholarship fund is the fund from which the government draws tuition for the best 3000 to 4000 students admitted to ‘strategic’ courses at public universities in Uganda per year. This central scholarship is the one supplemented by the district quota scholarship.

The district quota scholarship at times permits the enrolment of students who are academically weak by national standards yet who are the best candidates by district standards; this mostly apply to remote districts. The academically weak students admitted through the district quota system, although few, are a challenge in some university departments. Actually, one respondent revealed:

Sometimes the majority are not teachable and this is because a lot of recruitment of the students in the university are politically [influenced]. They have come on [board] through the issue of politics. They are not on merit as it used to be in our time and maybe in the early 1980s. So you find that however much you want quality outputs, some students are not trainable; however much you try this, you try that method of teaching they are just not moving with you. And, largely

because of the [district] quota system...I think policy-wise there is a problem which is making university processes and outputs, you know, questionable (Lecturer 07in Social Work, Focus Group SWFM1).

Through the district quota system government inadvertently (albeit to a minor extent) complicates the teaching processes at the public universities in Uganda. This complication is occasioned by the admission of academically weak students into the public university education system who enrol through both the quota system and the private scheme already explained. Therefore, the higher education capabilities expansion process is negatively affected since the lecturers have to use more effort in teaching than is necessary if they are to impart the requisite knowledge and skills to students.

However, Mbarara University seem not to have been disadvantaged by the district 'quota system' and private scheme as much as Makerere University in terms of the quality of graduates. Mbarara University is a science university, and it enrolls a small number of students. A respondent reported:

We have two major advantages as a university; number one: the courses offered here are highly scientific and competitive... Even when there is a quota system, the Joint Admission Board (the national student selection body) cannot lower the marks because the competition is too, too high. So, at the end of the day, we still get the best quality. Secondly, the issue of numbers ... has been an advantage that we do not go beyond our capacity. We are conservative and strict about the numbers of students vis-à-vis the available facilities (Lecturer 03in Education, Focus Group EDFB2)

Probably, the science-orientation of Mbarara University and the vigilant administration create an opportunity for shutting out non-competent students at entry level. Therefore, it has arguably been possible for Mbarara University to admit only academically able students from the secondary education system. This scenario at Mbarara University notwithstanding, the district quota system negatively affects, to a minor extent, the capacity of the public university education process to impart knowledge and skills to students.

It seems that in the economy of Uganda, there is a dysfunctional labour market information system that constrains information generation and flow to the potential users.

It is also likely that secondary school and university students lack access to comprehensive labour statistics that would inform them about the condition of the labour market. For example, reports on tracer studies, establishments, employment and unemployment levels, labour turnover rates, migration and so on are almost non-existent. The absence of such important labour market information creates an information gap that might be affecting the learning strategies of university students in their higher education capabilities expansion endeavours. In fact, this information lacuna might be contributing to a mismatch between skills developed at public universities in Uganda and the labour market requirements.

8.8 Summary

In summary, the learning processes at public universities in Uganda are contributing minimally to higher education capabilities expansion among students. The most common learning approaches used by students at public universities in Uganda are discussions, personal reading, online self-teaching, internship and attending lectures. Whereas these approaches are pedagogically acceptable in the development of higher education capabilities among students, the students are, in actual fact, bent on surface approaches to learning that involve rote-learning practices and cram-work. It is, therefore, possible that some students graduate with insufficient education capabilities (see Appendix A).

Although research is taught and is appreciated to be very important, respondents were of the view that the quality of research work, even for the undergraduate level, is still low. In research supervision, lecturers are reportedly overstretched by big workloads. The work overloads have created loopholes such as plagiarism in the final research and project papers. It is possible that all these learning constraints have limited the level of higher education capabilities expansion among university students. Incidentally, most of these constraints are self-imposed because, as Cross (2005:1) argues, learning is mainly a function of students' behaviour. In the following chapter (Chapter Nine), the researcher presents a summary of such findings and draws conclusions of this study.

Chapter Nine

Summary, Conclusions and Recommendations

9.1 Introduction

Chapter Nine synthesises the findings, conclusions and recommendations of the study. The summary and conclusions are mainly drawn from Chapters Six, Seven and Eight where the presentation, analysis and interpretation of findings are made. In this chapter, the summary and conclusions are presented in line with the objectives of the study. The objectives of the study were: i) to examine the contribution which the content of university education curriculum makes to higher education capabilities expansion among students in Uganda; ii) to analyse the extent to which the university teaching processes contribute to higher education capabilities expansion among students in Uganda; and iii) to assess the contribution which the university learning processes make in higher education capabilities expansion among students in Uganda (see also 1.4).

This study aimed at exploring and analysing why public university education in Uganda seemingly fails to expand certain higher education capabilities among students. University education is discussed from the perspectives of curriculum content, teaching processes, and learning processes. Meanwhile, capability expansion is explained in terms of general capabilities and higher education capabilities. However, the analysis is focused on higher education capabilities only (see also Figure 4.1). The selected higher education capabilities are: learning dispositions, sociality and participation, practical reason; and science and technology.

9.2 Summary of Major Findings

This section summarises the results from the analysis of study variables that are perceived to influence students' higher education capabilities expansion process. The section also presents the major findings emanating from the discussions of education capability-related issues identified from Chapters Two up to Eight.

In Chapter Two, the theoretical discussion of human capability expansion focused on: the human capital theory; human development thinking; and the capability approach. The discussion established that human capital theory has a neoclassical orientation and fundamentally considers the costs and benefits of education from the income and earnings perspectives. The orientation of the human capital theory to monetary benefits as opposed to other benefits of education made the researcher de-emphasise the theory in the current study. On the other hand, the human development paradigm and the capability approach were considered suitable theoretical alternatives applicable to this study. The human development paradigm and the capability approach present the costs and benefits of education beyond the economic perspectives and focus on additional benefits of education such as opportunities, capacities, knowledge, and skills that promote individual agency. Furthermore, in the capability approach, it was established that education is a capability: higher education is a “combined capability” (Nussbaum quoted in Alkire 2003:6) and, furthermore, a “complex capability” (Terzi 2004: 10& Maguire 2008:72) (see also 2.4.2). The study treated university education as a higher capability because of its complex nature.

Chapters Three and Four are closely intertwined as they discuss literature on university education, which is conceptualised as an independent variable in the current study. University education is further disaggregated into three main themes (or sub-variables), namely curriculum content, teaching processes, and learning processes. In fact these sub-variables are reflected in the research questions guiding the study (also see 1.5). In Chapter Three, it was established that to a large extent, in the education capabilities expansion processes, the curriculum content has to be relevant to the students, the profession in question and to the public. The curriculum content also has to be balanced in terms of theory and practice. Moreover, in the curriculum content formulation process the needs of the student should be met by involving stakeholders (Saint 1992; Toohey 1999; Karseth 2008), emphasising the practical bits (Billett 2009), making the curriculum holistic (Watson & Ashton 1995; Miller 2007), and making the curriculum goal-oriented (Hativa 2000; Butcher et al. 2006).

In Chapter Four, the literature review reveals that the teaching and learning processes have to be focused on the student's needs. The student has to be involved in the learning processes if the learning is to make a positive after-school impact on education capabilities expansion. However, it is also noted that various teaching and learning factors can facilitate or impede the acquisition of higher education capabilities, such as practical reason, learning dispositions, sociality and participation, and science and technology, in an undergraduate student. These capabilities are crucial to enable a graduate to function as a citizen. The literature further revealed that relationships exist between a student's individual characteristics, perceptions of the learning and teaching environment, approaches to learning on the one hand, and the student learning outcomes on the other (Trigwell et al. 1999: 58; Kek & Huijjer 2011: 203). However, the literature did not clearly reveal the extent to which a combination of these factors relates to one another and jointly affect student outcomes (such as higher education capabilities expansion). However, in the paragraphs that follow, the current study reveals the extent to which these education sub-variables jointly affect the education capabilities expansion processes.

In Chapter Five, the researcher presents a methodology concerning the collection, analysis, presentation and interpretation of data on the role of public university education in higher education capabilities expansion among students. The chapter reveals that the methodology involved both qualitative and quantitative techniques; specifically, the interviews, document reviews, focus groups, and questionnaires. The study used a total number of 221 respondents comprising new graduates, lecturers, and senior public officials (see also 5.4 & 6.2). Basically the chapter explains how the study was carried out right from the design stage, data collection, data processing up to the final stages of analysis and presentation of findings.

The presentation of findings is done in Chapters Six, Seven and Eight, where the three major themes or sub-variables (curriculum content, teaching processes, and learning processes) are unpacked and elaborated under different sub-themes. The major findings in these chapters are summarised below (from 9.2.1 to 9.2.8). In addition, the

quantitative analyses reveal that the three sub-variables of university education account for a cumulative 81.2% in explaining the variations in higher education capabilities expansion among students in Uganda. This ratio is contributed by the sub-variables of university education as follows: curriculum content accounts for 24% (see also 6.7); teaching processes explain 31.6% (see also 7.7); and learning processes account for 25.6% (see also 8.6). Therefore, teaching processes have the highest influence (31.6%) on higher education capabilities expansion, followed by learning processes (25.6%) and finally curriculum content (24%)(see also Figure 4.1). By implication, other factors not covered in this study account for the remaining 18.8% in explaining what influences higher education capabilities expansion among public university students. The researcher speculates that other factors may include: economic status of the student, family education background, location of the university, and so forth. In the current section (9.2), a summary of the study findings is also presented under different sub-sections.

9.2.1 Curriculum content of public university education in Uganda and education capabilities expansion

The study has established that public universities in Uganda (public universities in Uganda) are perceived to have full autonomy to design their curriculum. Heads of department agree with teaching staff on what should be taught. The departments are at liberty to teach what they want as long as they can justify it before the School Board, the University Senate, University Council, and the National Council for Higher Education (NCHE). Submission of courses to the NCHE for approval is, however, a recent requirement that came into force only in 2003 and started being enforced in 2004. However, even after 2004 some courses in the public universities in Uganda continued to run with their content unapproved. Prior to 2004, the internal structures such as department, faculty, senate and councils approved all new courses. However, in some cases, an individual lecturer would craft out a course and go ahead to teach it with or without the input of the other colleagues in the department or faculty. This freedom, in some departments, seems to have led to sub-standard material being given to students, thereby limiting students' education capabilities expansion.

Theory-practice integration in the public university curriculum

The link between theory and practice in public university education in Uganda is viewed by respondents as tenuous for the bigger part of the curriculum. This weakness is a drawback to the development of practical education capabilities that would be handy in the field. However, the teaching staff think that the curriculum mix between theory and practice is reasonable and in many cases at acceptable levels. In addition, lecturers think that the curriculum has broad coverage. Similarly, new graduates feel that the curriculum content is reasonably rich, although it does not link theory to practice. To the contrary, the senior public officials are of the view that the graduates' practical competences are deficient. One respondent's observation summarises this point; viz.:

...many employers are saying these people (new graduates) are unemployable: when they leave the university, they are unemployable. They need to be trained again. You see, very few organisations [are satisfied with them]. I saw at least one last year, which put in the papers that previous experience is not necessary (Public Official, Interview G2).

This comment reveals the low opinion that some members of the public have of the curriculum content of public universities and the new graduates themselves.

The public universities, for example Makerere University, charge an internship or field attachment fee per academic year but find placing the students in the field problematic. In some cases, for most courses at the public universities in Uganda this practical part of the curriculum is not actualised due to lack of resources, such as money and placement outlets for the would-be fieldwork students. In fact, the student population in public universities in Uganda by far outstrips the selected fieldwork placement outlets and the university field supervisors. Hence, in most humanities and social science courses, for example at Makerere University, the fieldwork component has reportedly been dropped from the curriculum content.

Professional relevance

The professional relevance of the curriculum in public universities in Uganda depends on specific departments and colleges. The respondents from the Departments of Education reported very high levels of relevance while those from the humanities and social sciences reported high levels. In general, lecturers in all departments believe that the curriculum they have is very relevant to the professions in question. At Mbarara University, for example, professional relevance is very high and this increases the employability of their new graduates, especially those from the Department of Education. Similarly at Makerere University, the lecturers strongly believe that the curriculum is appropriate; for example a respondent argued, “I think the curriculum of the university is actually among the best, the best formulated things within the university. It is revised regularly and actually it is usually standard” (Lecturer 03 in Social Work, Focus Group SWFM1). Public universities in Uganda regularly revise their curricula through participatory approaches that mainly involve the university teaching staff and not necessarily the practitioners. The likely absence of the practitioners’ input in the curriculum is a liability in the university capability expansion endeavours.

However, the senior public officials who work with the new graduates from public universities in Uganda argue that the university curriculum is largely irrelevant. Using academic transcripts as a reference point, the officials contend that although the curriculum is broad, it is fragmented and shallow. They maintain that the university curriculum hampers students’ in-depth and focused learning that is required by the various professions. Therefore, in the opinion of public officials, the professional relevance of the university education curriculum is deficient and is a disincentive to higher education capabilities expansion. However, it should be noted that the curriculum, regardless of its content, forms a foundation for teaching and learning processes.

9.2.2 Teaching processes in public university education in Uganda and education capabilities expansion

It seems that the teaching processes affect university highereducation capabilities expansion among students. Data in Chapter Seven suggest that creative lecturers who use a blend of methods positively affect the development of the education capabilities among students in terms of how much they know, retain and subsequently practice. And the opposite is true for non-creative lecturers who stick to a single teaching method.

Teaching strategies

The lecturers' plans largely point to wanting students to learn new ideas. To fulfil these plans, some lecturers use a blend of teaching approaches. For example, the study found that at Mbarara University, there is a unique course called 'Service Course' which is offered by the Department of Development Studies to all undergraduate students across all first-year programmes. The course aims at enabling students to realise the interconnectedness of different disciplines in the world of development work. This knowledge enables the graduates to solve real-life problems from a broad understanding of developmental issues.

However, in spite of some lecturers reporting that they are interested in teaching well, some students at the public universities in Uganda show limited interest to learn. For example, a significant minority of about 40% of the students join university just to acquire a degree qualification and thereafter find a job. Therefore, about half of the students at public universities in Uganda are focused more on acquiring the qualification than the requisite knowledge and skills that come with the profession that they are being trained to pursue.

Teaching approaches

Like in most universities elsewhere in the world, public universities in Uganda mainly use the lecture approach. It is inexpensive in terms of preparation and since most of the university students are youthful, it is believed that they can follow lectures with ease. In

effect, lecturers dictate notes in lecture rooms, and at times issue handouts. However, students reportedly hate handouts, especially those that are elaborate such as journal articles or textbook chapter extracts. Consequently, the dominance of the lecture approach lowers the quality of teaching in public universities in Uganda. In addition, literature indicates that other factors limiting student capability enlargement include “lack of teaching assistants, poor facilities, lecturers working on more than one job to survive and low levels of language mastery” (Kasozi 2003:124).

In some departments or in certain academic years, when the resources permit and student numbers are manageable, lecturers also teach using the fieldwork method. Extended fieldwork placement is used only in a few courses such as Social Work, Development Studies, and Education. According to respondents, fieldwork is a pedagogically popular approach although it is not professionally managed by public universities in Uganda. For example, in the College of Humanities and Social Sciences and in the College of Education and External Studies at Makerere University, supervision is not rigorous. Both the lecturers and senior public officials reported that the students' commitment to the fieldwork is low. This limited commitment to fieldwork creates loopholes that result in students missing out on an important opportunity for developing certain higher education capabilities.

Furthermore, public universities in Uganda teach through the use of role models, guest speakers, practical learning, tutorials, and discussions. These approaches are, however, used on a very small scale compared to the lecture method. The lecturers argue that this is because of the big number of students coupled with the inadequate number of teaching assistants and discussion rooms. By de-emphasising practical teaching methods, public university education in Uganda makes students miss out on opportunities for acquiring higher education capabilities.

As the study data suggest, especially in Chapter Seven, there seems to be a problem of lecturers missing to teach some classes for no good reason. This is reported to be a common practice, especially at Makerere University, in the departments covered by this

study. This practice most likely contributes to low levels of higher education capabilities expansion among students.

Quality assurance in university teaching processes

Fieldwork is used both as a teaching method and as one of the avenues for quality assurance in the university education processes. Public universities in Uganda have checklists for fieldwork supervision, which are used in evaluating the students' performance in the field. Fieldwork is instrumental in student education capabilities expansion through exposing students to the realities of the workplace. However, fieldwork supervision is poorly managed. For example, there are few contact hours between lecturers, on one hand, and reluctant field supervisors, on the other, leading to the failure of fieldwork to meet the knowledge and skills development objectives for students.

Coursework is also used as a quality assurance tool and it challenges students to do private reading, which is essential for deep learning. Coursework demands that students read a certain number of documents so as to respond to a given assignment question. The study results suggest that some students in public universities in Uganda abuse coursework by contracting out the reading and writing only bits of it. Others reportedly plagiarise the coursework from their colleagues, from the internet or from other sources. In such cases, the students bypass the university quality assurance measures undetected. In the process, students miss out on the opportunity to develop some knowledge and skills.

As a quality assurance measure, public university education processes in Uganda use a number of penalties on students and staff. The penalties are guided by rules and regulations that are availed to the university council, senate, staff and students. Rules and regulations spell out what conduct is expected of stakeholders. The regulations also indicate the penalties applicable to different offending stakeholders as part of the enforcement of high academic standards. However, a major limitation of these penalties

is that they involve complicated and lengthy processes of justice administration that lead to many offenders getting away scot-free.

As the respondents indicated, quality assurance on the part of teaching staff is observed through hiring competent staff, usually the 'academic cream' from the different programmes. The heads of departments ideally supervise the lecturers to ensure quality in teaching. In some cases, penalties are meted out to non-complying lecturers, for instance those dodging classes are warned, fined or even dismissed. However, overall the supervision of lecturers to ensure quality teaching is one of the most neglected areas. Hence a lot of sub-standard work done by some lecturers passes undetected and is, therefore, not penalised. The result of this weak supervisory system is the potential loss in learning on the part of students at the public universities in Uganda.

9.2.3 Learning processes in public university education in Uganda and education capabilities expansion

Like in most universities elsewhere, students at public universities in Uganda use many learning approaches. They learn by doing something in class or out of class, by listening to lectures in the classrooms, by reading their class notes and textbooks, and by trying out something, for instance through school practice.

Learning strategies and approaches

The students learn through day-to-day personal interface with their lecturers and university administrators. In some cases the students interact with experts in the field during fieldwork or experts who are brought into lecture rooms to talk to them. A common method of learning is through group discussions. The qualitative data in Chapter Eight reveal that many students who perform well academically use the discussion method. In addition, some students use private individual reading as a method to supplement group discussions.

The internet is another source of learning that is used by students for both academic and non-academic purposes. Internet access is, however, generally low at public universities

in Uganda, with an estimated 20% access by the student community (excluding the students in ICT courses). This percentage is quite low for university students in the current age. In essence, students are generally averse to downloading elaborate study materials from the internet, opting instead to use the internet mainly for social interaction, such as on Twitter and Facebook.

Overall, from the study responses, the results suggest that concentration on learning by students is low. Students seem to concentrate on their studies only under the threat of approaching examinations or tests. Even when they learn, they are engaged only in surface learning. Whereas the lecturers largely believe that the poor learning habits of the students is due to their background, specifically primary and secondary education, a lot of constraints on student learning could be a result of how lecturers teach. The use of the lecture method, for example, that dominates the teaching processes at public universities in Uganda, accompanied by notes dictated by the lecturer, does not provide sufficient study material. The lecturers dictate the main points and later on expect short answers because the students are very many. The students simply cram these few main points and reproduce them during examinations and tests. Incidentally, the students pass their examinations and coursework with good grades. However, scholars such as Biggs (1987:1), Trigwell and Prosser (1991:251) and Hativa (2000:59) observe that, although such surface learners can reproduce information that they have been given to satisfy the examination requirements of the course and even pass very well, such knowledge and skills are lost shortly after examinations. Similarly, in public universities in Uganda surface approaches to learning seem to limit the expansion of higher education capabilities among students.

Level of research in public universities in Uganda

Generally, research methods are taught to undergraduate students in most departments. However, only a few (less than 30%) departments require their students to do a compulsory practical research paper (see also Table 8.3). Some departments do a project – a kind of mini-research – and the majority do not write any project or research paper at all. Therefore, the majority of the students miss out on the education capability

benefits of research, such as confidence-building, learning disposition and knowledge and skills acquisition.

The data collected suggest that the level of research knowledge and skills is generally very low on the students' part. The deficient research skills deny students the confidence to read long texts and to write papers in the future, both in academia and in other realms of employment. The few disciplines in which writing a research paper is compulsory, for example Social Work at Makerere University and Development Studies and Business Studies at Mbarara University, still suffer some quality problems. It appears, the problems mainly came from the large number of students, limited research resources and low student ethics evidenced by plagiarism and, on a small scale, contracting out the writing of their research papers to 'academic mercenaries'.

9.2.4 Opportunities for capability expansion in public university education in Uganda

The study results in Chapters Six, Seven and Eight suggest that there are many opportunities for students to develop their knowledge, skills and capacities extensively while at university. The opportunities emanate from the strengths inherent in the university teaching and learning processes, the environment, administration systems, public sector educational resources, lecturer competences, and student competences.

University internet laboratories: Although 'riddled' with access problems, the internet laboratories present an opportunity (see also Chapter Seven). For example, the lecturers encourage the students to make use of the internet resources, although the public universities in Uganda do not have sufficient internet access points. Using the internet can enable students to access cross-country and up-to-date information related to their area of interest. However, even those limited internet access points in the computer laboratories are not fully accessible to students.

Teaching content: Teaching content is an opportunity in the sense that if students bother to understand and fully internalise the intended content, as indicated in the course outline

in the university curriculum, they can significantly expand their higher education capabilities. Understandably, the design and relevance of the content in the curriculum depend upon a given department. However, through self-teaching students can go beyond what the lecturers share in lecture rooms by following up the references supplied on course outlines.

The increasing competence of lecturers: The quality of lecturers' competence has reportedly been increasing in the previous one decade, although the teaching outcomes have not improved proportionately. All public universities in Uganda possess better-trained lecturers than in the previous decade, in spite of staff turnover in some departments. One respondent explained: "In addition to an adequate curriculum, we have good and professionally well-developed staffs. The lecturers here are very competent to deliver the curriculum on the ground"(Lecturer 04 in Science Education, Focus Group SEFB2). For example, the proportion of PhD holders has been growing in all public universities in Uganda. This growth presents an opportunity for the students who interact with these well-trained lecturers who can share their knowledge and skills competently.

Informed and committed student-peers: Reasonably informed students provide an opportunity to their colleagues to learn from them. However, students with high intelligence and commitment appear to be few in the public universities in Uganda. They may not, therefore, cause significant change in the majority of the student population, but they present an opportunity for student education capability development.

Co-curricular activities: The public universities in Uganda provide a wide range of co-curricular activities, ranging from social clubs to sports. These activities are an opportunity for students to develop education capabilities such as learning disposition, and sociality and participation. Meanwhile, students can be counselled and encouraged to reduce the time they allocate to passive co-curricular activities such as watching movies or football games on television.

9.2.5 Some constraints to higher education capabilities expansion among students

Lecturer-related constraints: The study has established that some lecturers seem to have a negative perception of the quality of the students they teach. They believe that their students are poorly prepared academically and cannot be easily taught. This mindset discourages such lecturers from taking much interest in making the students learn on the assumption that, after all, it is a waste of time. Such lecturers, therefore, disclose their inability to close the higher education capability gaps among students, because of the belief that students are not 'teachable'.

University administration-based constraints: The respondents reported that the university lecture rooms are poorly equipped with teaching aids. This constraint negatively affects the teaching and learning processes. Some classes are taught 'conference-style' using an on-and-off cordless microphone rotated within a classroom of 400 or more students. This arrangement hinders effective student participation and, consequently, learning. This scenario may be considered to be an indication of administrative system weakness whereby the absence of affordable equipment is a limiting factor in the teaching and learning processes.

In addition, cases were reported of leniency in test and examination assessments at departmental level to compensate for the poor performance standards. Incidentally, this practice, where it occurs, permits mediocre students to obtain a degree certificate from a public university in Uganda. This practice has, inter alia, led to some non-qualifying students obtaining a degree from public universities in Uganda.

Furthermore, the university systems seem to have allowed the tutorial teaching method to diminish owing to several factors such as high student populations, limited discussion rooms and low staff motivation to manage tutorials. Yet tutorials, which used to be part of the public university education processes in Uganda in the 1990s, and earlier, used to help students internalise the subject matter better. It is evident that the removal of tutorials denies students an opportunity to develop certain skills, for example, in writing, practical reason, and public speaking.

Government-related factors: Owing to government directives to public universities in Uganda, student enrolment at public universities in Uganda from 2001 to 2010 generally increased. However, the learning and teaching resources increased at a much lower rate than the student population. It is possible that this trend negatively affected the efficacy of public university education processes and student outcomes.

The seeming poor quality of students at university also emanates from the entire education system, especially the primary and secondary levels. University admissions receive a direct input from the secondary education system that is already having quality-related problems. Students enter the secondary school system when they are poorly prepared for secondary education. The government secondary education system also does not fully address the education capability gaps created at primary level. By the time students reach university they are ill-prepared for the rigours of university education; for example, they find research to be very demanding and undesirable.

Student-related constraints: There are signs of knowledge and skills deficiencies in university students in Uganda. At university, over half of the students are less interested in their studies than in leisure activities, usually those that are passive in nature. Students seem to be poorly self-motivated to study. In addition, some of the students with a negative attitude towards deep learning approaches influence their peers against following university education fully. The leisure-leaning and weak students, therefore, miss out on the sharing of knowledge and ideas from their academically-talented peers.

Constraints originating from high school: From the views of the respondents, it appears that most students lack sufficient career guidance before they join university. Most students, basing on scanty information, apply for certain courses at university. The scanty information leads them to enrol in any course that comes their way. This random choice of courses by some students is arguably a constraining factor in developing relevant skills and abilities from the university because they find themselves

pursuing courses which they are not necessarily interested in. This reality dawns on them when it is too late and expensive to change the course. Moreover, to some students university education is a wasted opportunity as they cannot link the profession they are studying for to what they really want to be in life. This mismatch is because during Advanced level minimal career guidance seems to be given to students regarding the alternative courses available at university and the workplace application of certain courses. All these factors seem to have negatively affected the performance of university education in expanding the higher education capabilities among students.

9.2.6 Performance of public university education in higher education capabilities expansion

In the current study, the capability approach is applied at university education level whereas, in other studies, the approach has mainly been used at a minimalist level with the exception of a few cases, such as Walker (2006), Terzi (2007) and Maguire (2008), who apply it to higher education in general. The current study, has, therefore, treated education capabilities from the complex perspective. With the guidance of the conceptual framework, the major findings on public university education cutting across Chapters Six, Seven, and Eight are summarised below in terms of the four education capabilities focused on in the current study (see also 5.10 and Figure 4.1).

Learning disposition: The learning dispositions of student in public universities in Uganda are low. In general, students show evidence of low concentration levels in their studies. For example, one respondent observed:

Our students have not been used to serious thorough reading. They want a five page document which they can easily summarise and maybe you summarise it for them... So when they go out [of Uganda] and they face serious reading they cannot manage (Lecturer 06 in Development Studies, Focus Group DSFB1).

Therefore, even when students graduate they still reveal glaring gaps in terms of limited skills and poor personal presentation at the workplace.

Sociality and participation: This capability is fairly developed. For example, student-teachers, especially from Mbarara University, are committed to their work. They are

described by their lecturers and employers as sociable and as people who are able to work with others. For example, one respondent reported: “One thing among our teachers or among our products is that they are people who are committed to work. They are social and they are people who are able to work with others” (Lecturer in Science Education, Interview LESB1). However, activities that would have enhanced their capabilities further, for example debating clubs and sports, are largely poorly attended by these students.

Practical reason: There are signs from data in this study that this capability is being fairly developed at public universities in Uganda, albeit on a limited scale. From interviews with new graduates, it was evident that their comprehension of questions and the subsequent responses pointed to average levels of practical reason. In fact, some straightforward questions had to be posed more than once in order to elicit a correct response.

Science and technology: The study responses suggest that there are capability deficiencies in students regarding their understanding of information and communication technology (ICT), specifically computer use. While it is understandable that the new graduates (respondents) in the current study were not ICT specialists by training, it was strongly believed that they should be able to comfortably use basic computer packages such as Microsoft Word and Excel. However, most new graduates are not confident about the application of these basic Microsoft Office computer programmes.

9.2.7 Higher education-related capabilities developed by public university education in Uganda

Although this study can only name a few capabilities, public universities in Uganda, through their education processes, are likely to be developing a wide range of knowledge and skills among their students. However, the capabilities developed in students may not be easily noticeable because, as some scholars indicate:

The reality is that one is dealing with intangible, non-observable qualities in higher education: the outcomes of university education are much harder to assess and compare than, say, the holding properties of different brands of glue. They are complex and long-term, and many are hard to measure precisely. Further, the

relationships between those outcomes and the characteristics of the curricula and teaching methods which produce them are infinitely complicated by the diversity of the 'inputs' – the range of student abilities, interests and approaches (Baldwin and James 2002: 142).

Nevertheless, in spite of this observation by scholars, the current study analysed the curriculum content, teaching and learning processes and in the process attempted to generate some cross-cutting skills and capacities developed in public universities in Uganda, such as those indicated in the following three paragraphs.

Social skills: Data from respondents revealed that, in general, students enhance their socialisation during their university days. This is through the co-curricular activities that are averagely attended. Specifically, students attend dances and parties in big numbers during their university days and because of the multi-cultural nature of the student community, these dances and parties enhance their social skills and opportunities. These skills are in line with one of the higher education capabilities in the current study, namely sociality and participation.

Confidence and communication skills: These are developed to a low degree in students at the public universities in Uganda. In general, the students acquire only average confidence, and their communication skills, especially written communication, are poor. The limited opportunities for regular debates and class presentations hamper students' oral communication skills; as far as their written communication skills are concerned. Moreover, insufficient teaching of English language in secondary schools will already have imposed severe constraints. This limited comprehension of English language coincides with a *laissez-faire* teaching environment at university where lecturers believe that students are mature enough to determine their own destiny. Moreover, lecturers believe that by the time students enter university, it is too late to improve on their English language abilities.

Science and technology skills: Some graduates have a fair grasp of computer use. They will have learnt this skill on their own initiative through undertaking short courses of one

week or so that are offered privately on campuses or in the neighbourhood of campuses. The public universities in Uganda have general computer laboratories connected to the internet that are freely accessible to students for a limited number of hours. However, the computers are insufficient in number and the students do not fully utilise the few available ones.

9.2.8 Higher education-related capabilities not well developed in public university education in Uganda

The study results in the analytical Chapters Six, Seven and Eight suggest that some education capabilities are lacking in the students completing public university education in Uganda (see also 1.3). Basically, the deficiencies are in knowledge, skills and in the form of capacity gaps found among the new graduates; they are listed below.

Analytical skills: By international standards the students in public universities in Uganda generally score low in the analytics and articulation of issues as evidenced by the interview responses of the current study. Many students were reportedly unable to analyse very simple issues in their essays or in academic discussions. Low analytical skills were mainly attributed to a poor reading culture, poor mastery of the English language, and the students' orientation to surface learning approaches where even those who cram answers and almost reproduce lecturers' notes in examinations are frequently not penalised.

Innovativeness, entrepreneurship and creativity: These skills are seemingly rare in the students of public universities in Uganda, including students who attend programmes in Business Studies. Almost all new graduates interviewed are still focused on job-searching and not job-creation. Therefore, the possession of a capability (for example entrepreneurial skills) may not necessarily imply its utilisation for as long as those who possess it continue to imagine that there is a more beneficial way (for example a company job) to put it to use.

Computer skills: These seem to be little developed in the students of public universities in Uganda save for the graduates who have specialised in Computer Science or Information Technology. The basic computer skills that are expected of a typical graduate regardless of specialisation are absent in the majority of the university students. The few students who obtain the basic computer skills can only be rated as average or below average.

Communication skills: Analysis of responses reveals that the students generally lack writing skills. The students have difficulty in expressing themselves in both written and spoken forms. For example, the respondents indicated that the students' understanding of the word "plagiarism" and its implications for academic work is extremely poor. Moreover, even their reading skills are very poor. The poor reading skills seem to result from the secondary school system where extensive reading of textbooks is little practised, with summarised notes, usually in the form of locally printed notes, being extensively used. However, starting around 2008, Makerere University introduced a university-wide communication skills course. The impact of this course is yet to be evaluated.

In the entire section 9.2, the researcher has summarised the findings on public university education from the different perspectives. Having established the strengths and weaknesses of public university education, it is important for the research to draw lessons from the capability approach that can guide public university education in Uganda. The lessons are drawn from the researcher's broad interpretation and perception of the findings.

9.3 Lessons from the Capability Approach for Public Universities in Uganda

One of the underlying objectives of the current study was to assess the potential guidance that the capability approach presents to public universities in Uganda in improving curriculum content, teaching processes, and learning processes to contribute to higher education capabilities expansion among students. The researcher notes that the capability approach provides a lot of guidance in the management of

public university education processes in Uganda. The researcher argues that, given the strengths and weaknesses of public university education processes in Uganda shown in 7.2, a number of lessons can be learned from the capability approach, as elaborated below:

a) *Universities need to define higher education capabilities for their students*

The public universities in Uganda managers need to know that when students enrol in a university, the university should develop in those students, among other things, higher education capabilities. These higher education capabilities need to be specified right at the outset of any university study programme or course. Whereas currently almost all courses taught in the public universities in Uganda have documented course objectives, the intended course outcomes are widely missing in the course outlines for the period 2001–2008, though some departments in the School of Education at Makerere University had them for the period 2009 –2010. These outcomes would be the capabilities and functionings which should be documented and distributed to students. The documentation of outcomes is important because, as scholars indicate, in “... young people’s education ... teachers need to know if and how a capability is being developed, by whom, and under what conditions, as well as how this relates to other capabilities” (Walker & Unterhalter 2007:15). University students are among the young people that Walker and Unterhalter describe in their text. Actually, most university students are between the ages of 19 and 25, which is part of their formative stage. Hence, clarity in the capability expansion process is important because it (clarity) enhances focus.

b) *University education may not always expand higher education capabilities*

In principle, an education programme should develop education capabilities. But as demonstrated in 9.2.8, graduates can go through the university education processes with deficiencies in the higher education capabilities that a graduate is expected to possess (see also Appendix A). This could be due to relaxed education processes characterised by such behaviour as sloppy assessment processes, inappropriate teaching and learning approaches, excessive students’ freedom, inadequate educational resources and so forth. Regarding freedom, for example, Comim (2001:7) and Sen (1992: 59) observe that, if not well used, freedom can be a disincentive for individuals to attain a given

capability. Therefore, students can complete university education with some higher education capabilities underdeveloped or totally missing: the provision of university education does not always mean that higher education capabilities expansion among students will happen.

c) Reluctant Individuals can be convinced to adopt a capability if its centrality is well articulated

The literature in this study on capability approach, in Chapter Two, indicates that some people can deliberately miss out on developing or adopting a capability for religious, moral or social reasons. Even when the capability expansion opportunity exists, owing to personal limitations, or misguided or deliberate individual choices, an individual might disregard adopting a given capability. For example, as Sen (1999a) explains, a religious person may fast to near starvation even when food is available, thereby missing a nutrition capability.

In the analytical chapters, Seven, and Eight, of the current study, the researcher affirms that reluctant individuals can be convinced to adopt a capability if its centrality to their lives is well articulated. The recipient, who initially doubts a capability's importance, may finally understand its functionings. For example, as borne out by this study, under the university education system, students who initially find themselves in what they believe to be wrong courses, and therefore avoid classes, are in some cases guided and counselled by their lecturers. Later on, the students are enabled to appreciate the importance of the courses they are offering. Such students move on, later in life, to be successful despite taking up what initially appeared to be wrong courses. In fact, this scenario may be related to what Sen (1992: 51) explains about choice that, unless one observes the choice someone makes, there is no way of knowing what functioning a person has achieved or will select given the information on a person's capability set alone. Therefore, information, guidance and counselling can facilitate the adoption of a capability by an individual.

d) The time element can be added into the capability approach 'equation'

A person needs time to convert a 'commodity' into a capability and probably into an achieved functioning. The absence of time on one's schedule may compel one to abandon the intention to adopt a given capability. A person may have an opportunity to do something but become too busy to do it. For example, owing to personal reasons such as the desire to engage in leisure, a university student who has free access to a computer laboratory might lack the time to use the laboratory to learn basic computer operations. Therefore, the current study brings to light the *conversion time* element which the capability approach does not appear to consider.

9.4. Emerging Higher Education Capabilities for University Education

Walker (2006:128-9) lists the higher education capabilities as: practical reason; educational resilience; knowledge and imagination; learning disposition; social relations and social networks; respect, dignity and recognition; emotional integrity, emotions; and bodily integrity (see also Appendix C for details). Since Walker's ideal-theoretical and multi-dimensional educational list of eight capabilities is for higher education, these educational capabilities should, also, be possessed by first degree holders regardless of profession. Walker's list has further been developed by Maguire (2008: 92), who adds: "(i) *making connections*: being able to connect the self to the broader, global issues. Being able to make interdisciplinary connections [and]; (ii) *play*: being able to laugh, to play, and to enjoy artistic activities in collaboration with others".

Drawing up a list or supplementing an existing list of capabilities is widely accepted in the operationalisation of the capability approach in given contexts (Sen 2004: 18). Such a list allows the analysis and contextualisation of a phenomenon. In the opinion of Sen, "to insist on a fixed forever list of capabilities would deny the possibility of progress in social understanding and also go against the productive role of public discussion, social agitation, and open debates" (Sen 2004: 18). Similarly, Robeyns (2003:36) agrees with Sen that a flexible list of capabilities created through public deliberation can be drawn up. Moreover, Alkire (2003:5) confirms that there is no rigid and fixed set of certain capabilities but the priorities of human life will have to be set and re-set again and again

in various ways. In education, Sen (1992: 45-46) declares that a list of capabilities can be developed because drawing up a list of capabilities is normal.

Therefore, as a result of synthesising ideas from literature in the foregoing paragraph and using data from the respondents in the current study, the researcher contributes two additional capabilities for higher education, especially university education, to Walker's and Maguire's lists. The new capabilities are:

- a) *Entrepreneurial orientation*: Being able to see value in any activity, opportunity or calamity. Being able to multiply opportunities and resources to benefit a wider community than that one currently benefiting. Being able to look at resources as 'seeds' with the potential to generate or expand into bigger outputs. Being able to analyse, discern and avoid situations that generate loss or less than any form of input, be it time, finance, or personal energy.
- b) *Professionalism*: Being able to have a multiplicity of central qualities that are connected with trained and skilled people in a given discipline. Being able to speak or act with reasonable confidence in one's area of training. Being knowledgeable in the new developments in a given discipline. Having poise and confidence. Being reliable, open-minded and straightforward in the execution of day-to-day business.

Having contributed these two emerging higher education capabilities, this study can now be concluded. The conclusions also follow the data and subsequent analyses presented in the entire study.

9.5 Conclusions of the Study

The foregoing summary of major findings of the study presented in 9.2 and 9.3 and the emerging higher education capabilities in 9.4, crystallise a foundation upon which the researcher makes a number of conclusions in this section guided by the major sub-themes of the study. The conclusions are drawn from the major findings and reflect the inferences which the researcher makes out of the analysis in the study, especially in Chapters Six, Seven and Eight.

There are some imbalances in theory and practice integration in the curricula of public universities in Uganda. Under curriculum content, consideration given to theory and practice integration in public university education is possibly limited by lack of a deliberate effort on the part of lecturers, and limited learning resources. Lack of learning resources, therefore, affects the type of curriculum content implementation the public universities in Uganda are engaged in. In addition, the high university student populations by far outstrip the 'gazetted' fieldwork placement outlets and the number of potential academic supervisors. Hence, in some social science courses, the fieldwork component has been dropped from the curriculum content, not by deliberate choice, but owing to the scarcity of resources. By implication, the student-lecturer ratio affects the curriculum-content design.

The public university education curriculum in Uganda is largely relevant. Some lecturer-respondents argue that the curriculum is one of the best formulated things in the university education package. Similarly, students' perception of curriculum relevance is largely positive. Only the minority of students have a negative perception of the curriculum (for example, see also Table 6.4). However, senior public officials who work with the new graduates believe that the university curriculum is largely irrelevant, fragmented and shallow. In general, regarding curriculum relevance, there is a mismatch between lecturers' and students' beliefs, on one hand, and public sector officials' perception, on the other hand. Therefore, the conception of curriculum relevance depends on who the stakeholder is. When the stakeholder is the formulator of the curriculum, he is likely to praise it, and when he is at the receiving end he is likely to find fault with it.

Teaching strategies of lecturers and students sometimes conflict. Some lecturers, who use a blend of teaching approaches, enable students to learn very well. However, in spite of some lecturers' attempts to help the students learn, the students themselves are at times reluctant to learn. According to the respondents, only a relatively small proportion (about 40%) of the students seriously wants to learn. Therefore, the lecturers' positive blended teaching strategies of sharing knowledge and skills are sometimes frustrated by a reluctant clientele (the students).

The lecture (teaching) approach is dominant and undermines education capabilities expansion. The study established that public universities in Uganda primarily use the lecture approach to teaching. However, the lecture method is, overall, frustrating to both the lecturers who use it because of the big numbers of student and to the students who obtain a smaller amount of knowledge and skills than what the lecturers are capable of sharing. Hence, the dominance of the lecture method lowers the quality of teaching in public universities in Uganda and in the process undermines the expansion of higher education capabilities among students.

When used on a small scale only, pedagogically sound methods impede higher education capabilities expansion among students. Public universities in Uganda also use teaching approaches such as extended fieldwork placement, tutorials, guest speakers, practical learning, and discussions, which are pedagogically popular. These methods impart the requisite knowledge and skills to students but they are rarely used in the public universities in Uganda owing to teaching resource constraints (see also Chapter Seven). This anomaly inadvertently limits the students' opportunity to develop education capabilities.

Quality assurance practices in public university education processes are riddled with loopholes. Fieldwork and coursework are used as the dominant methods for quality assurance in the public university education processes. However, fieldwork supervision seems to be poorly managed, leading to its failure to meet the knowledge and skills development objectives (see also Chapter Seven). Similarly, coursework is prone to abuse through students contracting out its writing and the absence of extensive plagiarism controls. Hence, quality assurance through coursework and fieldwork is minimal because of operational weaknesses.

Public universities in Uganda hire excellent teachers but manage them poorly. The respondents indicated that quality assurance systems for teaching staff are first and foremost implemented through the hire of academically competent staff. This strategy is

aimed at ensuring that students receive top-notch teaching. However, this system has seemingly been rendered ineffective by poor staff supervision, irregular performance evaluation practices, and poor enforcement of performance standards. Hence, higher education capabilities expansion among students is, inter alia, limited by administrative weaknesses that fail to enforce performance standards.

Surface approaches to learning are constraining skills and knowledge expansion at public universities in Uganda. The respondents reported that the students at public universities in Uganda learn through day-to-day personal interaction with lecturers, experts, peers, and through internet surfing as well as private individual reading. All these approaches are useful and help students improve on their education capability. However, the students' learning intensity appears to be low. Most students concentrate on learning only when they are under the threat of examinations or tests. Even when they engage in learning, they are using surface approaches (see also 8.3). Surface approaches to learning lead to loss of opportunities to acquire skills and knowledge. Therefore, as the results in Chapter Eight suggest, the low expansion levels of student education capabilities are, inter alia, a result of students' surface approaches to learning as well as a liberal university examination system.

Students at public universities in Uganda have low levels of research skills. Generally, research methods are taught to undergraduate students in most departments, although writing a research paper is compulsory for less than 30% of the students (see also 8.3). The few disciplines that have a compulsory research paper still suffer quality-related problems emanating from the existence of large numbers of students, limited research resources and low student ethics (see also 8.4). Hence, the level of research-knowledge and skills is low among some students, most of whom miss out on the benefits of research, such as developing writing skills and practical reason. Therefore, among other things, the low levels of research teaching and practice in public universities in Uganda lead to low higher education capabilities expansion among students.

Why new graduates from public universities in Uganda appear deficient in higher education capabilities

Considering the views and perceptions of respondents, as borne out by the data collected and analysed in this study, it can be asserted that public universities in Uganda suffer several constraints that limit their effective functioning in expanding education capabilities among students. Such limitations, as already indicated elsewhere in this thesis, include: inadequate educational resources; an ineffective supporting administrative structure; poor approaches to teaching; surface approaches to learning; excessive student freedom; a generation of students attuned to leisure as opposed to academic work; and so forth (see also Chapters Six, Seven & Eight). In general, the researcher concludes that the seeming deficiency in higher education capabilities among the new graduates from public universities in Uganda is, *inter alia*, due to erratic teaching processes (in terms of teaching approaches and quality assurance measures) and inadequate teaching resources (see also Chapter Seven). The deficiencies are also due to poor learning habits among students influenced by an environment that is not conducive to learning, characterised by limited learning resources, limited career guidance, and leisure-related learning intentions (see also Chapter Eight). Incidentally, as the respondents indicated, the curriculum is a minor problem because its content is generally at an acceptable standard (Chapter Six). In essence, the study findings suggest that *how* the content is delivered by lecturers and *how* it is received and assimilated by the students are the constraining factors in the process of higher education capabilities expansion among students in public universities in Uganda.

9.6 Recommendations for Higher Education Capabilities Expansion

In the light of the foregoing analysis of public university education and higher education capabilities expansion, as presented in Chapters Six, Seven and Eight; the major findings as summarised in 9.2, the major lessons in 9.3, and the conclusions in 9.5, the following recommendations are presented for consideration by the different stakeholders in public university education in Uganda. These recommendations are aimed at benefiting the public university students, university administrators, and different actors in the labour market.

9.6.1 Improve curriculum content to match higher education capabilities expansion

Define specific university education capabilities as education outcomes: Public university educators in Uganda should let students know and receive in writing the expected education outcomes (higher education capabilities) to be developed per course. This action can be undertaken during orientation time in the students' first year at university. The exercise can be repeated at the beginning of every academic year. For example, the teaching staff could encourage students to focus on four areas of learning advocated by Hoffmann (2006:3), namely: learning to know; learning to be; learning to do; and learning to live with others.

Balance between theory and practical teaching: The study has established that theory and practice integration in university education is constrained by lack of resources such as learning resources. Lack of resources affects the content prescribed by the curriculum developers. For example, practical work, seminars, exchange workshops, and coursework cannot be prescribed in the curriculum owing to lack of the necessary teaching resources. Therefore the Government of Uganda should increase the budgetary allocation to public universities and should put a lot of emphasis on financing teaching and learning resources.

Organise joint consultations between lecturers and employers: It has been established that while the university lecturers and students consider the university curriculum to be appropriate and relevant, the senior public officials (who manage the workplaces which the new graduates join after university) despise it (the curriculum). This mismatch in perception points to a departure of the public university education system from the labour market requirements. It is, therefore, recommended that university administrations organise joint consultations between university lecturers and the lead employers in Uganda every time there is a curriculum review. Joint consultations will help these stakeholders to agree on key components of curriculum content and hopefully increase its relevance.

9.6.2 Modernise university teaching processes to enhance higher education capabilities expansion

Teach lecturers how to teach: The results of this study, inter alia, suggest that most lecturers in public universities in Uganda do not have pedagogical skills. Lecturers learn how to teach through trial and error over time. Even then, some of them do not follow the principles of teaching. This limitation affects what and how students learn. In fact, as Stark (quoted in Hativa 2000: 17) observes, “deficiencies in pedagogical knowledge negatively affect all aspects of university teaching”. Other scholars have argued that “a well-informed approach to teaching, in whatever field, relies on a sound understanding of the process of, and obstacles to, learning” (Wagner et al. 2010: 83). Therefore, the deficiency in teaching skills might make teachers fail to plan their lessons with their mind tuned to the content and how to present it while giving little consideration to how their students will understand it and utilise it. Anomalies in teaching processes, for example at Makerere University, still obtain despite the conduct of some short courses on ‘pedagogical skills’ targeting every lecturer between 2006 and 2008 by the School of Education and External Studies. Whereas the course was a useful undertaking, the time allocated to these pedagogical classes was insufficient. As for Mbarara University, it seems that such courses have never been offered to lecturers outside the School of Education.

Harmonise lecturers’ teaching strategies with students’ learning strategies: The study has established that at public universities in Uganda the teaching strategies (plans) of lecturers, when dealing with the university students, affect the amount of knowledge and skills developed by students. Students’ strategies sometimes contradict lecturers’ strategies because only a relatively small proportion (about 40%) of the students are seriously engaged in learning (see also 8.3). Probably, the major reason for the disparity between the lecturers’ and the students’ learning strategies is inadequate communication of the teaching and learning intentions. Just like Martin, Prosser, Trigwell, Ramsden and Benjamin (2002:103) observe, lecturers’ intentions concerning “what it is that students should learn” has close links with lecturers’ expectations of how students should learn and how the learning processes can be organised, right from curriculum

design through the teaching and learning processes to learning evaluation. Therefore, when lecturers clarify the learning outcomes, the probability of harmonising teaching strategies with student learning strategies is increased. In the process, students are enabled to appreciate the higher education capabilities expansion value of studying at university.

Use blended methods of teaching and assessment: The lecture approach is the dominant one in teaching at public universities in Uganda. The dominance of the lecture approach lowers the quality of teaching in public universities in Uganda. It is, therefore, recommended that lecturers use a blended approach to teaching in order to cater for different learning needs and styles. The blending will facilitate the development of knowledge, skills and capacities in the university students. In addition, the public universities in Uganda should develop “competence-based methods” of teaching and assessment that relate to the world of work (Kolb 1984:7), so as to match students’ education capabilities with job demands.

Reduce intake of private students in public universities in Uganda: The current high intake of privately sponsored students in public universities in Uganda is at the centre of most of the problems relating to poor education capabilities expansion in students. For example, all the public universities in Uganda combined admitted about 32,000 privately sponsored students in 2011 against the backdrop of resources that could adequately support less than half of this student population. In the current circumstances, these students are already vulnerable to being under-equipped in higher education capabilities expansion. Indeed, as Unterhalter (quoted in Flores-Crespo 2004:4) notes, the “mere fact of widening educational opportunities...does not always go in the same direction as the process of expanding human capabilities”. Therefore, the government should direct public universities to admit only half of the current number of privately sponsored students until such a time as the teaching and learning resources (for instance library space, lecture rooms, computer laboratories, lecturers, textbooks, and so forth) have been increased proportionately. Meanwhile, the remaining students should be channelled to private

universities or, better still, to diploma- and certificate-awarding institutions such as polytechnics.

Enforce quality controls in the university education processes: The enforcement should start with directing public universities to admit students on merit but not on social or political criteria such as district quotas. Then, coursework and examinations as quality control measures of student learning should further be refined in terms of controls to minimise plagiarism and students 'contracting out' of coursework. Furthermore, university administrations should reintroduce tutorials as a teaching approach; monitor class attendance; evaluate lecturer performance; restock the libraries; introduce the plagiarism detection programmes; and so forth. In addition, the public universities in Uganda need to develop control mechanisms and enforce penalties to regulate students' learning and other stakeholders' behaviour regarding coursework and examination malpractices. Meanwhile quality assurance for staff currently implemented through the hire on merit of competent staff should be upheld and further strengthened through professional staff supervision and performance appraisals in order to eliminate sub-standard teaching in university education programmes.

Teach university students how to learn: Staff in public universities in Uganda should counsel and even teach students how to learn. This is because some students are fundamentally surface learners, although they learn through day-to-day personal interface with their lecturers, field experts, peers in group discussions, the internet and private individual reading (see also 8.3). And as Biggs and Moore (1993: 310, 329) argue, some ways of learning are more efficient than others; and there are things that teachers can do to maximise the chances for students to undertake learning in the most beneficial way. Biggs and Moore further demonstrate that study skills can be taught in context or across contexts. For example, deep learning approaches should be entrenched in the public university education processes because deep approaches favour academic achievement (see also 4.3.1).

Make research compulsory for all undergraduate degree programmes: Research teaching and writing a dissertation or project should be emphasised in all undergraduate courses at public universities in Uganda. This is because doing research is a capability development undertaking, for it removes a student from his familiar 'comfort zone' and places him in the demanding zone of the academic rigours of knowledge seeking, analysis and understanding. In addition, as a respondent observed; "There can be no meaningful practice without research because it is the research which keeps improving on practice: it is the research which generates knowledge" (Public Official, Interview P3). Possibly, the low levels of research teaching and practice at university level have led to low levels of higher education capabilities expansion among the students.

Curtail students' excessive freedom. Most undergraduate students in public universities in Uganda are reportedly mentally and socially immature, contrary to the general view that these are adults capable of making rational decisions. The uncontrolled campus atmosphere for undergraduate studies, with a lot of freedom, makes students lose out on important bits of learning because, after all, they are free to learn or not to learn. In the current study, it is argued that excessive freedom is one of the limitations to capability expansion at university level and should, therefore, be curbed. In fact, as Sen states, "...sometimes more freedom of choice can bemuse and befuddle, and make one's life more wretched" (Sen 1992: 59). Moreover, Deneulin (2003: 2) affirms that 'agency' is at times detrimental to an individual if the pursued values are not rationally chosen. Hence, this study recommends that the administrations of public university institute several learning control measures and challenges that force the students to acquire the intended knowledge, skills, and attitudes.

9.6.3 Exploit opportunities for student learning to enhance capability expansion

Institute functioning career guidance and counselling centres at public universities in Uganda: Drawing from the current university teaching processes that present unique opportunities for students' higher education capabilities expansion (for example through the use of internet resources that allow students to access international and up-to-date information and do self-teaching) there is need to go beyond these opportunities and

guide students. Students need guidance on what to download and how. Moreover, some students even need to be guided, early in their university days, on the alternative courses or programmes where their career interests can fit so that they are successful in their future lives. Hence, the public universities in Uganda should institute functioning career centres that are open to all students for consultations and guidance.

Improve on the utilisation of well-qualified lecturers: The lecturers' increasing competences in specific subject areas is an opportunity for students to develop education skills and capacities through knowledge-sharing. However, the respondents revealed that the highly qualified lecturers have substantially reduced their participation in designing course, teaching and supervising research students, thereby relegating this role to junior lecturers. This scenario seems to have contributed to a reduction in education quality standards at public universities in Uganda. It is, therefore, recommended that public university administrations take a deliberate interest in improving the level of senior lecturers' direct participation and involvement in the university education processes.

Promote all-round university education: Public universities should extend their roles beyond academic research, teaching and learning to include an emphasis on the already existing co-curricular activities that allow social, moral and physical development. The co-curricular activities, if emphasised and not merely availed on a small scale as it is now, will hopefully enhance the development of graduates into all-round persons with a variety of capabilities. Thus, public universities in Uganda should develop systems and infrastructure for active leisure and socialisation activities that provide opportunities for developing social skills, for example in areas of personal grooming, etiquette, and public relations.

Improve on students' confidence and communication skills: The study data suggest that these skills are developed in the students to a low degree. In general, the new graduates exhibit average confidence, and are even poor at communication skills, especially written communication. The public universities should, therefore, promote the practice of day-to-

day debates, tutorials and class presentations to improve on students' oral and written communication skills. Remedial, and probably voluntary, English language classes should be instituted in the relevant university departments to help the students hone their communication skills and personal presentation.

9.6.4 Develop the neglected capabilities in the public university education system

Develop analytical skills of students: These skills will enable the student to measure up to international standards regarding what is expected of a graduate (for example, see also Appendix A for British Standards). In order to improve on the analytical skills of the students, public universities in Uganda should promote deep learning approaches among their students (see also 4.3.1). Furthermore, as some scholars have argued, deep learning helps students to always make connections and meaning rather than focusing on isolated elements of knowledge or rote-learning (Butcher et al. 2006: 89).

Nurture innovativeness, creativity and entrepreneurship among students: As the world of formal employment seems to stagnate, those qualifying from universities may need to be more creative than the previous generations in order to enjoy human wellbeing. Public universities in Uganda should, therefore, impart to all students the skills relating to innovation, creativity and entrepreneurship regardless of professional specialisation. These skills should be accompanied by occupational counselling that brings out the significance of occupational flexibility in the employment sector.

Strengthen computer skills development in students: The level of computer skills development among non-specialist students of Computer Science or Information Technology is low. However, most faculties at Makerere and Mbarara universities have computer laboratories that allow students to do self-teaching but the computers are insufficient in number. Yet the world of work today is centred on computer use and the students seem to have difficulty in coping with this skill deficiency later on. The university should, therefore, find ways and means to ensure that every undergraduate student is equipped with basic computer skills in the utilisation of common programmes such as Microsoft Word and Excel.

In conclusion, the foregoing recommendations are made in the belief that they are feasible. However, the researcher is also aware that making changes in the university system is a complicated undertaking. Quite often the different stakeholders are reluctant to change their way of doing things. As Jackson (2010: 497) observes:

Anyone who has tried to bring about change in educational practices in a university knows how difficult it is to achieve when people who must implement change have near total autonomy over their practice and they are quite happy with the way things are. Bringing about change on any significant scale is difficult, messy and full of contest, conflict, avoidance and non-engagement.

However, as long as what needs to be changed in a public university is beneficial to most of the stakeholders (such as students, lecturers, and government) the university should effect that change. Hence, the researcher feels that the foregoing recommendations should be implemented. If implemented, these recommendations will contribute towards the improvement of higher education capabilities expansion among university students in Uganda. In effect, the opportunities for students to expand their higher education capabilities will be enhanced through the suggested refinements in public university education processes and the problems identified in 1.3 will hopefully be minimised (see also 5.10).

9.7 Contributions of the Study

The current study makes some contributions to the existing body of knowledge in the field of university education and capability expansion. Firstly, the study has demonstrated that university education in Uganda can be analysed using the capability approach. Secondly, the conceptual framework in Figure 4.1, though informed by literature reviews, is a creation of the researcher and it graphically demonstrates that the acquisition of higher education capabilities (such as learning dispositions; sociality and participation practical reason; and science and technology) is not an end in itself but is one of the predictors or processes in acquiring general capabilities (such as independence, freedom, rights, and employment) (see also figure 4.5). Thirdly, whereas scholars such as Walker (2006:128-9) and Maguire (2008: 92) list capabilities for higher education, analyses in the current study have generated two new capabilities that can

be added on the capability list. The new capabilities are (i) entrepreneurial orientation, and (ii) professionalism (see also 9.4). Fourthly, the study has further contributed a view that public university education processes, if left to their own 'devices', may not always expand higher education capabilities among students.

9.8 Areas for Further Research

The current study gives rise to some new areas for potential research. These research areas are informed by the findings and insights generated by this study and they require further research. The study focused on public university education and analysed the higher education capabilities of students from two out of the five public universities in Uganda. Future research could, therefore, shift to private universities for more insights, although the students in the private universities account for only about 25% of the total number of university students in Uganda. It would also be interesting for a cross-country study within sub-Saharan Africa to be conducted to establish if there is any regional pattern of declining student education capabilities.

The current study results, inter alia, suggest that the growing student populations at Makerere and Mbarara universities have contributed to a reduction in the effect of university education on higher education capabilities expansion among students. There is need to study why the Government of Uganda continues to allow the rapid expansion of public university education in spite of the growing evidence that the higher education capabilities developed among students at public universities in Uganda are diminishing. Actually, future studies may also analyse the implications of government expanding the private wings of public universities in Uganda that have facilitated access to university by many secondary school leavers, even under non-meritorious circumstances, instead of some of them being channelled to polytechnics for diploma or certificate courses.

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APPENDIX A

EXPECTED CAPABILITIES FROM A FIRST DEGREE HOLDER (THE UNITED KINGDOM)

Level descriptors: Honours

Honours degrees are awarded to students who have demonstrated:

- i. a systematic understanding of key aspects of their field of study, including acquisition of coherent and detailed knowledge, at least some of which is at or informed by, the forefront of defined discipline.
- ii. an ability to deploy accurately established techniques of analysis and enquiry within a discipline.
- iii. conceptual understanding that enables the student:
 - (a) to devise and sustain arguments, and solve problems, using ideas and techniques, some of which are at the fore front of a discipline, and
 - (b) to describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline.
- iv. an appreciation of the uncertainty, ambiguity and limits of knowledge.
- v. the ability to manage their own learning, and to make use of scholarly reviews and primary sources (e.g. refereed research articles and/or original materials appropriate to the discipline).

Typically, holders of the qualification will be able to:

- a. apply the methods and techniques that they have learned to review, consolidate, extend and apply their knowledge and understanding, and to initiate and carry out projects.
- b. critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgment, and to frame appropriate questions to achieve a solution –or identify a range of solutions- to a problem.
- c. communicate information, ideas, problems and solution to both specialist and non-specialist audiences.

and will have:

- d. qualities and transferable skill necessary for employment requiring:
 - the exercise of initiative and personal responsibility
 - decision making in complex and unpredictable context, and
 - the learning ability needed to undertake appropriate further training of a professional or equivalent nature.

Source: QAA (Quality Assurance Agency) 2001: 14-15

APPENDIX B

Nussbaum's Central Human Capabilities

Life— being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced as to be not worth living.

Bodily Health— being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter.

Bodily Integrity— Being able to move freely from place to place; to be secure against violent assault, including sexual assault and domestic violence; having opportunities for sexual satisfaction and for choice in matters of reproduction.

Senses, Imagination, and Thought— being able to use the senses, to imagine, think, and reason— and to do these things in a “truly human” way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical and scientific training; being able to use imagination and thought in connection with experiencing and producing works and events of one's own choice, religious, literary, musical, and so forth; being able to use one's mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech, and freedom of religious exercise; being able to have pleasurable experiences and to avoid non-beneficial pain.

Emotions— being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; in general, to love, to grieve, to experience longing, gratitude, and justified anger. Not having one's emotional development blighted by fear and anxiety. (Supporting this capability means supporting forms of human association that can be shown to be crucial in their development.)

Practical Reason— being able to form a conception of the good and to engage in critical reflection about the planning of one's life. (This entails protection for the liberty of conscience and religious observance.)

Affiliation— being able to live with and toward others, to recognize and show concern for other human beings, to engage in various forms of social interaction; to be able to imagine the situation of another. (Protecting this capability means protecting institutions that constitute and nourish such forms of affiliation, and also protecting the freedom of assembly and political speech.) Having the social bases of self-respect and non-humiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails provisions of non-discrimination on the basis of race, sex, sexual orientation, ethnicity, caste, religion, or national origin.

Other Species— being able to live with concern for and in relation to animals, plants, and the world of nature.

Play— being able to laugh, to play, to enjoy recreational activities.

Control over one's Environment— there are two areas: One is **Political**. Being able to participate effectively in political choices that govern one's life; having the right of political participation, protections of free speech and association. The last is **Material**. Being able to hold property (both land and movable goods), and having property rights on an equal basis with others; having the right to seek employment on an equal basis with others; having the freedom from unwarranted search and seizure. In work, being able to work as a human being, exercising practical reason and entering into meaningful relationships of mutual recognition with other workers.

Source: Nussbaum 2003

APPENDIX C

AN IDEAL-THEORETICAL LIST FOR CAPABILITY DISTRIBUTION AND EVALUATION: HIGHER EDUCATION

- 1 **Practical reason.** Being able to make well-reasoned, informed, critical, independent, intellectually acute, socially, responsible, and reflective choices. Being able to construct a personal life project in an uncertain world. Having good judgment.
- 2 **Educational resilience.** Able to navigate study, work and life. Able to negotiate risk, to persevere academically to be responsible to educational opportunities and adaptive to constraints. Self-reliant. Having aspirations and hopes for good future
- 3 **Knowledge and imagination.** Being able to gain knowledge of a chosen subject-disciplinary and / or professional – its form of academic inquiry and standards. Being able to use critical thinking and imagination to comprehend the perspective of multiple others and to form impartial judgments. Being able to debate complex issues. Being able to acquire knowledge for pleasure and personal development, for career and economic opportunity, for political, cultural and social action and participation in the world. Awareness of ethical debates and moral issues. Open-mindedness. Knowledge to understand science and technology in public policy
- 4 **Learning disposition.** Being able to have curiosity and a desire for learning. Having confidence in one's ability to learn. Being an active inquirer.
- 5 **Social relations and social networks.** Being able to participate in a group for learning, working with others to solve problems and tasks. Being able to work with others to form effective or good groups for collaborative and participatory learning. Being able to form networks of friendship and belonging for learning support and leisure. Mutual trust.
- 6 **Respect, dignity and recognition.** Being able to have respect for oneself and for and from others, being treated with dignity, not being diminished or devalued because of one's gender, social class, religion or race, valuing other languages, other religions and spiritual practices and human diversity. Being able to show empathy, compassion, fairness and generosity, listening to and considering other person's points of view in dialogue and debate. Being able to act inclusively and being able to respond to human need. Having competence in inter-culture communication. Having a voice to participate effectively in learning; a voice to speak out to debate and persuade, to be able to listen.
- 7 **Emotional integrity, emotions.** Not being subject to anxiety or fear which diminishes learning. Being able to develop emotions for imagination, understanding, empathy, awareness and discernment.
- 8 **Bodily integrity.** Safety and freedom from all forms of physical and verbal harassment in the higher education environment.

Source: Walker 2006: 128-129

APPENDIX D

UNIVERSITY OF SOUTH AFRICA, PRETORIA

INTERVIEW GUIDE FOR LECTURERS OF UNDERGRADUATE COURSES AT PUBLIC UNIVERSITIES IN UGANDA

Dear/madam

I am Sebastian Bigabwenkya, a student at the University of South Africa (UNISA) carrying out a study to find out the role public university education has played in student capability development for the last ten years (2001-2010) in Uganda. You have been selected to participate in this study as one of the respondents. I would like to request you to answer the following question as honestly as possible. Your responses will be treated with the highest level of confidentiality and will be used for purpose of this study only. The interviews will take about 35 – 50 minutes.

The basics

- ❖ Consent to tape interview a recorder
- ❖ Prerogative to refuse to answer some questions
- ❖ Particulars:
 - Name of university
 - Place of interview
 - Date of interview
 - Time started
 - Time ended
 - Name of department & faculty

A. Capabilities

1. Please tell me your experience and perception of university education processes and how they contribute to the development of knowledge, skills, learning and other forms of human capacities in a student.
2. From your perspective as a lecturer, what knowledge, skills and learning are people trying to develop when they enrol for an undergraduate course you teach at the university today?
3. From your perspective, what are the education capabilities (knowledge, capacities and skills) you expect to find in a first degree holder in Uganda today?

B. Appreciation of curriculum theory and practice integration

4. How does the curriculum content of the courses you teach at the university affect students' overall individual education capabilities expansion in terms of sociality & participation, practical reason, learning dispositions, and computer knowledge?
5. How relevant to the students' needs and profession is the university curriculum in your department?

C. Teaching processes

6. Please tell me about the departmental teaching processes you are involved and how you feel these processes are relevant to student knowledge and skills development (e.g. in practical reason, critical reflection, positive relationship with others).
7. As a lecturer, what capabilities (knowledge and skills) are you trying to develop in your students through your teaching?
8. In trying to develop these capabilities, what quality assurance measures do you undertake?

D. Learning processes

9. Please tell me about your experiences on the learning processes that your recent students were involved in: How do they learn?
10. Please tell about the learning strategies, and approaches, if any, that you as a lecturer encourage students to use while at the university? What learning processes do you normally promote?

E. Level of research engaged in

11. Please explain to me your experience in getting students involved in any form of studying research methods or writing paper or dissertation paper.
12. How does your teaching or conducting of research relate to the development of capabilities of your students (e.g. computer knowledge and skills, practical reason, sociality, learning dispositions)?

F. Moderating factors

13. In your view, what are the factors that have been limiting the university students (2001-2010) in your university from getting the best out of university education processes during their university time?

G. General Issues

14. What education capabilities (knowledge & skills) do you think the new graduates (2001-2010) from your faculty/department university lack?

End. Thank you very much

APPENDIX E

UNIVERSITY OF SOUTH AFRICA, PRETORIA

INTERVIEW GUIDE FOR NEW GRADUATES (2001-2010) IN PUBLIC UNIVERSITIES IN UGANDA

Dear/madam

I am Sebastian Bigabwenkya, a student at the University of South Africa (UNISA) carrying out a study to find out the role played by public university education in student education capability development for the last ten years (2001-2010) in Uganda. You have been selected to participate in this study as one of the respondents. I would like to request you to answer a number of questions as honestly as possible. Your responses will be treated with the utmost confidentiality and used for purpose of this study only. The interviews will take about 30 – 40 minutes.

The basics

- ❖ Consent to tape interview on a recorder
- ❖ Prerogative to refuse to answer some questions
- ❖ Particulars:
 - Name of university
 - Place of interview
 - Date of interview
 - Time started
 - Time ended
 - Year of completion at university
 - Name of department & faculty

A. Capabilities

1. From your perspective as a recent student, what knowledge, skills and learning are people trying to develop when they enrol for an undergraduate course in the university today?
2. From your perspective, what are the capabilities you expect to find in a first degree holder in Uganda today?
3. Please explain to me the education capabilities (knowledge, skills and capacities) you actually possess because of university education.

B. Appreciation of curriculum content

4. How did the curriculum content of the courses you did at the university affect your overall individual education capabilities expansion in terms of sociality & participation, practical reason, learning dispositions, and computer knowledge?
5. How relevant to your needs and profession was the university curriculum?

C. Teaching processes

6. Please tell me about the departmental teaching processes you experienced and how you feel these processes are relevant to student knowledge and skills development (e.g. in practical reason, critical reflection, positive relationship with others).
7. As a recent student, what education capabilities (knowledge and skills) do you think your lecturers were trying to develop in you through their teaching?
8. In trying to develop these capabilities, what quality assurance measurable did they use to undertake?

D. Learning processes

9. Please tell me your experience of the learning processes (approaches/styles) that you as a recent student were involved in. (How were you learning?)
10. Please tell about the learning strategies, and approaches, if any, that the lecturers encouraged students to use while at the university? What is your preferred learning style?

E. Level of research engaged in

11. Please explain to me your experience in getting involved in any form of studying research methods or writing paper or dissertation paper.
12. How did studying or conducting research relate to the development of your capabilities (e.g. computer knowledge and skills, practical reason, sociality)?

F. Moderating factors

13. In your view, what are the factors that have been limiting the university students (2001-2010) in your university from getting the best out of university education processes during their university time?

G. General issues

14. What education capabilities (knowledge and skills) do you think the new graduates (2001-2010) from your department or faculty lack?

End. Thank you very much

APPENDIX F

UNIVERSITY OF SOUTH AFRICA, PRETORIA

FOCUS GROUP GUIDE FOR LECTURERS OF UNDERGRADUATE COURSES AT PUBLIC UNIVERSITIES IN UGANDA

Dear/madam

I am Sebastian Bigabwenkya, a student at the University of South Africa (UNISA) carrying out a study to find out the role public university education has played in student capability development for the last ten years (2001-2010) in Uganda. You have been selected to participate in this study as one of the respondents. I would like to request you to answer the following question as honestly as possible. Your responses will be treated with the highest level of confidentiality and will be used for purpose of this study only. The interviews will take about 35 – 50 minutes.

The basics

- ❖ Consent to tape interview a recorder
- ❖ Prerogative to refuse to answer some questions
- ❖ Particulars:
 - Name of university
 - Place of interview
 - Date of interview
 - Time started
 - Time ended
 - Name of department & faculty

A. Capabilities

1. Please tell me your experience and perception of university education processes and how they contribute to the development of knowledge, skills, learning and other forms of human capacities in a student.
2. From your perspective as a lecturer, what knowledge, skills and learning are people trying to develop when they enrol for an undergraduate course you teach at the university today?
3. From your perspective, what are the education capabilities (knowledge, capacities and skills) you expect to find in a first degree holder in Uganda today?

B. Appreciation of curriculum theory and practice integration

4. How does the curriculum content of the courses you teach at the university affect students' overall individual education capabilities expansion in terms of sociality & participation, practical reason, learning dispositions, and computer knowledge?
5. How relevant to the students' needs and profession is the university curriculum in your department?

C. Teaching processes

6. Please tell me about the departmental teaching processes you are involved and how you feel these processes are relevant to student knowledge and skills development (e.g. in practical reason, critical reflection, positive relationship with others).
7. As a lecturer, what capabilities (knowledge and skills) are you trying to develop in your students through your teaching?
8. In trying to develop these capabilities, what quality assurance measures do you undertake?

D. Learning processes

9. Please tell me about your experiences on the learning processes that your recent students were involved in: How do they learn?
10. Please tell about the learning strategies, and approaches, if any, that you as a lecturer encourage students to use while at the university? What learning processes do you normally promote?

E. Level of research engaged in

11. Please explain to me your experience in getting students involved in any form of studying research methods or writing paper or dissertation paper.
12. How does your teaching or conducting of research relate to the development of capabilities of your students (e.g. computer knowledge and skills, practical reason, sociality, learning dispositions)?

F. Moderating factors

13. In your view, what are the factors that have been limiting the university students (2001-2010) in your university from getting the best out of university education processes during their university time?

G. General issues

14. What education capabilities (knowledge & skills) do you think the new graduates (2001-2010) from your faculty/department university lack?

End. Thank you very much

APPENDIX G

UNIVERSITY OF SOUTH AFRICA, PRETORIA

INTERVIEW GUIDE FOR SENIOR PUBLIC OFFICIALS SUPERVISING NEW GRADUATES (2001-2010) IN GOVERNMENT MINISTRIES IN UGANDA

I am Sebastian Bigabwenkya, a student at the University of South Africa (UNISA) carrying out a study to find out the role public university education plays in student capability development for the last ten years (2001-2010) in Uganda. You have been selected to participate in this study as one of the respondents. I would like to request you to answer the following questions as honestly as possible. Your responses will be treated with the utmost confidentiality and used for purpose of this study only. The interviews will take about 35 – 50 minutes.

A. The basics

Consent to tape interview a recorder

Prerogative to refuse to answer some questions

Particulars:

- Name of Ministry
- Place of interview
- Date of interview
- Time started
- Time ended
- Number of participants:
- Length of service at the Ministry

A. Capabilities

1. Please tell me your experience and perception of university education processes and how they contribute to the development of knowledge, skills, learning and other forms of human capacities in a student.
2. From your experience as a civil servant, you are aware that many people have been joining our public universities in Uganda in the last 10 years: What do you think are the common knowledge, skills, and abilities that students are trying to get when they enrol for an undergraduate course in a public university today?
3. From your experience, what general knowledge, skills, qualities, and capacities do you expect to find in a graduate of one degree in Uganda today?

B. Appreciation of curriculum content

4. As a government official, what is your feeling about how the curriculum of public universities in Uganda has affected student overall individual opportunities, knowledge and skills development? (e.g. in sociality & participation, practical reason, learning dispositions, and computer knowledge).

5. Please tell me your feelings about the relevancy of the university curriculum to the students' needs, profession and to the workplace.

C. Teaching processes

6. Please tell me what you know about our public university teaching processes nowadays and how you feel these processes have been relevant to student skills and capacity development (e.g. in practical reason, critical reflection, positive relationship, computer knowledge).
7. As a government official, what general skills, and attitudes do you think the lecturers in our public universities are trying to develop in our students through their teaching?
8. What general skills and attitudes do you feel our public universities need to impart in every single student attending public university education in Uganda today?
9. In trying to develop these capabilities, what quality assurance measures do you feel these universities should put in place to ensure that students learn what they are meant to learn?

D. Learning processes

10. Suppose our public universities are trying to develop relevant and standard knowledge, skills and attitudes (e.g. practical reason, computer knowledge, sociality, learning dispositions) in our students; what learning approaches and strategies would you encourage among students?

F. Moderating factors

11. In your view, what are the factors that have been limiting the university students (2001-2010) in your university from getting the best out of university education processes during their university time?

G. General Issues

12. What is your overall impression of the quality of our new graduates from public universities in Uganda? (in regard to knowledge, skills & attitudes). What is the quality trend like?
13. What are those capabilities (skills & abilities) that you have observed the new graduates (2001-2010) from our public universities lack?

End. Thank you very much

APPENDIX H

UNIVERSITY OF SOUTH AFRICA, PRETORIA

QUESTIONNAIRE FOR FIRST- DEGREE HOLDERS / NEW GRADUATES (2001-2010) OF PUBLIC UNIVERSITIES IN UGANDA

I am Sebastian Bigabwenkya, a student at the University of South Africa (UNISA), carrying out a study to find out the role public university education plays in capability expansion among university students in Uganda so as to recommend appropriate action to university authorities and policy makers. You being a new graduate (2001 -2010), hence a recent student, you have been selected to participate in this study as one of the respondents. I request you to answer the following questions as honestly as possible. Your responses will be treated with the highest confidentiality and used for purposes of this study only.

100. BACKGROUND CHARACTERISTICS (Circle or tick the appropriate answer)

101 Your age in years: 1. (less than 25) 2. (25-29) 3: (30-34) 4. (35-39)5. (40+)

102 Sex: 1. Male 2. Female

103 Your marital Status

1. Single 2. Married 3. Separated/divorced 4. Widowed

104 Name the university where you got your degree from.

1. Makerere University (MUK) 2. Mbarara University (MUST)

105 Name of the faculty/department to which you belonged at the university:

1. Science Education, 2. Soc.Sc. /Arts Education, 3. Dev. Studies, 4. Foundations & Curriculum 5 Social Work, 6. Political Science, 7. Sociology, 8. Management Science

106 Year of completion of the first degree:

For the following question, please indicate your opinion as: 5= Strongly Agree (SA); 4= Agree (A); 3 = Undecided (U); 2= Disagree (D); or 1= Strongly Disagree (SD). Please tick or circle one answer that best represents your opinion on every question. Kindly answer all questions.

		5	4	3	2	1
		SA	A	U	D	SD
200	Curriculum theory & practice integration					
201	The curriculum covered by my bachelor degree was generally exhaustive					
202	The university curriculum was well structured					
203	The curriculum content satisfied me					
204	The curriculum had more practical learning than theory					
205	The curriculum catered for independence of mind					
206	The curriculum had technology elements e.g. computer use					

Key: 5= Strongly Agree (SA); 4= Agree (SA); 3 = Undecided (U); 2= Disagree (D); or 1= Strongly Disagree (SD)

		5 SA	4 A	3 U	2 D	1 SD
300	Professional relevance					
301	The curriculum was up to date					
302	The university course influenced me in what I am able to do today					
303	The university curriculum was relevant to my learning needs					
304	I am confident in my understanding of the subject matter of my profession					
305	My first degree is useful to the community of Uganda					
306	I have employment opportunities using my first degree					
400	Teaching strategies					
401	My lecturers took interest to ensure I internalise knowledge					
402	My lecturers took interest to ensure I acquire relevant skills					
403	University teaching processes increased my personal concentration skills					
404	The university taught me how to accomplish tasks					
405	Due to the university teaching, I am able to relate well with the public					
406	Due to the university teaching, I feel confident to participate in public affairs.					
407	Due to university teaching, I can use the computer MS Office package					
408	Due to university teaching I can critically reflect on my actions					
500	Teaching approaches					
501	Teaching methods used by my lecturers were effective					
502	Discussions with the lecturers were common during class time					
503	While at the university I had a lot of free time for self-teaching					
504	The teaching methods increased togetherness among students					
505	Teaching methods encouraged critical reflection on one's actions					
506	Lecturers used participatory teaching methods					
600	Quality assurance					
601	The university issued to me regulations to guide my conduct at campus					
602	It was easy for me to access learning materials from within the university					
603	The process of distributing the learning materials among students in my class was generally fair.					

Key: 5= Strongly Agree (SA); 4= Agree (SA); 3 = Undecided (U); 2= Disagree (D); or 1= Strongly Disagree (SD)		5 SA	4 A	3 U	2 D	1 SD
604	The lectures were fair in assessing exams across the board					
605	The lectures were fair in assessing tests across the board					
606	The available study materials in the library were generally relevant					
607	The university fully met my social needs (e.g. sports, socialization, etc)					
608	The learning resources (e.g. buildings, money, equipment etc) at the university were efficiently used by the administrators.					
609	The university environment was appropriate/good for learning					
610	I always felt that someone was supervising my lecturers to ensure that they teach well.					
611	I found university education consistent with my cultural needs.					
612	I found university education consistent with my religious needs.					
700	Learning approaches					
701	I experienced shared-learning among students during classes					
702	The knowledge I acquired from the university related to the earlier learning I had had before the university					
703	The skills I acquired from the university related to the earlier learning I had had before the university					
704	I used to revise my notes even when there was no exam in the pipe line					
705	I used to revise my notes even when there was no test in the pipe line					
706	I often used to read notes outside the lecture notes for the sake of knowing					
707	I often used to try to find out what lecturer was likely to set for the exam					
708	I was more interested in acquiring knowledge and skills than in high marks/grades in examinations					
709	The learning strategies were instrumental in developing my reflection abilities					
710	The learning strategies promoted concentration on subject matter					
800	Level of research					
801	I often saw my lecturers teaching using material generated from their own research works					
802	I often used to come across text books or journal articles or research papers written by my lecturers					
803	My bachelor degree studies involved a research study course/paper					
804	I can carry out a research in my area of study with reasonable confidence.					

Key: 5= Strongly Agree (SA); 4= Agree (SA); 3 = Undecided (U); 2= Disagree (D); or 1= Strongly Disagree (SD)

		5 SA	4 A	3 U	2 D	1 SD
900	Education capabilities					
901	I can concentrate on assignment with ease					
902	I have interests I am pursuing in life					
903	I accomplish my intended day to day work very well					
904	I can do research on a given topic with ease					
905	I have many friends					
906	I participate in public activities					
907	I feel free to interact in public					
908	I can use Microsoft word programme with ease					
909	I can use Microsoft excel programme with ease					
910	University education expanded my reasoning capacity					
911	University education improved my socialization behaviour					
912	University education improved my ability to accomplish tasks					
913	University education improved my application of technological tools					

END
Thank you very much!

APPENDIX I

SCORED QUESTIONNAIRE FOR FIRST- DEGREE HOLDERS / NEW GRADUATES (2001-2010) OF PUBLIC UNIVERSITIES IN UGANDA (DATA SHEET)

TOTAL RESPONDENTS = 166

100. BACKGROUND CHARACTERISTICS

- 101 Your age in years: 1. (less than 25) **(16)** 2. (25-29) **(71)** 3: (30-34)**(54)**4. (35-39) **(18)** 5. (40+)**(7)**
- 102 Sex: 1. Male **(71 (43%))** 2. Female**(91 (57%))**
- 103 Your marital Status
1. Single **(76 (46%))**2. Married **(88 (53%))** 3. Separated/divorced**(2 (1%))**4. Widowed**(0 (0%))**
- 104 Name the university where you got your degree from.
1. Makerere University (MUK)**(122 (73%))** 2. Mbarara University (MUST)**(44 (27%))**
- 105 Name of the faculty/department to which you belonged at the university:
1. Science Education**(36 (21.8%))**, 2. Soc .Sc./Arts Education,**(23 (13.9%))** 3.Dev. Studies **(35 (21%))**
4. Foundations & Curriculum (00) 5Social Work**(19 (11.4%))**, 6. Political Science**(16 (9.6%))** 7. Sociology **(25 (15.1%))**8. Management Science **(12 (7.2%))**
- 106 Year of completion of the first degree: 2001 (15); 2002 (9); 2003 (15); 2003 (12); 2004 (12); 2005 (17); 2006 (17); 2007 (21); 2008 (22); 2009 (24) & 2010 (14).

For the following question, please indicate your opinion as: 5= Strongly Agree (SA); 4= Agree (SA); 3 = Undecided (U); 2= Disagree (D); or 1= Strongly Disagree (SD). Please tick or circle one answer that best represents your opinion on every question. Kindly answer all questions.

RESPONSES IN PERCENTANGES (%) (TOTAL RESPONDENTS = 166)

		5 SA	4 A	3 U	2 D	1 SD
200	Curriculum theory & practice integration					
201	The curriculum covered by my bachelor degree was generally exhaustive	7.2	43.4	18.7	30.1	0.6
202	The university curriculum was well structured	1.2	0.6	4.2	72.	21.7
203	The curriculum content satisfied me	1.2	12.0	6.6	65.7	14.5
204	The curriculum had more practical learning than theory	1.2	7.2	3.6	72.9	15.1
205	The curriculum catered for independence of mind	6.6	19.9	3.6	41.0	28.9
206	The curriculum had technology elements e.g. computer use	7.2	21.1	11.4	52.7	7.6

Key: 5= Strongly Agree (SA); 4= Agree (SA); 3 = Undecided (U); 2= Disagree (D); or 1= Strongly Disagree (SD)						
		5 SA	4 A	3 U	2 D	1 SD
300	Professional relevance					
301	The curriculum was up to date	1.2	1.8	0	79.5	17.5
302	The university course influenced me in what I am able to do today	0.6	1.2	1.8	66.9	29.5
303	The university curriculum was relevant to my learning needs	10.8	42.2	4.2	21.1	21.7
304	I am confident in my understanding of the subject matter of my profession	4.8	25.9	5.4	48.2	15.7
305	My first degree is useful to the community of Uganda	9.0	33.7	3.0	34.3	18.1
306	I have employment opportunities using my first degree	1.8	5.4	9.0	69.3	14.5
400	Teaching strategies					
401	My lecturers took interest to ensure I internalise knowledge	1.8	7.2	9.6	58.4	24.1
402	My lecturers took interest to ensure I acquire relevant skills	9.6	8.4	9.6	45.8	26.5
403	University teaching processes increased my personal concentration skills	7.2	19.9	13.9	45.1	13.9
404	The university taught me how to accomplish tasks	5.4	21.7	16.9	38.5	17.5
405	Due to the university teaching, I am able to relate well with the public	8.4	10.8	13.3	57.3	10.2
406	Due to the university teaching, I feel confident to participate in public affairs.	11.4	23.5	7.8	42.2	15.1
407	Due to university teaching, I can use the computer MS Office package	13.3	26.5	11.4	39.4	8.4
408	Due to university teaching I can critically reflect on my actions	1.8	7.8	6.2	65.9	18.3
500	Teaching approaches					
501	Teaching methods used by my lecturers were effective	11.4	21.1	4.8	46.4	14.5
502	Discussions with the lecturers were common during class time	6.0	18.7	3.0	55.4	16.9
503	While at the university I had a lot of free time for self-teaching	12.7	30.8	4.2	43.9	8.4
504	The teaching methods increased togetherness among students	6.0	13.9	4.2	63.7	10.2
505	Teaching methods encouraged critical reflection on one's actions	1.8	7.8	7.4	67.1	15.9
506	Lecturers used participatory teaching methods	11.4	24.7	4.8	36.1	22.3
600	Quality assurance					
601	The university issued to me regulations to guide my conduct at campus	2.4	7.8	4.8	68.5	16.3
602	It was easy for me to access learning materials from within the university	1.2	6.7	5.4	69.9	16.8
603	The process of distributing the learning materials among students in my class was generally fair.	1.2	0.6	4.2	74.5	19.5

Key: 5= Strongly Agree (SA); 4= Agree (SA); 3 = Undecided (U); 2= Disagree (D); or 1= Strongly Disagree (SD)						
		5 SA	4 A	3 U	2 D	1 SD
604	The lectures were fair in assessing exams across the board	1.8	1.8	3.0	76.9	16.5
605	The lectures were fair in assessing tests across the board	7.8	18.7	3.0	56.0	14.5
606	The available study materials in the library were generally relevant	13.9	36.7	1.8	38.0	9.6
607	The university fully met my social needs (e.g. sports, socialization, etc)	11.4	24.7	2.4	42.2	19.3
608	The learning resources (e.g. buildings, money, equipment etc) at the university were efficiently used by the administrators.	11.4	10.8	1.8	63.3	12.7
609	The university environment was appropriate/good for learning	6.0	18.7	4.2	58.4	12.7
610	I always felt that someone was supervising my lecturers to ensure that they teach well.	6.6	15.1	3.0	62.0	13.3
611	I found university education consistent with my cultural needs.	3.0	19.3	3.0	52.4	22.3
612	I found university education consistent with my religious needs.	1.2	4.8	3.0	61.4	29.5
700	Learning approaches					
701	I experienced shared-learning among students during classes	2.4	5.4	4.8	67.5	19.9
702	The knowledge I acquired from the university related to the earlier learning I had had before the university	6.6	10.8	0.6	64.5	17.5
703	The skills I acquired from the university related to the earlier learning I had had before the university	4.8	17.5	1.2	54.2	22.3
704	I used to revise my notes even when there was no exam in the pipe line	2.4	6.0	0.6	61.4	28.9
705	I used to revise my notes even when there was no test in the pipe line	2.4	10.9	0	60.8	25.9
706	I often used to read notes outside the lecture notes for the sake of knowing	5.4	16.3	0	60.8	17.5
707	I often used to try to find out what lecturer was likely to set for the exam	12.7	38.6	2.4	39.2	7.2
708	I was more interested in acquiring knowledge and skills than in high marks/grades in examinations	3.6	28.9	6.6	45.2	15.7
709	The learning strategies were instrumental in developing my reflection abilities	1.8	5.4	7.8	74.7	10.2
710	The learning strategies promoted concentration on subject matter	8.4	22.3	10.8	55.7	3.0
800	Level of research					
801	I often saw my lecturers teaching using material generated from their own research works	3.0	15.1	53.6	9.6	18.7
802	I often used to come across text books or journal articles or research papers written by my lecturers	8.4	28.9	45.8	2.4	14.5
803	My bachelor degree studies involved a research study course/paper	6.0	21.1	1.2	64.5	7.2
804	I can carry out a research in my area of study with reasonable confidence.	6.6	19.9	1.2	65.7	6.6

Key: 5= Strongly Agree (SA); 4= Agree (SA); 3 = Undecided (U); 2= Disagree (D); or 1= Strongly Disagree (SD)

		5 SA	4 A	3 U	2 D	1 SD
900	Education capabilities					
901	I can concentrate on assignment with ease	5.4	32.5	3.0	44.0	15.1
902	I have interests I am pursuing in life	7.8	27.7	4.2	47.0	13.3
903	I accomplish my intended day to day work very well	6.6	32.5	3.0	39.2	18.7
904	I can do research on a given topic with ease	8.4	24.1	7.2	45.1	15.2
905	I have many friends	8.4	33.8	7.8	31.9	18.1
906	I participate in public activities	3.0	10.2	4.2	61.4	21.1
907	I feel free to interact in public	1.2	2.4	4.2	71.1	21.1
908	I can use Microsoft word programme with ease	7.2	28.3	4.8	45.2	14.5
909	I can use Microsoft excel programme with ease	4.2	16.9	3.0	63.3	12.6
910	University education expanded my reasoning capacity	13.9	25.3	7.2	42.2	11.4
911	University education improved my socialization behaviour	12.6	38.6	2.4	39.2	7.2
912	University education improved my ability to accomplish tasks	3.6	28.3	6.6	45.8	15.7
913	University education improved my application of technological tools	8.4	28.9	45.8	2.4	14.5

APPENDIX J

ISSUES CONSIDERED IN DOCUMENT REVIEW

1. Name of document and source
2. Relationship of the document to public university education
3. Aims and objectives of the document
4. Relationship of the document to university curriculum content (relevance, theory, practice)
5. Relationship of the document to university teaching processes (strategies, approaches, quality assurance)
6. Relationship of the document to university learning processes (strategies, research standards, learning environment)
7. Relationship of the document to higher education capabilities expansion among students
8. Insights from the document on public university education and higher education capabilities expansion among students

APPENDIX K

GUIDELINES ON QUALITY OF TEACHING AND LEARNING AT UGANDA UNIVERSITIES

3.2.2 The Quality of teaching and learning

Internal and external auditors shall use the following benchmarks to assess the quality levels of teaching and learning:

- (i) Implementation of NCHE regulations on standards.
- (ii) Adherence to or improving of the minimum requirement of courses of study developed by NCHE. Auditors shall focus on the design, content, duration, contact hours and assessment of what is taught...
- (iii) Relevance of what is taught to the community, the job market and the nation.
- (iv) Methods of examining or assessing of students, including examination regulations and wards.
- (v) Quality of graduates, if necessary measured against the quality of entering students.
- (vi) Appeal mechanisms for students to challenges their results.
- (vii) Protection of unique and professional programme against general policies that may not apply to all disciplines.
- (viii) Access to information by students in the following units:
 - a. Libraries (Statutory Instruments 2005 No. 85)
 - b. Laboratories (Statutory Instruments 2005 No. 85)
 - c. Computer and Internet access, space, books and computer access should conform to Schedule 4, (Statutory Instruments 2005 No. 85).

Source: NCHE (National Council for Higher Education) 2006:22-23; 2008:19-20