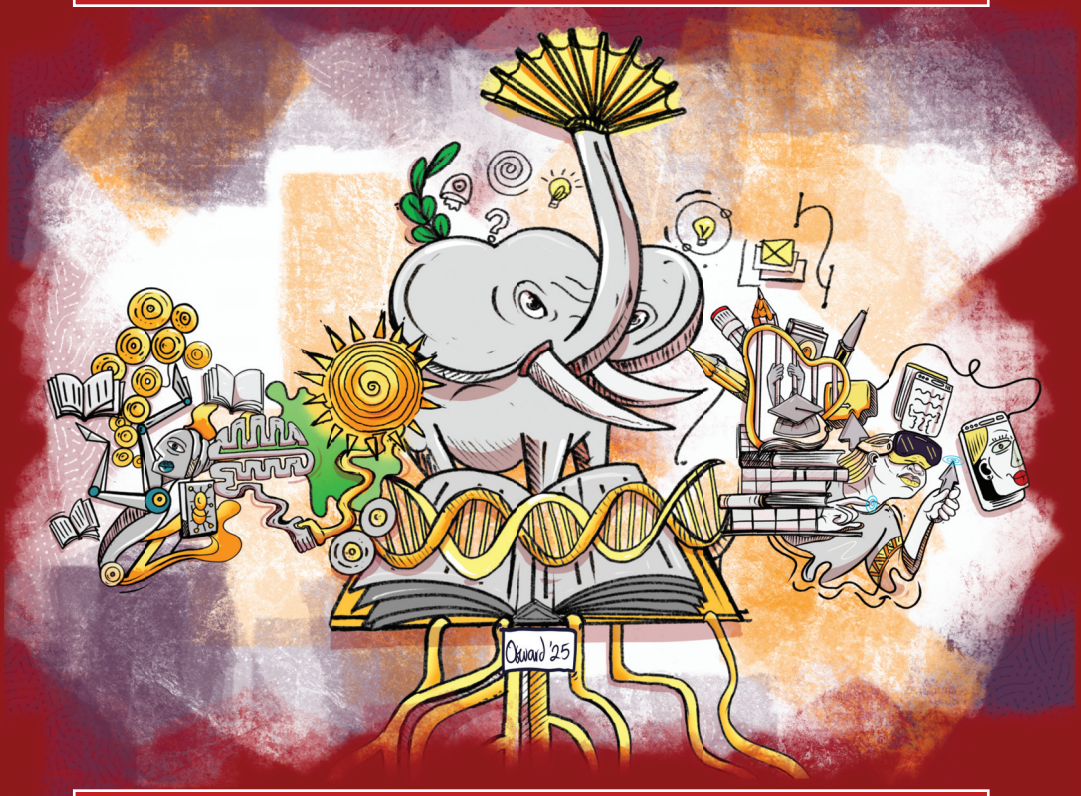
AFRICAN HIGHER EDUCATION: DEVELOPMENTS AND PERSPECTIVES

Transforming Higher Education for Community Development

Participatory Reflection on a Decade of Mutual Capacity-Building in Northern Uganda

Lone Dirckinck-Holmfeld, Geoffrey Olok Tabo, Charles Nelson Okumu, Morten Kure Kattenhøj and Inger Lassen (Eds.)



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DEVELOPMENTS AND PERSPECTIVES

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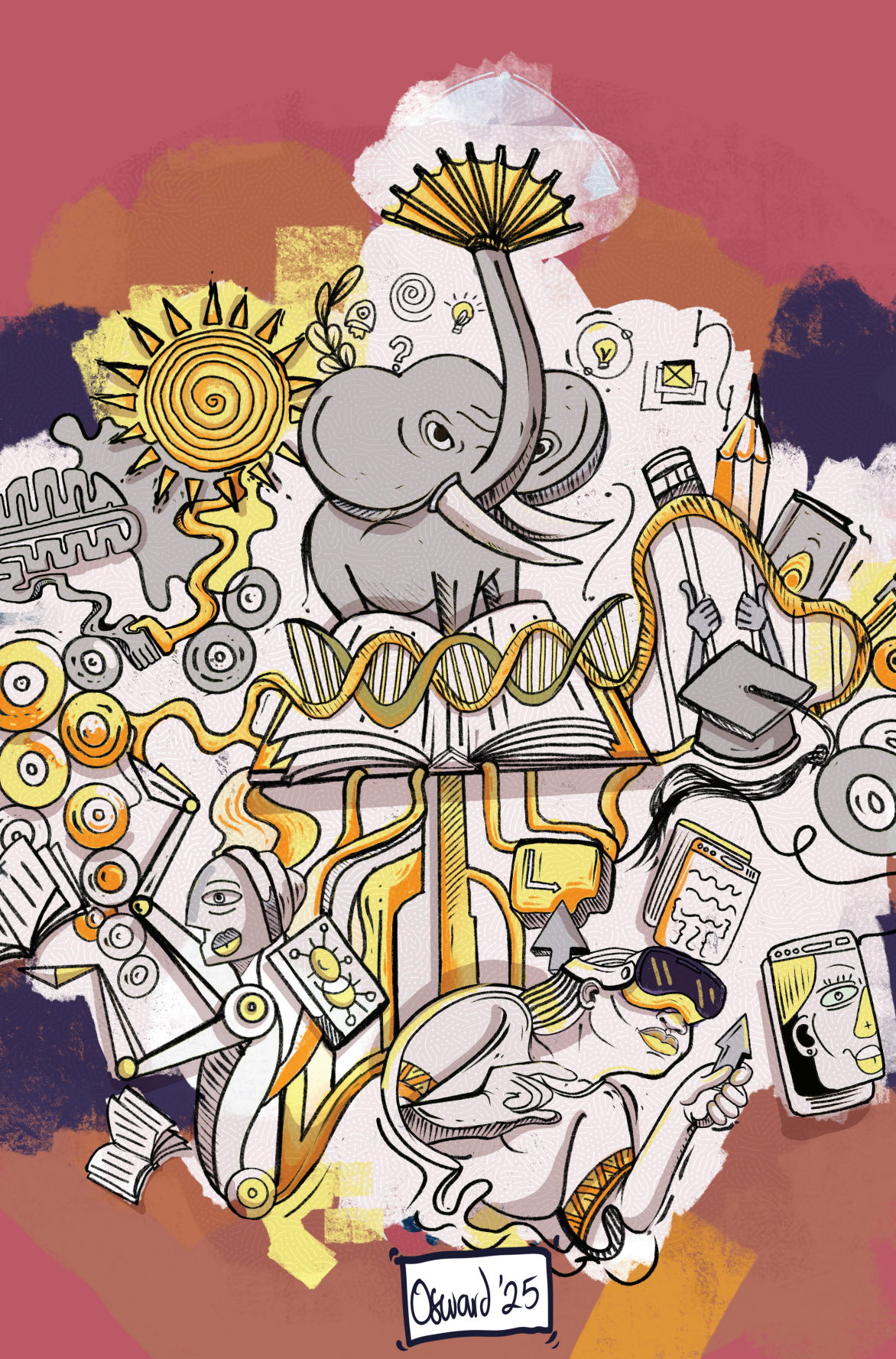
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Preface

In this edited book volume, we explore the role of universities, education and research as a cornerstone for community development. Based on an ongoing and long-term collaboration in Building Stronger Universities between Gulu University and Danish universities supported by the Danish aid organisation, DANIDA, this book will provide insights into aspects of transforming education as a means for community development in northern Uganda.

Uganda has a proud history of building education and higher education after the colonial era ended. Northern Uganda is sharing the vision of strengthening education; however, due to the unrest and the human consequences of the armed conflicts (1980s until 2007), the region still encounters distinctive challenges. Damage done to the infrastructure and human infrastructures that provide education, combined with the long-term harm to people's assets, livelihoods, physical, emotional and spiritual wellbeing (Atim et al., 2019), the region still faces distinctive challenges. Further, a huge influx of more than 1,400,000 refugees from neighbouring countries (Uganda – Refugee Statistics, 2021), settling primarily in northern and western Uganda, has rendered communities in these regions particularly vulnerable. However, despite these challenges, higher education in East Africa has been presented from a high level of optimism and is viewed as the driver of regional and national development (Oketch, 2009).

As a case in point, the establishment of Gulu University in 2002 with its motto: For Community Transformation, can be seen as a driving force in regional development, assisting in solving the need for a highly qualified workforce in the aftermath of civil war. Public understanding of higher education institutions is grounded in their role of training human resources, both personal and professional, to feed into the white and blue colour jobs (Teferra & Altbachl, 2004). In the past, many of these jobs were provided by governments. With the expansion of the private sector and services, the notion of job creation is becoming strongly advocated by various stakeholders. Against this backdrop, universities within Uganda and not least Gulu University in northern Uganda are exploring new approaches to providing quality in higher education and researching institutional pedagogies (Basheka et al., 2009; Bunoti, 2011; Tabo, 2020).

From the outset, Gulu University followed traditional teaching and learning approaches adopted from the colonial era. However, given the ambition of contributing to community transformation and development, the university staff soon realised that achieving the mission goal would require revision of

existing curricula allowing for a more student-centred approach. To this end, Danish universities have assisted the process in two faculties: the Faculty of Humanities & Education and the Faculty of Business & Development Studies and through the Danida supported project: Building Stronger Universities.

Departing from the overall goal of transforming education, the authors of the edited volume apply diverse perspectives on the overall theme through the following structure:

- Part 1: An introductory chapter providing a context and overview of orientations in transforming education – the why's and how's.
- Part 2: A historical background to transforming education including perspectives on a colonial past,
- Part 3: On institutional practices, access to education and quality of education,
- Part 4: On innovation in teaching and learning, focusing on digital technologies, participatory practices and employability,
- Part 5: Closing chapter on lessons learnt and way forward.

The chapters in the edited volume engage different perspectives on education and development. One of the perspectives looks at education and development from the vantage point of history, tracing some of the challenges to past colonial history. This is seen for instance in Chapters 1, 2 and 3 and exemplified in Chapters 4 and 5, which illustrate the importance of educational reform both from an institutional perspective and a community perspective.

A different, and yet related perspective, focuses on institutional practices and access to quality education, as seen in Chapters 6, 7, 8, 9 and 10. Each of these chapters in turn explores the modalities of curriculum and co-curricular activities, pedagogy, inspection practices, leadership, assessment of performance and access to education. Although most of these issues are contextually grounded in Gulu University, some of the chapters (e.g. Chapters 6, 7 and 10) focus on primary and secondary education as feeding channels into tertiary education.

The third perspective addressed in the book volume focuses on innovation of teaching and learning. This involves transformation of teaching and learning processes by introducing problem-based learning (PBL), hybrid learning and digital learning (e.g. Chapters 12, 13 and 15). A further important component in the transformational process is the emphasis on digital – and participatory practices. As has become evident from most of the chapters in this volume, the overall rationale for transforming education at Gulu University relates to high unemployment rates among graduates from the university, and to contribute to development. It is therefore crucial to rethink transformative learning in a Gulu University context to create employable graduates and graduates with

an entrepreneurial capacity (Chapter 13). An example of reimagining transformative learning is illustrated in a chapter on circular entrepreneurship (Chapter 14). To achieve the goals of educational transformation applying new learning approaches and enhancing employability for graduates from Gulu University, the development of new and participatory institutional infrastructures for learning is of paramount importance (Chapter 15).

General to the perspectives presented in the book volume is that they all aim at affording better and relevant education to students, and to back community transformation. Student graduates should leave university with the skills necessary for employment and job creation, which will make them better candidates for engaging actively in community transformation.

Part 1

The introductory Chapter 1 by Inger Lassen, Geoffrey Olok Tabo, Charles Nelson Okumu and Lone Dirckinck-Holmfeld: "Towards transforming higher education" sets the scene for the edited book volume by introducing and discussing some of the key issues and challenges in international development and higher education in more detail. Departing from the World Bank slogan *Education for All*, and the United Nations Sustainable Development Goals to end poverty by ensuring equality and work for all, the chapter focus on education as a driving force for transformation. The authors ask: How can teaching and learning be transformed to facilitate the goal of community transformation?

Drawing on experiences from ten years of teaching and research capacity building in a partnership between East African universities and Danish universities in the Danida supported program: Building Stronger Universities, the authors narrow the scope to the Acoli Sub-region in northern Uganda. Situated in a rural poverty-ridden area, Gulu University (GU) has made a commitment through its motto 'for community transformation' to prepare students for employability and to become job creators.

The chapter is designed as a conceptual paper discussing themes that may present obstacles to educational development and transformation in a globalised world. Decolonization theory is introduced. Not all chapters in the book address decolonization theory; however, all the studies provide insights into problems and themes of relevance for the decolonization project. The authors argue that educational reform is needed to achieve the goal of community development. The chapter is central and serves as a common framework for the chapters. Because educational reform requires deeper reflection on design and implementation, the chapters all reflect on issues related to transforming education.

Part 2

Part 2 explores the historical background and discusses what is going to be transformed, why transformation is needed, and how such transformation can take place. This part explores the unique conditions and challenges in northern Uganda, taking point of departure in the vulnerable situation, researching the paradox in the educational system between reparation, reconstruction, and transformation. The part contains four chapters:

Chapter 2 by Agatha Alidri: "Decolonising or localizing higher education in the global South? Historical perspective of transforming education under the South-North collaboration in Gulu University" goes deep into the presentation and discussion of a decolonising perspective. Raising the issue of African universities still being influenced by colonial structures, the author critically asks whether the concept and goal of transforming education through decolonization may in fact invite colonisation in a new form or what she refers to as re-colonization. She proposes that in endeavours to decolonize African universities – and in this case – Gulu University – partners need to 'localise' educational transformation by considering the local context for meeting local needs and finding local solutions. As such the chapter opens to new possibilities in the areas of north-south-south collaboration, affording new and more creative ways of teaching, learning and research, which would shift the balance of how knowledge is produced and which knowledge counts. This is followed by.

Chapter 3 by Charles Nelson Okumu: "Okot p'Bitek's literary inspirations for decolonization of education" continues in the trail of decolonization theory. Situating the chapter in Acoli culture, the author illustrates through examples from Okot p'Bitek's writing that Okot's scholarship promises an important contribution to humanistic education, and thus to decolonization of education in Uganda's educational system. The chapter discusses how Okot writes from the periphery to the centre and how his poetry has challenged the educational system that has been dominant in Uganda since independence in 1962. The study is qualitative applying document analysis. Among literary texts quoted, the main text is 'Song of Lawino', a poem that gives rise to much of the discussion in the chapter. Knowing the Acoli culture through literature and Okot's poems becomes even more important to an area where conflict reigned for more than twenty years.

Chapter 4 by Denis Thaddeus Ofoyuru and Collins Okello: "Curricula transformation in Gulu University: A response towards community needs and challenges" work from an assumption that Gulu University has transformed in response to the socio-economic challenges of operating in the aftermath of civil war, while still bearing traces of colonial structures. Because the extent

of the transformation has not been explored earlier, the authors investigate to what extent curricular transformation has taken place. For this purpose, they assess curricula and pedagogical changes within two faculties, and how these changes meet community needs. Theoretically, the study draws on neo-institutional theory, applying an exploratory qualitative case study design and thematic analysis. Findings indicate that the reformed curriculum meets societal needs through the change of study programs and institutional pedagogy.

Chapter 5 by Asaf Adebua, George Oriangi and Abola Benard: "Community transformation by higher institutions of learning: An engendered perspective in Northern Uganda" also focusses on the process of transforming the community, however now including a gender perspective. The chapter departs from the assumption that because women are disadvantaged when it comes to access to land, education and leadership, their ability to transform communities is rather low. The study is situated in Activity Theory and discusses how individuals may be transformed and empowered, and in turn may transform their community. Questionnaires were administered to 390 respondents and analysed using Principal Component Analysis. Surprisingly, findings indicated that among various socio-demographic dimensions explored, *female occupation* contributed more strongly than male occupation to community transformation. However, for all other indicators examined, the male gender contributed the most.

Part 3

Part 3 investigates institutional practices and quality of education. The focus is higher education, but some chapters will also reach out to primary and secondary education to throw light on strength and developmental challenges in the schools. These strengths and challenges are interesting in their own rights, however also important to understand the food chain for the university, and to inform the reform work at the university, especially in the Faculty of Education and Humanities.

In Chapter 6 by Jerry Bagaya, Betty Akullu Ezati, Wycliffe Scot Wafula and Palle Rasmussen: "Secondary school inspection practices in Western Uganda: Implications for pedagogy" focus on quality of education and bring in a perspective from western Uganda. The rationale is that there is a strong concern in Uganda that pedagogy and quality in schools are poor. While studies have shown that inspection on school performance has been found to be an influential factor, there is a dearth of research in developing countries on how inspection practices influence pedagogy in secondary schools. To elucidate this

problem, the authors ask: How do inspection practices influence pedagogy? Drawing on Habermas's Theory of Communicative Action (TCA) and using mixed methods, the authors apply a triangulation design on data collected through a questionnaire survey, and key informant semi-structured interviews of teachers, head teachers and inspectors. Findings indicate that inspection based on the existing guidelines contributes minimally to improving pedagogical practices in secondary schools in Uganda. However, reflecting the empirical findings in perspective of TCA the study contributes to outline new inspection principles based in a dialogical approach, which have the potential to significantly transform the school practices, and thereby enhance quality of education and novel pedagogies.

Chapter 7 by Stephen Odama, Agatha Alidri, Charles Nelson Okumu and Iben Jensen: "Educational leadership styles and quality of primary education in Gulu City, Northern Uganda" shares the concerns about quality in education raised by the authors of Chapter 6, but now with a focus on Primary Schools in Gulu City. They ask: What is the quality of education in selected primary schools in Gulu City? What are the roles played by management, and what are the leadership styles applied by headteachers? Departing from Behavioural Leadership Theory and the assumption that low-quality education may be attributed to poor leadership styles, they investigate leadership styles applied by primary school leaders. To analyse data from interviews and focus group discussions, the study uses mixed methods involving textual analysis and thematic content analysis. The findings indicated that headteachers applied a variety of empathetic, transformational, dictatorial and laissez-faire leadership styles. The study concluded that the empathetic and transformational leadership styles strongly affected the performance levels of the different schools in a positive direction.

Chapter 8 by Rosalba Aciro, George Oriangi, George Openjuru, David Onen, Palle Rasmussen and Betty Akullu Ezati "Exploring the determinants of entry grades and challenges faced by students admitted to public universities in Uganda through direct entry schemes?" focuses on *access* to public universities in Uganda, seeing that there is limited research on factors influencing pre-entry grades and challenges faced by students in relation to the enrolment process. An important rationale of the study is that a challenging enrolment process may in turn negatively impact academic performance. The authors examine determinants of entry grades and challenges faced by students at Makerere University and Gulu University as cases in point for illustrating admission to public universities. The Input-Transformation-Output (ITO) model is used for exploring the relationship between entry grades and academic performance. For this purpose, they use content analysis of documents and key informant

interviews. They find that students overall face numerous challenges that need to be addressed through targeted interventions.

Chapter 9 by Helen Christine Waiswa Amongin, Peter Kukubeire Baguma and Joseph Oonyu: "Emotional intelligence and non-academic achievement". The chapter aligns with Chapter 10 in focusing on how the overall learning process may be enhanced through non-academic activities. The authors observe that the relationship between *Emotional Intelligence* and non-academic activities has not been researched, and this is the focus of their study. For this purpose, they explore teachers' and students' perceptions of emotional intelligence and how well they achieve if involved in non-academic activities. Data was collected from students and lecturers at Makerere University and Christian University of Kampala. The study uses mixed methods, including group interviews, observations and in-depth interviews with lecturers. Applying NVIVO for analysis, the study found that emotional intelligence is important for achievement in non-academic activities. Based on the findings, the study suggests that curricula should be transformed to include training in emotional intelligence as high levels of emotional intelligence are useful for learning and research. Although the study was carried out in Central Uganda, it can be applied in other contexts because of its general nature and importance.

Chapter 10 by John Bismarck Okumu: "Co-curricular activities and students discipline in higher institutions of learning in Gulu City" explores the relationship between co-curricular activities and student discipline, understood as important skills and attitudes that contribute to the overall learning process. The author pursues the objectives of assessing the level of students' discipline and of determining the level of students' participation in co-curricular activities. The theoretical foundation of the chapter is based on Social Learning Theory. Using a mixed methods approach consisting of interviews and questionnaires, the author identifies correlations and trends between Co-curricular activities and students' discipline. Findings indicate a very strong relationship between participation in co-curricular activities and students' discipline, and the author encourages teachers and administrators to motivate students to participate in these activities.

Part 4

Part 4 investigates curricular transformation and changing practices, examining novel pedagogical approaches, also addressing the question on employability. With a focus on Information and Communication Technology (ICT) as a catalyst for change, and how to facilitate supportive learning infrastructures, this part also addresses the changing role of universities from an 'ivory tower'

power structure towards a community engaged university promoting inclusive and sustainable development innovation.

Chapter 11 by Ann Bygholm, Lone Dirckinck-Holmfeld and Geoffrey Olok Tabo: "Advances toward digital learning: A scoping review of research and practices from East Africa" dates back to 2009 and demonstrates the development within the use of digital technologies and new pedagogies in East Africa. That is, which technologies are in use, how are they used and how is the relation between student centred pedagogies and digital technologies described and accounted for. The use of mobile phones and Moodle is widespread. The primary use concerns sharing of content. Further, there is a general agreement that use of digital technologies promote collaboration, self-regulated and student-centred learning. Cross-cutting challenges were identified, and the implications are discussed for practice and policies. The chapter serves as an overview to the part providing an East African perspective.

Chapter 12 by Iben Jensen, Geoffrey Olok Tabo, Judith Awacorach, Hanan Lassen Zakaria, David Ross Olanya and Inger Lassen: "Introducing problem-based learning in MA programs at Gulu University for community transformation: Reflections and lessons" researches the adoption of problem- and project-based learning (PBL) at Gulu University. From its start in 2011 the Building Stronger University project at Gulu University (BSU-GU) has focused on developing PBL as a methodology in Gulu University to break away from teacher and curriculum centred pedagogies. The chapter presents a practice theoretical analysis of the experiences from nine years of facilitating a process from creating awareness to competence development of PBL among students and staff. The chapter discusses the feasibility of localising and contextualise PBL to integrate local knowledge of problems, content, methods, and community transformation.

Chapter 13 by Judith Awacorach and Helene Balslev Clausen: "Rethinking transformative learning in higher education: Contextualizing pedagogical tools to create employable graduates in Gulu University, Northern Uganda" explores through the lenses of transformative pedagogy, how to design for students' creativity and critical thinking, thus strengthening entrepreneurial thinking. By integrating design prototypes of different business cases, and by initiating the use of tools to create moments of disorientation, students are being prepared to promote self-reflection and critical thinking of possible start-ups, and their risks. The method is tested at Gulu University. The method interacts well with PBL (see Chapter 12).

Chapter 14 by Frida Skovgaard Sørensen, Cornelia Thea Seger Jakobsen, Annebeth Colic Landsvig, Judith Awacorach and Arne Remmen: "Circular entrepreneurship in Northern Uganda". This chapter also focuses on means to strengthen the students' orientation towards becoming job creators and

entrepreneurs, linking this to environmental problems and circular economy solutions. Focusing on examples of quadruple-helix collaboration between a successful entrepreneur, Gulu University, and the local community the role of government is explored in enhancing circular entrepreneurship.

Chapter 15 by Geoffrey Olok Tabo, Ann Bygholm and Lone Dirckinck-Holmfeld: "Developing infrastructures for learning: Perspectives and proposals in design of new practices" examines the obstacles faced when implementing new digital learning methods in higher education settings with limited resources. The challenges are framed through the lens of *infrastructuring* highlighting the need for careful design to accommodate localized formats like project-based learning and hybrid learning. The study utilises participatory design, drawing on qualitative data gathered through collaborative learning design and futures workshops. Applying Cultural Historical Activity Theory, the study identifies practical, pedagogical, and organizational challenges and collective responses to implementing these new methods.

Part 5

Part 5 examines the lessons learned about education as a driver of change and the long-term international partnerships on Building Stronger Universities (BSU). Concerns are linked to discussions of development and a shared engagement in how to facilitate the goal of community transformation.

Chapter 16 by Lone Dirckinck-Holmfeld, Charles Nelson Okumu, Geoffrey Olok Tabo and Inger Lassen: "Lessons learned – Building stronger universities, transforming and transitions: Education as a driver for development" extracts the challenges and opportunities of contemporary educational pathways presented in the chapters of the book. The focus of the chapter is to answer the guiding question presented in the introductory chapter: "How can teaching and learning be transformed to facilitate the goal of community transformation?" The chapter provides insights into the lessons learned – both how to develop education to respond to societal needs, and how new ways of learning within higher education are (perhaps the) most important vehicle for development, and community transformation.

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It has been a great experience to develop and write this book together. It has become a shared journey and has provided deep insights into the various aspects of transforming education, especially in the context of northern Uganda. The book is based on the collaborative work in the thematic work packages of the BSU project, while other chapters are based on the PhD dissertations written by BSU beneficiaries within the theme of Transforming Education. The development of the edited volume is based on the longtime commitment of the BSU project, which has served as a venue for PhD projects, collaborative pilot research projects, online and physical seminars and workshops at Gulu University and in Denmark, writing workshops at Gulu University and online editorial work. This has provided excellent opportunities for sharing work, discussions, conclusions and ways forward. With Gulu University as a prototypical case for a resource constrained university and Building Stronger Universities as a case for a soft reform space, we are sure that the chapters will be of interest to all those engaged in transforming education and concerned with how to conceptualise and decolonise higher education – both in the South, in the North and in partnerships.

Bringing Art to Science

The illustration, 'Pioneering Knowledge for Community Growth' that graces the front cover of this publication and is repeated throughout its chapters, was created by artist Osward Tayebwa in collaboration with Vodo Arts Society and Lab, with contributions from Vodo M.F. Semuju and Gerald Puto Kimomeko. The artists have vividly brought to life the vision of this publication and the diverse themes explored within this volume.

At the heart of the illustration is the elephant – a totem of the Acoli – symbolizing Gulu University as one of the higher institutions in Uganda.

The elephant's trunk branches out in multiple directions, representing the foundational principles of higher education and the motto of Gulu University: Learning, Research, and Community Transformation. The helix string serves as the DNA of higher education and embodies the vision of this publication.

Central to digital innovation in higher education is its human-centered approach, reflected in the human figures and energy lines that flow like veins through the drawing. These energy lines represent the passion that fuels transformative education, unifying the chapters of this volume into one cohesive ecosystem.

We are deeply grateful to the artists for crafting such an impressive and comprehensive illustration within a tight timeframe. Vodo Arts Society and Lab – is a collective of artists and creatives founded in 2018 with a mission to elevate the art industry in Uganda and the region, and to provide comprehensive art and design solutions, from murals to creative projects, while fostering a vibrant community that empowers local artists through collaboration, growth, and exposure. Vodo Arts Society's vision complements the pedagogical and community transformation goals of this volume, and their contribution underscores the importance of integrating art into research in higher learning, not merely as a visual element, but as a means of bringing imagination to life in pursuit of emancipatory transformation.

Katrine Dirckinck-Holmfeld, PhD, visual artist, independent researcher and educator, has facilitated the communication to Vodo Arts Society and Lab, and contributed to the artistic dialogue.

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Abbreviations

AIL	Administration in Institutions of Learning
AU	African Union
BSc	Bachelor of Science
BSU	Building Stronger Universities
BSU-GU	DANIDA-funded partnership within the program BuildingStronger Universities between Gulu University and Danish Universities, dubbed BSU-GU
CCA	Co-Curricular Activities
CCP	Co-Curricular Programme
CMS	Church Missionary Society (a part of the Church of England)
CTLL	Creative Thinking Learning Lab
CTS	Critical Thinking Skills
DES	Directorate of Education Standards
DIT	Directorate of Industrial Training
EAC	East African Community
EI	Emotional Intelligence
ESA	Education Standards Agency
ESD	Education for Sustainable Development
GUREC	Gulu University Research and Ethics Committee
GUSP	Gulu University Strategic Plan
HE	Higher Education
HEAC	Higher Education Access Certificates
HEIS	Higher Education Institutions
HIL	Higher Institutions of Learning
HMIE	Her Majesty's Inspectorate of Education
ICT	Information and Communication Technology
IT	Information Technology
ITO	Input-Transformation-Output
IUCEA	Inter-University Council for East Africa.
KII	Key Informant Interviews
KMO	Kaiser-Meyer-Olkin
LEAP	Leadership, Education, And Partnership
LLL	Life Long Learning
LRA/M	Lord's Resistance Army/Movement
M.Ed.	Master of Education
MoES	Ministry of Education and Sports

MOOC	Massive Online Open Coruses
MSc	Master of Science
MSc REA	Master of Science in Renewable Energy
NAA	Non-Academic Activities
NCHE	National Council for Higher Education
NDP	National Development Plan
NDPS	National Development Plans
PBL	Problem- and project based learning; Problem-based learning
PCA	Principal component analysis
PTA	Parents, Teachers Association
S-C-O	Student-Centred-Outreach
SDG	Sustainable Development Goals
SDGS	Sustainable Goals
SLT	Social Learning Skills
SMC	School Management Committees, Parents,
SSPS	Sector Strategic Plans
STEM	Science, Technology, Engineering and Mathematics
SU	Scripture Union
TCA	Theory of Communicative Action
UACE	Uganda Advanced Certificate of Education
UBOS	Uganda Bureau of Statistics
UN	United Nations
UNEB	Uganda National Examinations Board
UNCST	Uganda National Council for Science and Technology
UPE	Universal Primary Education
USE	Universal Secondary Education
YCS	Young Christian Society

Notes on Contributors

Rosalba Aciro
(PhD) is an educator, administrator and researcher at Gulu University and currently Deputy Academic Registrar. She holds a PhD from Gulu University, Education Management. Her pubication includes "Entry Grades of Students Admitted to Public Universities and Their Academic Performance: Implications for Admission Policies" (2023).

Asaf Adebua
(PhD) is Chief of Planning and Development at Gulu University, researching higher education's role in community transformation. His recent work includes "Community Perceptions on the Contributions of Public Universities to Community Transformation" (*EANSO*, 2024).

Agatha Alidri
(PhD) is a lecturer at Department of History at Gulu University, focusing on international education, indigenous histories, and student-centered learning. Her recent work includes "Indigenous Authority and Justice in UNRF II State–Society Armed Conflict in Uganda, 1996–2002" (2024).

Helen Christine Waiswa Amongin
(PhD) is a lecturer in the Department of Education and Humanities at Gulu University, researching emotional intelligence and education. She has published "Emotional Intelligence and Interpersonal Relations among Teacher Students" (*International Journal of Psychology*, 2020).

Judith Awacorach
is a PhD student and a lecturer at Gulu University, researching education, livelihood and finance. She holds a Master of Business Administration and has co-authored book chapters and journal articles, including "Exploring Transition in Higher Education: Engagement and Challenges in Moving from Teacher-Centered to Student-Centered Learning" (*JPBLHE*, 2021).

Jerry Bagaya
(PhD) is an academic administrator at Gulu University, researching quality assurance and education management. His recent work includes "School Inspection Practices in Western Uganda" (*Journal of Education and Training*, 2020).

Peter Kakubeire Baguma
(PhD) is a professor of Organisational Psychology at Makerere University, researching emotional intelligence. His publications include "Emotional Intelligence and Interpersonal Relations among University Upgrading (grade v) Teacher Students" (*International Journal of Psychology*, 2020).

Abola Benard
(PhD) is a lecturer in the Department of Mathematics, Faculty of Science, at Gulu University. He is interested in multidisciplinary research in medical, financial industries and behavioral sciences by applying data science. He is competent in quantitative and fuzzy data analysis.

Ann Bygholm
(PhD) is a professor of Human Centered Informatics at Aalborg University, researching ICT in learning and health. Her recent work includes "This Is Not Participatory Design: A Critical Analysis of Eight Living Labs" (*Studies in Health Technology and Informatics*, 2017).

Helene Balslev Clausen
(PhD) is an associate professor at Aalborg University. Her research on entrepreneurship and learning includes "Environments for Women Entrepreneurship in North Africa" (2023).

Betty Akullu Ezati
(PhD) is a teacher educator at the School of Education, Makerere University. She holds a PhD in Education from Makerere University. She is the immediate former Dean of the School of Education, Makerere University, and a fellow of the Uganda National Academy of Sciences. She has published: "Factors influencing public university's role in community transformation" (2024).

Lone Dirckinck-Holmfeld
(PhD) is a professor of ICT and Learning at Aalborg University, promoting Humanities as a driver for interdisciplinary research. Her publications include the co-authoring of "How to Design for the Materialisation of Networked Learning Spaces" (2023).

Cornelia Thea Seger Jakobsen
holds an M.Sc in Sustainable Cities from Aalborg University. She is a strategic project manager at BLOXHUB in Denmark, focusing on sustainability and urban transformation. Her publications includes "Sustainable Entrepreneurship in East Africa" (Aalborg University, 2023).

Iben Jensen
(PhD) is an associate professor at Department of Culture and Learning at Aalborg University, researching intercultural communication and practice theory. Her recent work includes "Online Leadership and Communication across Cultures: Developing an Interdisciplinary Approach" (2018).

Morten Kure Kattenhøj
is Project Coordinator at Aalborg University. He has an MA in English philology and Media Studies. He has previously worked as development worker in Bangladesh and Kenya but now works on larger research projects at the university.

Annebeth Colic Landsvig
(M.Sc) works on circular economy and cross-sector collaborations. She is a co-author of *Sustainable Entrepreneurship in East Africa* (Aalborg University, 2023).

Inger Lassen
(PhD) is Professor Emerita at Department of Culture and Learning at Aalborg University, researching critical discourse studies. Her publications include "Stability, Democracy, and Rights in Post-Conflict Areas" (*Globe*, 2018).

Stephen Odama
(PhD) is a senior lecturer at Gulu University, researching education management and community engagement. His publications include "Parents' Contributions towards Variations in School Performance Indices in Uganda Certificate Education Examinations in Central and Northern Uganda" (*Research Journal of Education*, 2017).

Denis Thaddeus Ofoyuru
(PhD) is a senior lecturer at Gulu University, researching higher education science and university-society engagement. His recent work includes "Assessing University-Society Engagements: Towards a Methodological Framework" (*Innovative Higher Education*, 2024).

Collins Okello
(PhD) is a senior lecturer at Department of Biosystems Engineering at Gulu University, researching renewable energy such as green charcoal production. His recent publication includes "Experiences with Green Charcoal: A Gender Consideration of Gulu Households" (*EANSO*, 2024).

John Bismarck Okumu
(PhD) is a lecturer of Curriculum studies at Gulu University. He has published articles on curriculum studies including a PhD entitled "Mentoring and Teacher Effectiveness in Secondary Schools: A Case of the Acholi Sub-region of Northern Uganda" (2020).

Charles Nelson Okumu
(PhD) is a professor of Literary and Cultural Studies at Gulu University, publishing on literature and education. He was Dean of the Faculty of Education and Humanities. His recent work includes "The Life and Times of Okot p'Bitek" (*Imbizo*, 2020).

David Ross Olanya
(PhD) is a senior lecturer at Gulu University teaching management and policy studies. His research focus is on critical policy studies, science and technology studies, sustainability and learning in higher education. He is reviewing editor for the *Journal of Critical Policy Studies*.

David Onen
(PhD) is Visiting Professor at Simad University, former Senior Lecturer at Makerere University, Dean and Editor-in-Chief of the *Makerere Journal of Higher Education*. He is International Affiliate, the American Educational Research Association (AERA), the African Network for the Internationalisation of Education (ANIE).

Joseph Oonyu
(PhD) was a senior lecturer at Makerere University. His research included emotional intelligence, including Emotional Intelligence and Interpersonal Relations among University Upgrading (grade V) Teacher Students (*International Journal of Psychology*, 2020).

George Ladaah Openjuru
(PhD) is Vice-Chancellor of Gulu University and Professor of Education. His research and publication focus on adult literacy, lifelong learning, knowledge democracy and African indigenous knowledge systems, including Benefits of university degrees and the labour market experiences of non-traditional graduates in Uganda (2024).

George Oriangi
holds a PhD in Physical Geography and Ecosystems Science of Lund University and involved in teaching, research and outreach. He published a book chapter

in an assessment of climate extremes in Mbale Municipality in Eastern Uganda (2023).

Palle Rasmussen
(PhD) is Professor Emeritus at Aalborg University, researching education policy, lifelong learning, comparative education and critical social theory. He recently co-edited (with Marcella Milana and Margherita Bussi) the "Research Handbook on Adult Education Policy" (2024).

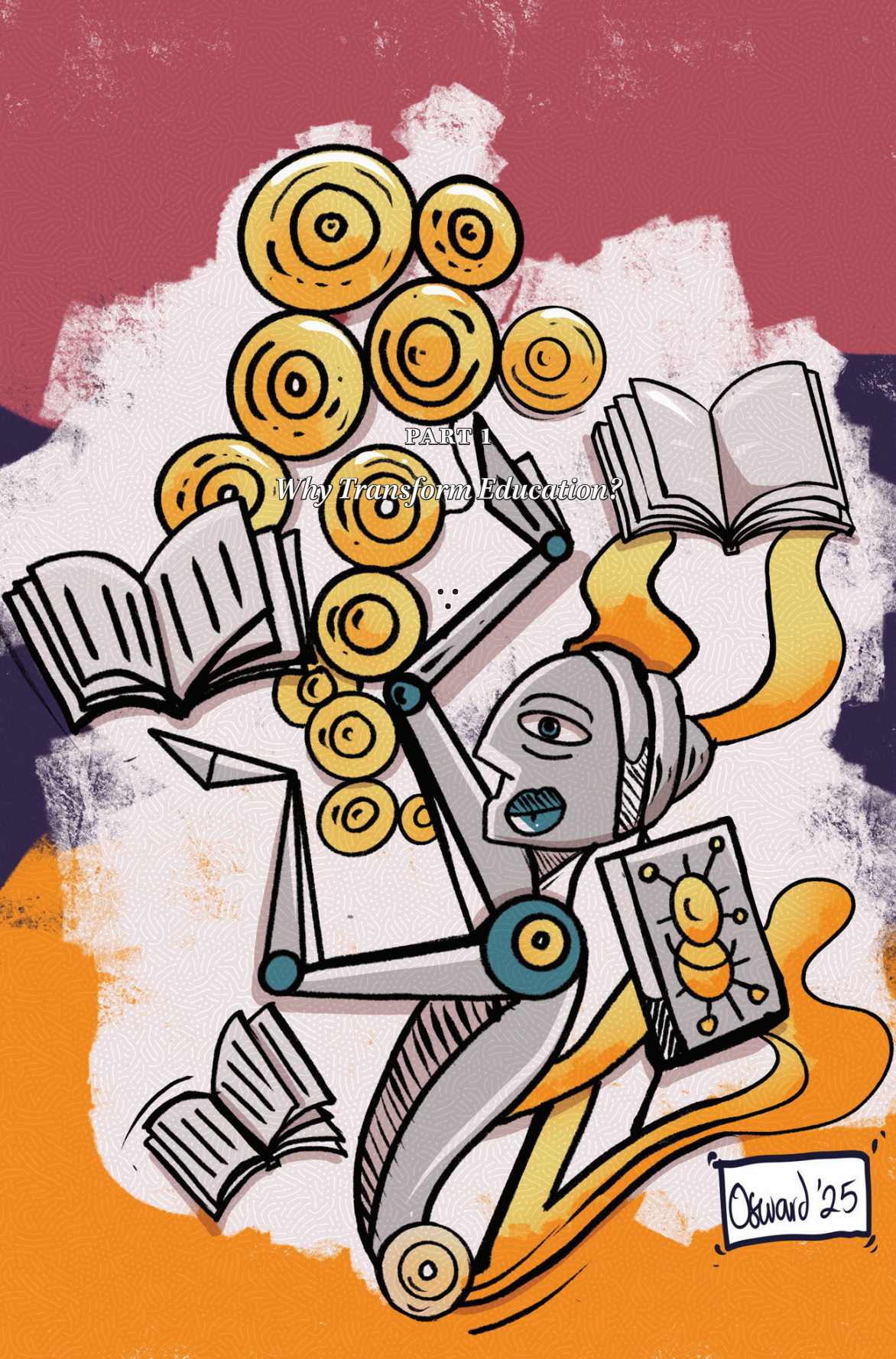
Arne Remmen
(PhD) is a professor at Department of Sustainability and Planning at Aalborg University, specializing in environmental policies and circular economy. He is a co-editor of "Life Cycle Management – A Business Guide to Sustainability" (UNEP, 2007).

Frida Skovgaard Sørensen
(M.Sc) is a research assistant at Department of Sustainability and Planning at Aalborg University, focusing on circular economy and sustainability. Her recent work includes *Sustainable Entrepreneurship in East Africa* (Aalborg University, 2023).

Geoffrey Olok Tabo
(PhD) is a senior lecturer in the Department of Computer Science at Gulu University, researching infrastructures for learning, emerging technologies, PBL hybrid and health informatics. His recent work includes *Designing Infrastructures for Learning: Technology and Human Praxis* (Aalborg University, 2020).

Wycliffe Scot Wafula
(PhD) is a teacher educator at Clark International University. He has published on teaching, learning and community development, including "Assessment of Mentoring and Teacher Effectiveness in Uganda" (*Current Research in Language, Literature and Education*, 2022).

Hanan Lassen Zakaria
is the director for Educational Development at Tamale Technical University. His research explores challenges in moving from Teacher to Students-Centered Learning. He co-authored *Institutional Capacities in E-learning and PBL at Universities in Tanzania and Ghana* (Aalborg University, 2015).



PART 1

Why Transform Education?

CHAPTER 1

Towards Transforming Higher Education

Inger Lassen, Geoffrey Olok Tabo, Charles Nelson Okumu and Lone Dirckinck-Holmfeld

Abstract

The importance of education and quality learning for all is evident in the Sustainable Development Goal framework that aims at ending poverty, ensuring equality and providing decent work for all. Social reformers across the world have worked towards this widely shared aspiration for a long time; however, it has turned out to be a goal that has met many challenges.

Situated in the Acoli Sub-Region, a rural poverty-ridden area in Northern Uganda, Gulu University has made a commitment towards this goal by preparing students for employability in future jobs through community engagement. The focus of the reform is on student-based learning assisted by the teacher, and hybrid learning with critical input from problem-based learning. However, educational reform requires deeper reflection on the design and implementation of education systems in search of qualified solutions to problems concerning teaching and learning performance in higher education. In this introduction we contribute to the discussion by critically exploring how to transform teaching and learning to accomplish the goal of community engagement. Methodologically, we draw on literature from within the higher education sector with a specific focus on how scholars have worked to address challenges of current systems. We also draw on our research and experience in implementing 10 years of teaching and research capacity building at Gulu University as documented in articles in this volume.

Keywords

transformation – higher education – decolonisation – internationalisation – partnership – student-centred learning – expansive learning

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1 Introduction

In 2002, the World Bank presented its new policy on tertiary education in the context of the changing global environment and knowledge societies (World Bank, 2002). This new policy shifted the focus from primarily providing access to education for all children to also focusing on tertiary education as a key driver of economic and social development. The main argument was the critical role of tertiary education institutions in supporting a knowledge-based economy and the changes brought about by the information and communication technology revolution. Tertiary education was presented as a driver for improving the quality of research and education, promoting overall economic growth and innovation, and enhancing the skills of the workforce: 'more education for more people' (World Bank, 2002, p. 26), and to improve governance and peace building. The transformation of tertiary education also included policy advice on curriculum development, emphasising the need to move away from the memorisation of specific information towards methodological approaches that focus on 'learning to learn, learning to transform information into new knowledge, and learning to translate new knowledge into application' (World Bank, 2002, p. 29). While some of the policies promoted by WB, such as the strong push for privatisation of education, were not shared by all, this volume represents a shift in the global and dominant way of understanding the active and transformative role of education and higher education in building knowledge societies and in economic and social development.

Danish universities and researchers have a long history of research cooperation with universities and researchers in Africa, South Asia, and Latin America. These research-driven partnerships date back more than 40 years and have been a cornerstone in Denmark's long-standing commitment to strengthening research capacity in developing countries. As a partner in development and international relations and following a modernisation philosophy, Denmark needed to find a new role on the global scene and a way of justifying a colonial past by maintaining 'a narrative of Scandinavian humanitarianism, exceptionalism, and benevolent civilising mission' (Jensen, 2015, p. 445). In 2008–2009, the then incumbent Danish Prime Minister organised the African Commission which formulated a strategy for Denmark to strengthen Danish engagement in Africa, and as part of this strategy the idea of the Building Stronger Universities programme was born. The idea was to strengthen research and institutional capacity building in African universities through university partnerships and to improve teaching and learning, dissemination and outreach. In this spirit and following selection criteria laid down by the Danish Ministry of Foreign Affairs, the first phase of Building Stronger Universities (BSU) programme

was launched in 2011 as a collaborative project between Danish universities and universities in Africa and a university in South Asia. An important selection criterion included that of fragile and vulnerable regions. In 2014, in the second phase of the programme, an important shift was made, and the BSU programme adopted a "South-driven" approach, where selected southern partner universities, designated as partnership leaders, entered into cooperation agreements with selected Danish universities for the implementation of a programme based on their needs. BSU is now entering its fourth phase with a focus on 'strengthening research capacities at smaller and younger universities in fragile settings and regions' (Danida Fellowship Centre [DFC], n.d.). In Uganda, Gulu University (BSU-GU) was chosen, partly because it was a young university located in a region ridden by civil war, but also because it was seen to have a great potential for transforming the local communities and for transforming its educational practices to respond to local and national challenges.

Gulu University is a young university. It was established in 2002 as the first public university in northern Uganda. The institution took form at the peak of a 20-year Lord's Resistance Army insurgency (1987–2007) that caused lots of destruction of community resources and services (Bunting, 2024). Meanwhile a longer effect is seen in psychosocial needs to rehabilitate a society that once was productive and vibrant in all sectors of production and services in the country. Higher education is one of the services that needs to be brought closer to the community to deal with some of the complex and intricate problems of the broken community. As a higher learning institution that strives to rebuild society, the university promises to contribute to community transformation under the motto: *For Community Transformation*.

1.1 *Changes in Education in Uganda*

From the colonial times in the 1950s and 1960s, there was a strong emphasis on quality of education for all people although in the early days of education by the missionaries, emphasis was on education for the Royal Family and Chiefs in Buganda (Scanlon, 1964). The change is based on the Castle Commission of 1963 that argues for raising standards of agriculture and technical education, expansion of girls' education and provision of adult education. Schools in Uganda belonged to various founding bodies who had full control of the learning activities that were directed at developing the workforce in a specific direction. These founding bodies included religion (Catholic, Anglican, Moslem, etc.) and Government funded bodies aligned to the colonial systems. Supervision of the schools was very intense, and teachers worked hard to deliver the quality services expected. Inspectors of schools visited schools anytime and scrutinised all academic and other areas affecting academics in the school,

to ensure quality. In the 1970s all schools in the country had equal opportunity to deliver quality education. Also, students could apply for admission to primary and secondary schools in any part of the country, which promoted cultural diversity. The aim was to promote national integration. This kind of integration is not practised today, where the national emphasis is shifting to private schools (mainly in Kampala District in the Buganda sub-region). These schools charge high fees to pay good teachers and provide better facilities to ensure good results compared to Government schools where there is less care on school performance (Iser, 2015).

The 1980s and 1990s saw emphasis on policies based on recommendations from the Education Commission. These were geared to recovery and rehabilitation of education facilities by strengthening the workforce to restore functional capacity after turbulence in the 1970s. For this purpose, the syllabus was reconstructed to accommodate handiwork (carpentry, pottery, metal work, brick laying, engineering drawing, building, agriculture, home economics, and typewriting). Many of these students completed and returned to communities ready to work but also to start their own farming activities or gain employment. These education reforms served to facilitate integration of schools and make education affordable. The introduction of Universal Primary Education (UPE) in 1997 was to provide free primary education to all children in Uganda (Nyenje & Nkata, 2016). This was followed by Universal Secondary Education (USE) in 2007 (Kakuba et al., 2021). However, the secondary school curriculum had been a subject of contention among stakeholders with many implicating it as theoretical and disputing its efficacy to produce Ugandans for the real world.

This prompted the Ministry of Education and Sports in Uganda and the National Curriculum Development Center to develop new curricula for lower secondary schools and for teacher education, which were approved in 2019 with the aim of reflecting the need for a more practical approach to teaching and learning. This paved the way for competence-based education, which is now used in the faculty of Medicine and Agriculture. Competence based education has also been implemented in natural and biological sciences. Competence based education in the medical schools in Uganda has been adopted to enable the health workers to understand and effectively manage health problems in communities where they will serve (Kiguli et al., 2014). Competencies such as communication skills and professionalism at work are described in the national curricula as areas that need strengthening. This approach is defined as an outcome-based approach to design, implementation, assessment and evaluation of programmes using a framework of competencies (Kiguli et al., 2014). Notwithstanding the fact that these changes are implemented at various levels (UPE and USE), the impact on employability is less felt and has not led to

poverty reduction in Uganda (Datzberger, 2018). Increasing access to primary schools as well as access to tertiary and university education has put a burden on the educational system, thus affecting quality (Nyenje & Nkata, 2016).

While most of the programmes have been developed with the motive to impact directly on the lives of communities, Gulu University has been engaged in exploring pedagogical approaches and strategies to contribute to transformation in the region. Problem- and project-based (PBL) and hybrid learning (integrating physical and online modalities) are some of the promising approaches explored through collaboration with Aalborg University. These have impacted positively by bringing the university closer to the communities. Becoming the main player in community transformation means making the right choices of pedagogical methods for the degree programmes offered. Such impacts include providing conducive learning environments and approaches for learners to acquire 21st century skills to cope with a dynamically changing world of work and development.

The university is undergoing systemic transformation in programmes, infrastructures, teaching and learning that respond to issues of equity and equality in access at both local and international levels. Many programmes are redesigned with new ways of teaching and learning. Further, there have been a purposive development of master's and PhD programmes based on this growth, which includes the capacity development of the staff at the university. Faculties and Institutes are undergoing infrastructural and structural changes to accommodate the nationally approved programmes. GU has as its motto: *For Community Transformation* which is best carried out through community engagement. To comply with the motto, the university serves the region to promote economic development and improve livelihoods. To help Gulu University achieve its overall mission, the partnership between Gulu University and Danish Universities (BSU – GU) has a focus on *Transforming Education* and *Rights, Resources and Gender*.

To explore how this overall aim may be achieved, we focus on the following research problem. This is the main theme of the introductory chapter and will be reflected upon throughout the chapters of the volume: *How can teaching and learning be transformed to facilitate the goal of community transformation?*

Having situated our topic in context, we account for the methods used. We continue with a brief review of literature of relevance to the topic of transforming higher education in a Ugandan university. As an important aspect of transforming education, we address theory of relevance to post-colonialism by revisiting literature on decolonization and how it relates to education and knowledge production. We end the chapter by revisiting the research question,

discussing some of the foreseeable challenges in transforming education in the light of theories invoked and practices described in other chapters of the book.

2 Methods

In this chapter we approach our research questions through what Jaakkola (2019) has referred to as conceptual theory synthesis. The overall goal of a conceptual paper is to create new knowledge on the basis of insights gained through previously developed and tested theories and concepts. These theories and concepts may derive from what Lukka and Vinnari (2014) refer to as *domain theory* and *method theory*. Jaakkola (2019) defines a *domain theory* as a theory that subsumes areas of study that build on particular theories and assumptions. In our presentation of literature, domain theory relates to *a substantive topic area* (Jaakkola, 2019, p. 20) such as the domain of decolonization, and transformation of education; *method theory*, on the other hand, is a concept used for studying issues of the domain theory introduced. In our approach, we apply the method theory of educational philosophy as a meta-level of reflection on our focal phenomenon of transforming education. Driven by the assumptions that underlie our research question, we study how traces from a colonial past may be re-contextualized to meet the needs of present-day Ugandan Society. As such, this chapter strives for conceptual integration across relevant literature to help us see a phenomenon in a new light. In the context of transforming education at Gulu University, the identification of relevant literature is instrumental in affording new ideas about best teaching and learning practices. This way it helps increase our understanding of the empirical phenomenon of transforming education at Gulu University. We build on literature written by prominent researchers within the fields of decolonization as well as teaching and learning approaches in higher education in East Africa and beyond. This includes literature on decolonization, Africanization, and internationalisation. We also build on literature on teacher-centred learning, student-centred learning, problem-based learning, transformative learning, and hybrid learning.

3 Theoretical Underpinnings

Although Uganda gained independence in 1962, the educational system still bears traces of the system introduced in colonial times. As will be discussed further on in the chapter, the educational system involved a teacher-centred approach where the teacher was expected to deliver knowledge to students

who were passive, note-taking recipients of the knowledge delivered. This kind of approach was anchored in asymmetric power relations between the student and the teacher with more power vested in or assumed by the teacher. Globally these inequalities are being scholarly discussed and acted on by activists, critical researchers and institutions. The perceived need for transforming education should be seen in the light of this ongoing exploration of decolonization and showdowns of the colonial era. The following section will therefore acquaint the reader with selected literature on decolonization, and how the various positions relate to pedagogical and didactical practices.

3.1 *Decolonization*

There is an abundance of literature on approaches to decolonization of higher education institutions in former colonies across Latin America and the African continent. Most of the literature focuses on what Andreotti, Stein, Ahenakew, and Hunt (2015, p. 23) have referred to as *epistemic violence* in the sense of knowledge systems established by former colonial powers (see for instance Brock-Utne, 2017; Ndofirepi & Cross, 2017; Adriansen & Madsen, 2019; see also Chapter 2). The theme of decolonization of higher education institutions has also received attention in Canada and the Scandinavian countries where issues relating to indigenous peoples have been at the forefront (Hansen, 2022), while other research in Northern Europe has focused on education for global mindedness as a counter-reaction to ethnocentric approaches in partnerships for global mobility (Andreotti, Biesta, & Ahenakew, 2015).

Acknowledging that there are vast differences in how decolonization is conceptualised and approached in different parts of the world, our study is concerned with literature and research relating to decolonization of higher education in Africa. To move towards an overall definition of the concept of decolonization, we take a point of departure in what Andreotti, Stein et al. (2015) have referred to as *the violence of modernity* (p. 21), a concept they relate to *coloniality* understood as 'a system that defines the organisation and dissemination of epistemic, material, and aesthetic resources in ways that reproduce modernity's imperial project' (Andreotti, Stein et al., 2015, p. 23; Maldonado-Torres, 2007, p. 243). The concept of modernity is commonly associated with progress resulting from industrialization, combined with democracy and humanism. However, such positive elements, which Andreotti, Stein et al. (2015, p. 23) refer to as *modernity's shine*, tend to hide the negative sides of modernity visible in the systemic and inequitable organisation and dissemination of epistemic and material resources. They argue that we all have varied investments in both modernity's shine and its shadow, not least in neoliberal educational contexts.

In the context of higher education and refraining from normativity, the authors map interpretations of decolonization in a social cartography of critiques of modernity identified in selected literature (Andreotti, Stein et al., 2015). The mapping of responses to modernity's challenge involves four overall spaces. The first space has an uncritical perspective on modernity and sees no need for decolonization practices whereas the other three spaces call for decolonization in varying degrees: a soft-reform space, a radical-reform space and a beyond-reform space. In the soft-reform space keywords are dialogue and consensus, addressing inequity through inclusive education and institutional change to protect the positive sides of modernity. Recognizing epistemological hegemony such as Eurocentrism, the radical-reform space involves antagonistic conflict and a redistribution of power to marginalised groups to reframe modernity and to make modernity work for all. The beyond-reform space is characterised by general despair and scepticism of modernity as we know it and is pessimistic about the possibility of decolonizing higher education from within universities; instead, modernity's systematic violences should be contravened by developing alternatives to modernity, for instance through extra-curricular activities and alternative educational use of spaces (Andreotti, Stein et al., 2015, p. 31).

Much in line with the radical-reform space discussed by Andreotti, Stein et al. (2015) and throwing a critical gaze at neoliberalism and how neoliberalism affects the African universities, Ndofirepi and Cross (2017) ask whether university education is a public good or a tradable commodity. They contend that privatisation and market competition propelled by neoliberalism has changed the nature of university education, negatively affecting the role academic institutions should play in addressing societal challenges. The idea of knowledge has been replaced by the idea of profit (p. 45) and the state has become 'increasingly unresponsive to local needs and powerless to meet the increasing (funding) demands of higher education' (Ndofirepi et al., 2017, p. 45). This situation is almost the norm in African universities, where limited allocations to universities force African researchers and faculty members to attract funding from international funding institutions. This has severe implications for what Slaughter and Rhoades (2005) refer to as 'the public good knowledge and learning regime', which they argue has been replaced by 'an academic capitalist knowledge and learning regime' (in Ndofirepi et al., 2017, p. 47). In the view of the authors, there is a need for a transformed space where both local and external human ideas and knowledge are acknowledged and shared. This particularly involves the African university where teaching and research should consider the social context and provide social and economic benefits to the surrounding community. The authors strongly emphasise the need for African

universities to break free of dependence on Western models and to engage in research, teaching and learning activities of local relevance, seeing that 'mental colonisation is the hardest part to decolonize and the worst form of colonialism' (Ndlovu-Gatsheni, 2013, p. 50 in Ndofirepi et al., 2017, p. 51). Funding higher education should adequately address research that is locally relevant and is locally used for community transformation.

In a similar radical-reform vein, Brock-Utne (2017) explores decolonization of knowledge in the African university from the vantage point of language as a medium of instruction. Based on experience from Tanzania and South Africa, she argues a need for substituting textbooks from the North, which are mostly written by researchers from the western hemisphere. She contends that the African researcher 'knows his/her environment better than any expatriate and will be more likely to ask the right questions provided that s/he is allowed to ask them and is not forced to work with questions of concern to Western donors' (2017, p. 166). On this basis, she argues a need for rewriting the content of textbooks and for changing curricula to represent contents of relevance to African students, and she further warns that one of the consequences of using English as a medium of instruction in teaching and research is that an academic vocabulary is not developed in any of the African languages. She observes there is a long way to go before African universities would decolonize knowledge to the extent of replacing English with a local language but recognizes that well-known African authors have been writing from the context of an African environment (e.g. Achebe, Ngugi, Okot p'Bitek, see also Chapter 3). At the level of primary school education, she is more optimistic, narrating an educational Village School Programme in Namibia, where basic education in the first three years of schooling was provided in the mother tongue and geared to the culture of the learners with positive implications for curriculum development and subsequent translation into English, to reach a wider circle of learners.

Departing from colonial history of African universities, Adriansen and Madsen (2019) analyse dilemmas and paradoxes in capacity-building projects between universities in Africa and Scandinavia. After more than fifty years of independence, most scholars concede that African higher education systems are still colonised by Western theories and methods generally perceived as neutral and universal. Citing Shiva (2012), Adriansen and Madsen (2019) raise a critique of *the universality of knowledge* understood as theory (the universal) born in the Global North, while empirical material is collected in the Global South, thus representing particularity (Adriansen & Madsen, 2019, p. 8). The problem of this division is that knowledge based on theories and methods derived from historical contexts outside of Africa tend to be irrelevant for

solving local problems in an African setting (Adriansen et al., 2016). In the same vein, Adriansen and Madsen (2019) discuss the concepts of *powerful knowledge* versus *knowledge of the powerful* (Young, 2008). In the context of African universities, *powerful knowledge* is knowledge about African history, geography, knowledge, and tradition. On the other hand, and broadly generalised, *knowledge of the powerful* is seen as a synonym of Western knowledge of the powerful in academia. In this sense it relates closely to the concept of *universality of knowledge*.

In their discussion of universality of knowledge, Adriansen and Madsen (2019) draw attention to the paradox that to partners in the Global North, a capacity-building project in higher education may seem straightforward in that the idea that 'we teach them what we know' is naturalised (p. 7) while issues such as *epistemological coloniality* and *colonisation of the mind* have been at the forefront of academic debates in the Global South, see Ngũgĩ (1986) on *decolonizing the mind*, or Tuhiwai Smith (2012) on *Decolonizing Methodologies*). Based on their experience of engaging in capacity-building projects between universities in Africa and Scandinavia, Adriansen and Madsen (2019) encourage participants to ask themselves 'where they are understanding and speaking from in order to address the issues of coloniality' (p. 8). Following Whyte and Whyte (2016) and based on experience from capacity-building projects in Africa, the authors recommend building on long-term involvement and interpersonal and professional relations, asking questions such as: "How can we consider the inherent colonial history and asymmetrical power relations? How can we work in a contextualising manner while avoiding *othering* of African academics? How can we combine Africanisation of the curriculum and access to knowledge of the powerful?" This way we may open up to collaboration following a soft-reform agenda.

3.2 *Africanisation, Internationalisation, and Globalisation*

This leads us to a discussion that has become prominent within contemporary African scholarship concerning the relationship between Africanisation and Internationalisation. In the context of Higher Education, Mngomezulu (2017) takes up the discussion, defining Africanisation as 'the affirmation of the African worldview, without necessarily dismissing anything Western' (2017, p. 184). Internationalisation, on the other hand, he defines as 'a reciprocal relationship which exists among countries' (2017, p. 185). He continues by asking to what extent the two concepts are complementary or adversarial. In the chapter, he offers an overview of turning points in the development of higher education in Africa from the colonial era, when African universities were linked to European universities and tended to follow their traditions. This was a kind of

internationalisation, however under Western dominance. Following Independence of many African countries, the concept of Africanisation (sometimes referred to as localisation or endogenization) became a key issue in the debate. Political and academic leaders in East Africa called for nationalisation of universities, proposing that expatriate staff be replaced by local staff. However, although there was consensus that universities in Africa needed to develop an African identity, many politicians – including an MP in Uganda (Dr. Kigundu) – argued that African universities cannot exist in a vacuum outside of a global context, and that it would be necessary to use expatriate staff in cases when it was not possible to find local staff with necessary academic qualifications. To Mngomezulu (2017) there is no justification that internationalisation and Africanisation should not be able to co-exist. Internationalisation has made it possible for African universities to gain access to technological expertise, which may in turn be used to promote Africanisation. International universities visit African universities and get insights they would not otherwise be able to obtain. African scholars obtain graduate training and return better equipped for teaching and research. Thus, there is mutual benefit for both scholars from the North and the South leading to joint publications in peer reviewed journals. Internationalisation may thus be seen as an opportunity for Africans to *showcase* Africa in a global community (Mngomezulu, 2017, p. 188).

4 Transforming Education

The overall aim for the BSU project and the title of this edited volume is *transforming education*. In the original proposal for the BSU 3 project, transforming education was described as transformative for individuals and societies. Through its National Development Plan II (2015/2016–2019/2020) and Vision 2040 (Mugerwa, 2015) the Government of Uganda emphasises sustainable development through research, science, and technology. This supports our intention 'to undertake humanistic and social science research on transforming education' (BSU III Partnership Proposal, 2017, p. 5).

Transformation of higher education is complex. It is a process of change of state from the current to the desired other. This change process is informed by the idea of remodelling, modification and restructuring of higher education (Du Preez et al., 2016). Researching transformation of higher education from a South African context, Du Preez et al. (2016) presents three levels: *democracy* (equality and equity); *ideology* (beliefs and assumptions) and *structural* (epistemology, curriculum, accessibility, quality, institutional and management structures, teaching and learning). *Structural transformation* emphasises

sociological relationships, structural changes, and equity within the higher education system and at institutional levels (Du Preez et al., 2016). Adding one more aspect, we suggest – the change of teaching, learning and research in everyday practice, and how these practices are enacted as an interpretation and a response to the structures. Experience shows that changing practices is the most difficult as practices are routine based, tacit and deeply integrated with values. This calls for a change in the mindset as exemplified in the Faculty of Education and Humanities where lecturers are re-designated as *Facilitators* who facilitate learning by sharing with students, knowledge that the students themselves can access in the digital age supported by problem-based learning and hybrid learning. This is a transformation from the colonial system of education based on the *Gradgrind philosophy* of choking the children with facts and nothing but facts (Dickens, 1854). The re-designation in the Faculty puts new burdens on both the lecturer and the student. The lecturer cannot rely on *yellow college notes,* and the students have to engage with digital knowledge through accessing the internet and available (open access) knowledge resources.

4.1 *Expansive Learning as Transformation*

A transformative approach to teaching and learning, originally developed in the Nordic countries, is *expansive learning* as proposed by Engeström (2001). The concept is based on principles from Bateson's (1972) theory of learning. Bateson distinguishes three levels of learning: Learning I, Learning II and Learning III (as referred to by Engeström, 2001). *Learning I* refers to conditioning, such as answers that are considered correct in the given school context. *Learning II* is the acquisition of the deep-seated rules and patterns behind the behaviour of Learning I, while *Learning III* is the ability and competence to break out of or find solutions to the double bind situation that may arise at the level of Learning II e.g., when a person or group starts to question the sense and meaning of the context and the rules behind the practice and acts accordingly to the conflicting situation. *Transformative learning* is therefore learning that creates a novel solution to a seemingly deadlocked situation, transcending the situation and thereby transforming conditions through action.

Engeström formulates a complete cycle of expansive transformation as a collective journey following the zone of proximal development on the activities:

> It is the distance between the present everyday actions of the individuals and the historically new form of the societal activity that can be collectively generated as a solution to the double bind potentially embedded in the everyday actions. (Engestrom, 1987, p. 174 cited in Engeström, 2001, p. 137)

This can be read as a process of historically new forms, one of the most immediate being e.g. digital learning, but as we have just learned in the section on decolonization, there are conflicting new forms of social activity and therefore more responses to the double bind.

The theory of expansive learning is developed within the framework of cultural-historical activity theory (Engeström, 1987, 2001). The driving force and springboard for transformations are contradictions and tensions within an activity system. In our case, for example, there may be contradictions between the learners at Gulu University, the learners' goals, and the learning environment, including pedagogy and the use of digital technologies, which may be perceived by the learners as contradictory to what is historically and socially possible. There are also contradictions and tensions between systems of activity, perhaps between different systems of activity within the university – e.g. the immediate objectives of the administration and management versus those of the academics. Again, these contradictions can serve as springboards for overcoming and transforming the conditions of the perceived things.

Learners, organisations, and societies are involved in transformative learning. As such, the capacity for transformation is a capacity for the individual learner as well as for the organisation and society. In this volume, the transformative perspective is primarily directed towards higher education, and with a special interest in the power of transforming teaching and learning (see for instance Chapters 4, 12, 13 and 15).

4.2 *Problem-Based Learning* (PBL)

Problem and project-based learning (PBL) has many roots and when it comes to institutional PBL practices they may take many forms. The first university program to embrace PBL was the medical school program at McMaster University in the late sixties, followed by universities from DK, Sweden and Holland in the seventies, among those Roskilde University (1972) and Aalborg University (1974). Rooted in critical theory and pedagogy (Dirckinck-Holmfeld, 2002) as well as in constructivist learning theory (Graaf and Kolmos, 2003), the approach represents a shift from teacher-centred teaching based on positivism and externally produced knowledge (Vavrus et al., 2011) to student-centred and critical learning based on social constructivist approaches. Some scholars also attribute the critical pedagogical and philosophical principles behind PBL to the Brazilian educationalist, Paulo Freire (1972) who saw dialogue as a central concept in learning, enabling students to 'achieve a deepening awareness both of the socio-cultural reality which shapes their lives and of their capacity to transform that reality' (Freire, 1972, p. 51). As a learning approach, PBL builds on this idea offering new skills and epistemologies that enable students, as well

as researchers, 'to address specific problems in complex, real-world settings in which the development of workable solutions is required' (Duch et al., 2001, p. 5). Although PBL may take on various forms, the approach has proved to stimulate students and researchers to think in critical ways for meeting societal challenges. PBL – supported by ICT – is known as a democratic methodology that promotes equality among students and allows them to enter respectful relationships with their supervisors and mentors. These ideas reflect Dewey's democratic ideal (1916) that emphasised the right to learn for individuals and groups. Dewey's ideas build on the assumption that we learn from inquiry, actions, and experiences, which led him to suggest an educational reorientation from teacher-centred to student-centred learning (Dewey, 1916). These ways of thinking have been influential in higher education around the world. The PBL concept is being constantly developed and adapted to new contexts. (For an overview of the historical development of PBL, see Krogh and Jensen, 2013; see also Engin and Atkinson, 2015).

Some core principles of PBL taken up by the BSU-GU project are problem orientation, teamwork (both students and facilitators), practice-based and action-oriented learning, democratic dialogue, and linking theory and practice for critical enquiry and analysis (Tabo et al., 2022; Awacorach et al., 2021; Olanya et al., 2021; also see chapter 12). The essence of PBL is working with real life problems of relevance to the community outside of the university. It thus helps calibrate an alleged mismatch between post-graduate skills and requirements made by future employers. It is also known to help solve problems of mass education, poor entry qualifications and inequities through the concept of peer learning, where students teach other students through group work, thus improving well-known imbalances of student-teacher ratios. Moreover, students working from a PBL curriculum will draw on knowledge from the local context, which they may integrate with de-contextualised knowledge and theories originating from the global North, thus addressing the issue of universality and particularity raised in Adriansen and Madsen (2019). PBL thereby promises to help an institution to move away from traditional, Eurocentric and more theoretical education to a more problem-based and learner-centred one because the quality of a project will be assessed according to how knowledge of theories and models are applied for solving a problem in the local context, theoretically and practically.

Posing the question whether Africa needs Problem-based learning, Dahms and Stentoft (2008) discuss some of the major challenges facing universities in Sub-Saharan Africa. In line with Ndofirepi and Cross (2017) they relate one of the challenges to neoliberal policy in terms of decreased funding and increasing enrolment, as universities have had to cope with a huge enrolment

of students – often with poor entry qualifications – without receiving sufficient funding from governments and international donors for coping with what has become known as mass education. This has resulted in poor educational quality and a mismatch between graduate students' skills and societal needs. To surmount these challenges, universities have felt a need for institutional reform and have invited donor funded educational programs to assist the process. However, this invites the challenge commonly known as *decolonization of higher education* and the need to redesign curricula for relevance in an African context (Ndofirepi & Cross, 2017, p. 2), and Dahms and Stentoft take up the challenge by arguing that Problem-based learning (PBL) could be introduced as a solution to the decolonization problem as PBL addresses and researches local problems as an outset for generating knowledge, stimulating innovation, and finding solutions that may potentially lead to community transformation.

5 Discussion

We introduced the chapter by asking the research question: *Why transform education?* We have approached the question through the lens of decolonization, focusing on aspects of education in the context of Northern Uganda considering our experience from a DANIDA-funded partnership between Gulu University and Danish Universities, dubbed BSU-GU. At the core of the BSU-GU project is a collaborative approach and learning by doing, seeking equality in partnerships, mutual learning and building institutional and research capacity at Gulu University. The overall aim is to strengthen GU to become a driver of development in the region in the context of post war era and historical socio-economic marginalisation, also, in line with the mission of GU, which is: To provide access to quality higher education, training, research, and innovations for the delivery of appropriate services towards community transformation and sustainable development. BSU-GU as a partnership has a focus on *Transforming Education* and *Rights, Resources and Gender* and our activities have worked towards accomplishing this goal.

Collaborative research and institutional capacity building in partnerships is challenging because it cuts across multiple boundaries and knowledge systems. The global system is dominated by Western ideas and traditions, as is the BSU-GU approach. However, we also see the project as a space to transcend these ideas in a university and region with distinct values, traditions, and knowledge practices, subsuming the idea of *powerful knowledge* versus *knowledge of the powerful* (Adriansen & Madsen, 2016; Young, 2008). As such,

BSU-GU aimed not only to increase the number of Masters' and PhD students but also to contribute qualitatively to building research in under-researched areas, to gaining a deeper understanding of different positions, approaches and methodologies within and across disciplines, and providing an arena for the development of research practices that promote new approaches, methodologies and ways of doing research, teaching and learning which gives voices to the communities.

In working towards these goals, we have tried to move away from the idea that so-called *experts* from the North would come to teach Northern/Western curricula (Brock-Utne, 2000, p. 224). Instead, our collaboration has taken a point of departure in collaborative, multidisciplinary research projects, the development of new Masters and PhD programs, educational reforms focussing on problem- and project-based learning, digital learning, teamwork and developing infrastructures for learning (Tabo, 2020). Moreover, when it comes to student mobility, provision has been made for students in the North to spend internships at Gulu University and for Gulu university PhD fellows to spend time at a Danish university. This has made it possible for students and teaching staff to get acquainted with each other and to be exposed to the culture behind the knowledge systems, thus moving away from a one-way flow of knowledge. It also allows joint publications in high impact peer-reviewed journals rather than in predatory journals that are not internationally recognised.

It will always be difficult to establish a truly symmetrical relationship when one party is a *donor* while the other party is a *recipient* and there is no guarantee that such a relationship will afford 'academic equality and mutual respect' (Brock-Utne, 2000, p. 225); however, in spite of this caveat and for several other reasons, there is general consensus that international exchange should be cultivated in higher education (see e.g. Hirji, 1990). Staying within this line of thought, we acknowledge that the BSU programme has paved the way for dialogues and shared work on collaborative research, curriculum development, study stays, and with PBL and digital learning as drivers of change.

At the core of the theories on decolonising is the serious message that there is a need to transform education, to move away from *epistemic violence* ostensibly resulting from *the violence of modernity* discussed earlier (Andreotti, Stein et al., 2015, p. 23). There is a need to reform education to rescue the positive aspects of modernity to improve the match between university graduates and the needs of the surrounding community. In our more than ten years of collaboration, we have followed what Andreotti, Stein et al. (2015) have mapped as a *soft-reform space* in their social cartography of educational reform. In essence, we argue that PBL and digital learning serve as a soft-reform space based on dialogue and consensus, giving voices to indigenous, communities

and students, when inquiring into local problems and knowledge creation. This approach is underpinned in the University policy of *Community Engagement* (Policy 22, 2020).

6 Conclusion

As we described earlier, higher education transformation involves *a process of change from one state to the desired other*. As an academic institution, Gulu University operates within activity systems (cf. Engeström, 2001) of contradictions and tensions inherent in the transformative approach to teaching and learning. Given the three levels of learning proposed by Bateson (1972, in Engeström, 2001), GU-BSU aims to provide a system of learning activities that can help students, teachers, administrators and management to move away from the double bind of conflicting learning modes that characterise conventional approaches to learning. This includes moving away from learning modes where students are assessed on "how well they have retained what teachers have delivered".

The Education system that existed in the 80s and 90s in Uganda was different from the current one. Practical elements were a heavy component of education and took place in the field, as opposed to the current system where everything is done in the classrooms. The current system has led to learners completing their studies without the knowledge of how to apply the skills acquired at school or at university. Apart from agriculture where students do some practical work, not least through attachments to farms and by maintaining horticulture plots in the Faculty grounds (see Chapter 4), the curricula for programmes like Bachelor of Physical education and Bachelor of Science Education do not offer the same opportunities for intense practice today. It is some of these current practices within education that make employability a challenge to graduates at all levels.

The prominence of knowledge intensive educational systems has put a heavy load on learners, who spend most of their time reading, to reproduce what they have read, in their end-of-semester examinations. The system has also increased stress on the learners and teachers, who have to teach even at night. Such an approach literally kills the skills development required for problem solving, innovation and attitude to work.

To meet societal demands and to integrate the practical aspects of knowledge production, Gulu University's transformed system of activities must embrace a model that enables students to find novel, action-based solutions to seemingly oppressive situations. One way forward seems to be to move from

teacher-centred to learner-centred education as pioneered by the Faculty of Education and Humanities and the Faculty of Business and Development. To address these challenges, BSU-GU has worked together and has gradually revised the curricula, opening the possibility of using problem-based learning, eLearning and online learning as a hybrid learning approach.

What we have learnt from the BSU project is that transforming education to adopt new ways of teaching and learning seems to be supported by most stakeholders. Learners are enthusiastic about new ways of learning and are highly motivated to use technology to achieve their learning goals in areas such as employment and entrepreneurship, which are not addressed by traditional approaches. Teachers and managers have also experienced the potential and realised the improved performance of their students. However, transforming teaching and learning practices is complex and takes time. It requires structural changes, e.g. in curricula and learning infrastructures, reactivating the *powerful knowledge* of the communities, ontological and epistemological inquiries into the naturalised (Western) knowledge system, along with changes in teaching and management practices. The BSU project has provided a solid foundation for these changes and has succeeded in

– local capacity building through long-term partnership, collaboration, and action
– providing resources, time and space for people-to-people projects and exchanges
– experimenting with PBL and collaborative research, enabling low-cost, community-based innovation and local knowledge building.

Despite the potentially asymmetrical relationship when one party is a *donor* and the other a *recipient*, the BSU project has served as an exemplary *soft reform space*. *Soft* because it has allowed for small and slow reforms based on mutual inquiry, experimentation, dialogue, and consensus. Decolonising education is a must not only in northern Uganda and Africa, but in the West as well. The means are many, with PBL, hybrid learning and collaborative research being a cornerstone, as well as funding schedules based on equal and long-lasting partnership models.

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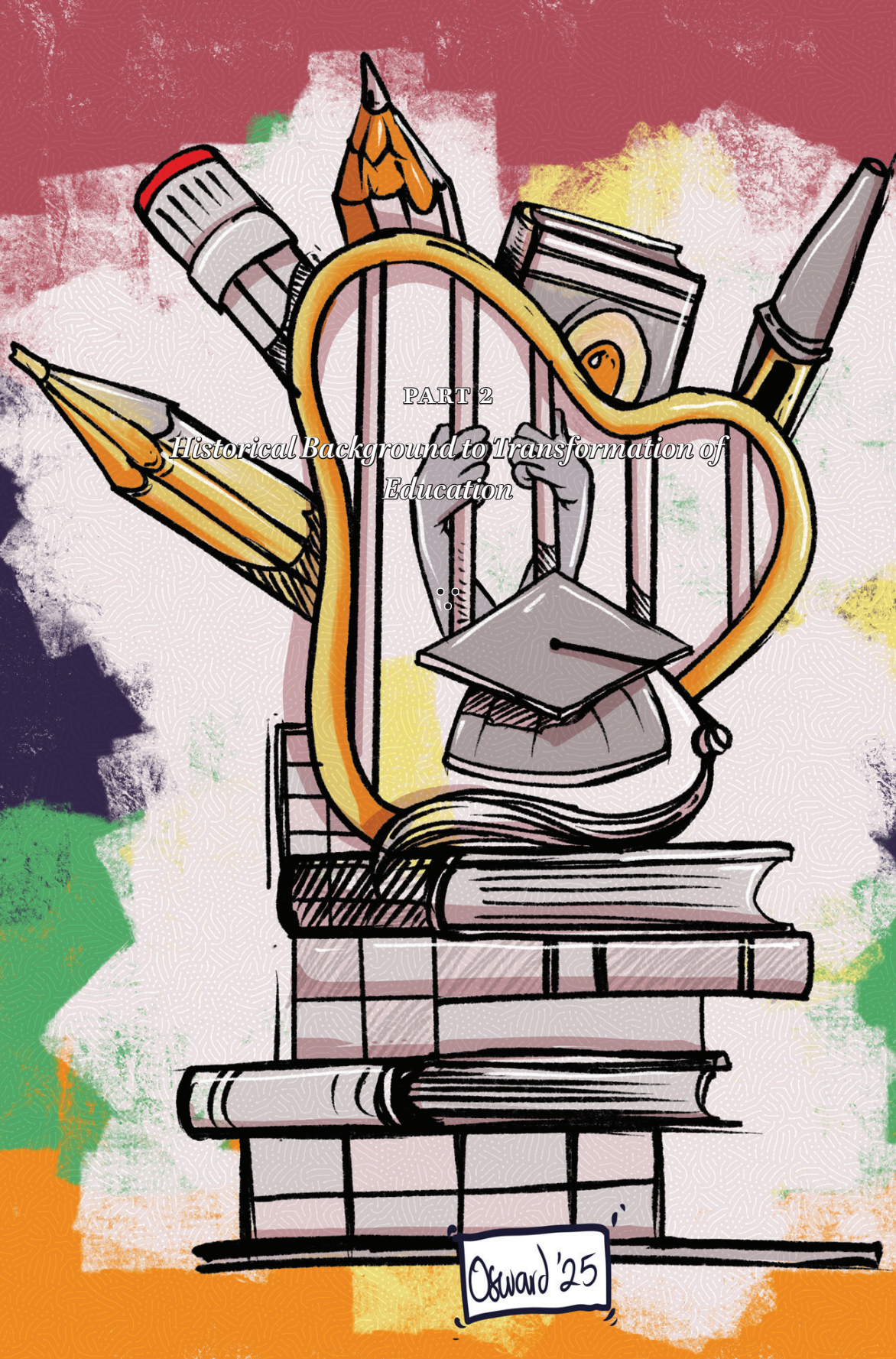
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PART 2

Historical Background to Transformation of Education

CHAPTER 2

Decolonising or Localising Higher Education in the Global South?

Historical Perspective of Transforming Education under the South-North Collaboration in Gulu University

Agatha Alidri

Abstract

This chapter contributes to the debate on decolonising versus localising higher education in the global south. *Transformation* of education in the global south is a contested discourse. It opens to new possibilities in the north-south-south collaboration in the production, ownership and use of knowledge in higher education. The Building Stronger Universities project at Gulu University has been implementing the PBL innovative pedagogy to transform education by engaging with technology and new ways of community engagement. It is aimed at a more localised, blended and creative way of teaching, learning, research, and how knowledge is produced and disseminated in higher education institutions. This chapter suggests new and more creative ways of teaching, learning and research for decolonizing and localizing education, envisioning a strategy that considers local needs, values and use in a local context of knowledge production. The humanities and social sciences continue to thrive on colonial structures, raising concern of their relevance, and calling for transforming education. Therefore, localising and contextualising higher education within the local needs and solutions is considered a strategy to decolonise education.

Keywords

transforming higher education – decolonisation – localisation – contextualisation

1 Introduction

There is increased foreign and external financing of research and teaching to transform Higher education in the *global south*. There has been multi-level conceptualization of transformation including three macrolevel contexts

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operating globally that can foster higher education transformation namely: socio-political, technological, and market forces that often transcend national boundaries. These macro-level contexts can accelerate transformation by reconfiguring the interests and priorities of higher education actor both nationally and globally (Dee & van der Meulen, 2023). Public universities in Sub-Sahara Africa have experienced decline in local research and teaching financing. The university is viewed as a state tool to enhance economic development. As governments reduce the proportion of state funding for higher education, colleges and universities are compelled to compete in the marketplace for necessary revenues, especially student tuition fees and research grant funding (Dee & van der Meulen, 2023). Higher education institutions have responded by developing 'entrepreneurial strategies', as part of the transformation. The dwindling state funding have transformed higher education institutions into market actors, where the pursuit of revenues serves as justification for strengthening the power of central management – a phenomenon known as managerialism (Dee & van der Meulen, 2023).

This chapter draws from the debates and lessons learnt from the efforts made in transforming education under the south-north collaboration at Gulu University. It focuses on the ten decades of the north-south-south collaboration under the Building Stronger Universities (BSU) project at Gulu University funded by the Ministry of Foreign Affairs of Denmark. The aim was to transform higher education by building institutional capacity in research, teaching and community engagement. Gulu University was established as a public University under the Universities and other Tertiary Institutions Act, 2001 (Establishment of Gulu University Instrument 2003 No. 31 enacted by Parliament on the 14th of May 2003). Under its vision: 'To be the leading Academic Institution for Promotion of Community Transformation and Industrialization for Sustainable Development', the strategic function of the University is research, teaching and learning, and community engagement (Gulu University Strategic Plan 2020/2021–2024/2025). 'The university has a series of functions related to production (such as selection of talents, training and research); to consumption (such as general education, community life and a holding operation); and to citizenship (such as socialisation, critical evaluations and democratisation)' (Cloete & Maassen, 2015, p. 2).

This chapter contributes to the debate on decolonising versus localising, or contextualising higher education in the global south in the framework of transforming education. Despite the advocacy for *Transformation* of education in the global south, it remains a contested discourse. With forces of globalisation and the neo-liberal knowledge economy at work, this work underscores the importance of higher education institutions remaining relevant in the

production and use of knowledge through teaching, research and community engagement. Such knowledge should have the potential to be replicated elsewhere in the globe. In order to remain relevant and play their critical role in the 21st century, higher education institutions ought to focus more on localising and contextualising the transformation agenda. Contextualising education transformation in this work, means aligning it to the appropriate roles, and purposes of education to the community or state.

1.1 *Post-Colonialism versus Neo-Liberalism Agenda in Transforming Higher Education*

Post-colonial critics argue that 'the neoliberal transformation of higher education will result in research and teaching priorities that are shaped more extensively by market forces and government actors rather than by the academic profession, and that disciplines far-removed from the market, such as the arts and humanities, will be further neglected' (Dee & van der Meulen, 2023, p. 2). The state and university in this case, are often viewed from the post-colonial lens as agents of neo-colonialism and neo-imperialism in higher education by adopting foreign agenda, policies and practices.

This chapter argues that foreign financing and transformation of higher education which does not target the local community and appreciate the unique knowledge and skills in developing countries could trigger re-invention of neo-colonialism/neo-imperialism from within and without. Thus, a call to transforming higher education by contextualising and localising knowledge and skills generation to the global south context. 'Neo-colonialism as a concept usefully focuses upon both corporate and donor forms of state penetration .... Donor aid is not necessarily a form of altruistic largesse (although in certain humanitarian scenarios it may well be) but can very often act as a lubricant for neo-colonial systems of policy co-optation' (Langan, 2018, p. 61).

> Western donors emphasise that the ultimate goal of aid-giving is to alleviate hardship in developing societies, and to generate growth and livelihoods conducive to a better quality of living. At times Western donors also emphasise that there is a 'win-win' aspect to aid-giving, namely that the donor state itself might accrue certain benefits from development co-operation. (Langan, 2018, pp. 61–62)

Nkrumah (1965) argued that there are the possibilities of Western aid monies denuding genuine political and economic sovereignty. Nevertheless, he expressed real concerns that the reality of aid-giving would be to enhance Western donors' policy influence and de facto political control at the expense

of the autonomy of local elites. In this case neo-colonial elites in Africa; abdicate their responsibility to govern in the interest of local citizens but they would instead rely upon the securities of foreign aid and accept to external demands despite of not being conducive to the well-being of local peoples. To Nkrumah (1965), aid monies operate as a 'revolving credit' whereby Western governments essentially regain their 'investment' through the bringing about of policy change in African countries conducive to their own economic and commercial interests (Nkrumah, 1965; Langan, 2018). The neoliberal policy regime and the institutionalized practices of colleges and universities is thought to reinforce the interests of elite groups (Dee & van der Meulen, 2023). 'Although development assistance, by many people, is perceived as a positive practice, questionable aspects can be identified when relating development (programmes) to neo-colonialist thinking, which is concerned with ongoing relations between Western and non-Western actors' (Smit, 2017, p. 1). 'Particular features of neo-colonialism are Western-centrism, dependency, agency and resistance, which can be experienced by aid receivers as a result of the implementation of educational aid programmes' (Smit, 2017, p. 1). Western centrism was experienced by the teachers mainly in terms of the inexperience with how to implement the desired Learner Centred Education (LCE) approach in their daily practice. A sense of dependency on the Western donor was shown by local actors in terms of academic knowledge and (a range of) resources necessary for the implementation of the introduced teaching approach. Regarding their agency, the target group expressed that their involvement in the programme caused for increased capabilities and a sense of empowerment in their daily practice' (Smit, 2017, p. 1).

1.2 *Conceptualising the North-South Imageries and Dichotomies in Transforming Higher Education*

In discussing higher education transformation, the south-north collaboration model and approach which is concerned with ongoing relations between Western and non-Western actors is critical. McEwan (2008) identifies ways of such connections as the spatiality of development. According to her, development interventions are underpinned by the way in which the South is perceived and represented in the North. The global north is perceived as the centre of development, whereas the South as the receiver, the peripheral area in which the policies and ideas originating from the North are implemented (McEwan, 2008). This imaginary north-south division only perpetuates the structures of colonialism. To McEwan, this creation of two separate entities (the central North and peripheral South) should be challenged as they have always been interconnected and mutually constituted and are replica of colonialism and

neo-colonialism. This is seen replicated in the transformation of higher education as well. Neo-colonial thinking can be related to development aid through what Said (1978) calls, representations, or imagined geographies. If not carefully considered, these perceptions may misguide transformation of higher education as a one-sided process limited to the global south. Again perceptions, 'play a significant role in the ways in which the global South is depicted in the minds of development practitioners' (Smit, 2017, p. 1). These images are often simplified and distorted due to a lack of first-hand experiences, and they tend to ignore the diversity, dynamism and complexity of countries and populations situated in these regions (McEwan, 2008; Smit, 2017). Smit notes that 'the spatiality of development describes a geographical difference between the North and South, whereas imagined geographies illustrate a generalisation of development regions as depicted by actors in the North' (2017).

McEwan (2008) identifies Eurocentrism, or Western centrism, as a central element in development. Eurocentrism, or Western centrism, 'creates an imagined geography of the world in which Europe and North America (the West) are perceived as the highest stages of global progress and civilization (McEwan, 2008; Smit, 2017). Relating development processes in the global south to these images of what ideal development contains, distorts perceptions on how and what to develop. Rather, this chapter calls for localising or contextualising a phenomenon. Western centrism, therefore, describes the different values that are allocated to the two separated entities. Neo-colonial thinkers assert that development and neo-colonialism are interlinked through the role of power (McEwan, 2008; Smit, 2017). Similarly, transformation of higher education and development are related. Who takes charge of development projects, and their aims influence their power relations? Power in development aid implies that involved actors are subjected to forms of external power and influence which limits their ability to act freely (Groves & Hinton, 2013). In this case, influence relates to the 'concepts of agency and dependency, through which power and influence can be strongly exercised upon aid receivers. Changes in their agency (and desired behaviour) can lead to perceived experiences of force among these actors' (Smit, 2017, p. 2). External involvement is a crucial factor in the development of aid receivers, creating a dependency relation between the donor- and receiving actors. This is the origin of perpetuation of the colonial status quo. The dependency relation between a Western donor and Southern recipients, a perceived indication of neo-colonialism becomes visible as dependency implies an uneven power relationship (Andrews & Okpanachi, 2012; Smit, 2017). Smit argues that Western-centrism, dependency and agency; features of neo-colonialism in development programmes, often triggers forms of resistance which emerges among a targeted group of actors (Smit, 2017). It is

through this resistance that call is made to decolonise, localise or contextualise the transformation of higher education and knowledge, to meet local needs and aspirations.

Whereas there is contention over the term *global south*, it is more of an ideological idea than a geographical one. Mignolo observes that the term *global south* 'is an ideological concept highlighting the economic, political, and epistemic dependency and unequal relations in the global world order, from a subaltern perspective' (Mignolo, 2011, p. 166).

Kloß (2017) argues that:

> The Global South, when not simplistically referred to in terms of geography, has great potential to consolidate and empower the various social actors that consider themselves to be in subaltern(ised) positionalities of global networks of power. The Global South is not an entity that exists per se but has to be understood as something that is created, imagined, invented, maintained, and recreated by the ever-changing and never fixed status positions of social actors and institutions. For the context of knowledge production in academic institutions, the idea of the Global South may be embraced as a process or practice through which new modes of knowledge production are created and learned and more balanced relationships in the global system of knowledge production are achieved.

To Dados & Connell, the term Global South refers to 'an entire history of colonialism, neo-imperialism, and differential economic and social change through which large inequalities in living standards, life expectancy, and access to resources are maintained' (Dados & Connell, 2012, p. 12). When not carefully treaded, the use of the phrase 'global south and north', an ideological rather than a physical reality in production of knowledge, can re-invent mental and intellectual neo-colonization, domination and exploitation of the invented 'global south' in the neo-liberal knowledge economy. This is often through packaging it under the name 'transforming education'. This paper does not cover the whole history of transforming higher education but rather focuses on how the process of transforming education through the south-north global collaboration could re-invent neo-colonisation rather than localising higher education. This becomes critical with the commodification of knowledge in the neo-liberal knowledge economy. The changes brought about by neoliberalism and managerialism have reinforced the stratification of higher education (Giroux, 2014). More resources are directed toward 'world class' research universities, while other institutions that focus on undergraduate education and

serving local communities receive minimal public investment (Dee & van der Meulen, 2023). This stratification could be considered as maintaining the colonial status quo of higher education institutions as agents of neo-imperialism and socialising the African into a global white man in a black skin.

What is being transformed, in whose interest is the 'transformation and therefore, whose idea is being used in the paradigm shift towards transforming education. The concept *transforming education* is multifaceted, requiring a broad-spectrum perspective. Globalisation and advances in information, communication and technology (ICT), is increasingly shaping and influencing educational system and higher education in different ways (Seroto et al., 2020).

To understand higher education transformation, it is important to appreciate the meaning of 'change' which Dee et al. (2023) defined as any 'alteration in the major components of an organizational field, system, or organization' (Dee et al., 2023, p. 4). They identify the major components of the field of higher education to include

> the types of knowledge and skills valued by various stakeholder groups, including academic disciplines, government agencies, and employers .... [and] the modes and practices associated with teaching and research, [and] prevailing expectations regarding the social responsibilities of colleges and universities. Major components of a higher education system such as the governance mechanisms that connect colleges and universities to various stakeholder groups within specified geopolitical boundaries and structures, policies, personnel, culture, and practices are important in the transformation of higher education. (Dee & van der Meulen, 2023, p. 4)

This chapter approaches the question of decolonising and localising higher education through a postcolonial theoretical framework as advanced by Gayatri Spivak who talks of epistemic violence, which Foucault defines as 'complete overhaul of episteme' (De Schryver, 2021; Spivak, 2023; Foucault, 2001). To Foucault, epistemic violence is orchestrated to constitute 'the colonial subject as the other'. However, there is a danger that transformation of education through decolonisation and localisation of education could end up being dislocated and unacknowledged (Foucault, 2001). Using Gayatri Spivak's views, this chapter adopts the post-colonial theory as decolonisation and localisation strategy as 'corrective to the epistemic violence attendant on intellectual attempts at engagement with marginalized others' (De Schryver, 2021, p. 100). Transformation of education through decolonising and localising education answers Gayatri Spivak's question 'Can the Subaltern Speak?' (Spivak,

2023, p. 171). Here imperialism in education according to Gayatri is known as 'subjugated knowledge, a whole set of knowledges that have been disqualified as inadequate to their task or insufficiently elaborated: naïve knowledges, located low down on the hierarchy, beneath the required level of cognition or scientificity' (Spivak, 2023, p. 25).

In transforming education, knowledge, and how it is acquired and used should be decolonised and localised to the context without establishing dichotomies and hierarchies, but rather its relevance and impact be considered. These ideological and geographical categories and dichotomies within collaboration and knowledge generation reinforces intellectual and knowledge subjugation in higher education as surviving structure of colonialism and colonial education system. This paper is divided into three major sections. The first section discusses the western concept of transforming education. The second part of the chapter presents the underpinning theory of the study. The third part examines strategies in decolonising higher education. Finally, the paper concludes by suggesting strategies transforming higher education as means to localise and contextualise education in the service of the local community.

2 Research Methodology

This chapter foregrounds lessons learned during the ten years (2011–2023) of the Building Stronger Universities project at Gulu University in three critical areas: the north-south collaborations, PBL innovative pedagogy and engaging with technology, and new ways of community engagement implemented under the theme 'Transforming Education' to initiate change from the traditional colonial oriented structure to a more localised, blended and creative way research, teaching, learning, and how knowledge is produced and disseminated in higher education institutions.

The research ontology focused on the grounding philosophy upon which 'transforming education' is established and how 'transforming education' attempts to decolonise or localize higher education in the global south. It was the philosophical starting point for inquiry aimed at finding explanations that could be considered to be true, whether by linking cause with effect, or seeking to understand the concepts and ideas. However, the concept of truth itself is open to debate as truth is not often considered to be objective and it depends on subjective views and context, as it is constructed in the mind from psychological processes such as memories and beliefs, and social factors, interactions and experiences (Bleiker et al., 2019). Hence, this study adopted the qualitative study.

2.1 *Data Collection Methods*

Workshops were used as a method of data collection. The workshops were on the introduction of PBL and undertaking PBL projects and using a blended PBL-eLearning for teaching and research. It focused on how such workshops generate and deliver knowledge and impart skills and trigger mindset change in e-learning and Problem Based Learning and community engagement (Ørngreen & Levinsen, 2017).

The workshops undertook creative, co-creation and co-design of learning activities. Whereas 'originally, workshop meant 'a place where things are made or repaired' (…) Today, workshop means an arrangement whereby a group of people learn, acquire new knowledge, perform creative problem-solving, or innovate in relation to a domain-specific issue' (Ørngreen & Levinsen, 2017, p. 71). This method hinged on social constructivism is traced back to Osborn, who in 1948 described it as a method for creative group problem-solving by brainstorming. The workshop methodology became popular in the early 1960s and used in policy making, societal challenges, technology, organisational change, innovation and design (Ørngreen & Levinsen, 2017). Similarly, future workshops (FW) (Jungk & Müllert, 1987) was introduced by the Danish partners from Aalborg University as tool for introducing student-centred learning, teaching and research in training both lecturers and the graduate students.

During the future workshops, the ethnographic action research and educational design research (Purushothaman & Rivera, 2018) was integrated into the Gulu University teaching and research to come up with a hybrid tagged as *Gulu University model*. The training workshops and fieldwork were used to introduce innovative pedagogy, concepts, content, skills and knowledge in the area of PBL, eLearning and theories of knowledge (see also Chapters 12 and 15).

During this BSU period, training workshops and fieldwork were used to drive the introduction of innovative pedagogy, concepts, content, skills and knowledge in the area of PBL, eLearning and theories of knowledge. In the analysis, I focus on the continuity and changes seen, during the formulation of the collaboration, selection of theme, implementing the project activities, the attitude and mindset, the discourses and verbal expressions. All these reflect the dimensions of recolonization or neo-imperialism and decolonisation or localisation.

Observation method drawn from the ethnographic tradition in qualitative research was adopted. Here, I played multiple roles as PhD student, facilitator, and researcher. As participant observer, I scrutinised the content being delivered, mode of content delivery, and participants and facilitator's behaviour in a naturalistic setting. This removed any artificiality or bias to enable participants to act, think and answer questions in ways they believe to be desirable or acceptable. Verbal consents were sought in order to maximise time. Reflexivity

was considered through a reflexive process of self-examination and distancing researchers' interest which could likely influence the study outcome (Bleiker et al., 2019).

In the analysis, I focus on the continuity and changes seen, during the formulation of the collaboration, selection of theme, implementing the project activities, the attitude and mindset, the discourses and verbal expressions. All these reflects the dimensions of recolonization or neo-imperialism and decolonisation or localisation.

3 Historical Origin to Transforming Education

This study traces the concept 'transforming education' to the global north. Problem based learning (PBL); a student -centred learning was aiming for a shift in teaching methodology and democratise and decentralise universities to reduce the 'power of the old professors'. New ways of building universities were established and the two new universities in Roskilde and Aalborg were established, embracing the philosophy of project based and problem-oriented learning (Krogh & Jensen, 2013). Through workshops held with a selected group of lecturers and students in Gulu University, PBL a student-centred approach and pedagogy was introduced in graduate training. Students form the centre of the learning and delivery practice as opposed to the more traditional teacher-centred approach. Teacher-centred education (TCE) emphasizes on the reproduction of knowledge delivered by the teacher often in the form of definitions, while Learner Centred Education focuses on the construction of knowledge by students through the interaction with their surroundings. A shift from passive- to more active ways of learning which enhances of learning outcomes and an increase in completion and employment rates (Smit, 2017; Krogh & Jensen, 2013).

Puusa and Kekäle (2013) note that, 'the university sector and its operational environment are changing on a global scale: demands for social relevance, developments in information technology, diminishing age groups and increasing competition, efficiency and accountability, to mention a few trends, have all affected the higher education sector' (Puusa & Kekäle, 2013, pp. 1, 205). There has been dramatic shifts and major changes in the global economy and work restructured economy over the past four decades from the manufacture of goods to provision of services. 'Decision making has become decentralized, information is widely shared, workers form project teams, even across organizations, and work arrangements are flexible. These shifts are often associated with increased productivity and innovativeness' (Kozma, 2009, p. 14). These changes have been enabled by the application of ICT for communication, information sharing, and simulation of business processes and they require

new skills. 'These changes in organizational structure and business practices have resulted in corresponding changes in hiring practices of companies and the skills needed by workers' (Kozma, 2009, p. 14). This has triggered the need to transform the higher education curricula and modes of delivery to impact relevant skills and knowledge suitable for that production and service sector.

Drawn from the over ten years north-south collaboration at Gulu University; 2011–2024; it has been challenging to the institution to create learning environments which replicate the ideal situation in the employment world as raised by Kozma (2009). Transforming education in developing countries, could be expensive in terms of money and resources as student-centred approach in graduate training requires curricula review to integrate learner-centred pedagogies, available ICT infrastructure and intensive use of ICT, ample classroom and flexible space; and a human resource trained and equipped with the knowledge and skills of handling student-centred learning. The funding under BSU from the Ministry of Foreign Affairs of Denmark and a south-north collaboration, enhanced transforming education from the traditional teacher centred to student centred approach. However, Valente (2013) notes that 'making international students understand and work within Aalborg's project oriented, problem -based learning (POPBL) approach is a challenge', as 'learning in many European Union countries is organised along very different lines and universities struggle to integrate bachelor programmes of various countries' (Valente, 2013, p. 155). This requires understanding differences among cultures and intercultural communication in order to appreciate that power is not equally distributed in the collaborations aimed at transforming education (ibid, 159). For the south universities, transforming education without contextualising the north education system to the south needs, may be difficult given the different learning context. For instance, the situation in Aalborg University in Denmark applying PBL may be different from Gulu University which follows a more traditional teacher-centred approach. This calls for contextualising or localising PBL to Gulu University context. Similarly, in Gulu University, the classes are large, ranging between 100 to 500 students for humanities and social science faculties. Yet, the departments are understaffed and teaching both weekday and weekend programmes; thereby having limited time to prepare lessons. The situation becomes complex with the limited and non-flexible classroom space and infrastructure.

4 Theorising Transforming Education

The concept *transforming education* which originates from the global north is contentious, having ideological, political, social and economic

perspectives and bearings. 'Global Perspectives on Education provides a distinctly northern hemispheric perspective' (Benade & Jackson, 2018, p. xiii). Drawing from the post-colonial theory, the spirit of colonialism can continue to haunt and thrive in independent states through the existence of colonial structures which sustain the colonial kind of mindset and ways of doing things. From the Danish experience, transforming education 'emphasised the political aspect of interdisciplinary nature of project work' (Krogh & Jensen, 2013), and 'the wish for relating professional activity to concrete societal conditions' being promoted through a problem-oriented management of the activity (Krogh & Jensen, 2013). Similarly, transforming education in the context of universities is linked to the 'right of the student to get access to a learning environment where skills to learn, to reflect on knowledge, and to produce knowledge are developed' (Wiberg, 2013). Benade and Jackson (2018, p. vii) note that,

> Transforming Education engages critically, conceptually, theoretically and empirically with the range of forces currently redefining curriculum agendas for education, ranging from primary (elementary)-level education to post-secondary education [and higher education]. The design of the place of learning is, in response to global imperatives, bringing about transformed understandings of curriculum, pedagogy and technology.

Benade and Jackson (2018, p. vii) further argue that,

> Education systems in the twenty-first century are encouraged to ensure that children, school-leavers and graduates acquire appropriate lifelong skills. Teachers, school leaders, teacher educators and lecturers are therefore required to approach their work in radically new ways, especially as flexible learning environments become the strategic option for the building of new schools and educational facilities, gradually replacing or supplementing older, sometimes industrialised, building types.

'Transformation', emphasises the notion of significant change and development (Benade & Jackson, 2018, p. ix).

4.1 *Are North-South Collaboration Acting as Drivers of Neo-Colonialism?*

The ongoing debates on north-south divide and decolonisation of education and knowledge cannot be concluded without tracing its root to production and circulation of knowledge. The central issue involving the matter of coloniality

and post-colonialism refers to the production and circulation of knowledge and to epistemology based on the south and north divide (Santos et al., 2016).

Education a tool of colonialism continues to be used as a neo-colonial tool to transform the African subject into a black white subject who reasoned, thought and behaved like the European master. The missionary education was a strategy to effect the transformation agenda. Borrowing from Ngũgĩ Wa Thiongo's (1986) notion 'Decolonising the Mind', for effective decolonisation to be attains it calls for 'localisation' and 'indigenisation' of learning. But the early postcolonial critics left open the issue of how to decolonize the university, a principal site at which successor generations learn about civilizational values.

4.2 *Decolonising Higher Education*

There is contention on how higher education should be decolonised. Calls for decolonising education first emerged on the African continent in the context of decolonising struggles against colonial rule during the 1950s and 1960s.

Shay (2016) identifies six features as strategies to decolonise higher education: (1) undergraduate curriculum, (2) real world relevance, (3) students' voices, (4) dominating worldviews, (5) power plays, and (6) reproducing inequalities (Shay, 2016). Shay notes that 'there has been a great deal of debate about 'decolonising the curriculum' but very little change' (Shay, 2016). One way to decolonise higher education is by decolonising the curriculum at universities 'by ending the domination of Western epistemological traditions, histories and figures' (Heleta, 2016; Molefe 2016). The call to decolonise higher education is also for knowledge pluralisation, the incorporation of the complex ways of knowing of subaltern and all previously excluded groups. It rejects the Western-centric knowledge orientation. Furthermore, decolonising education refers to the inclusion of all knowledge forms handed over to humanity including African, indigenous, Arab-Islamic, Chinese, Hindu, Indo-American, Asiatic, and Western knowledge forms. This all-inclusive approach to knowledge is based on an inter-cultural understanding of multiple and heterodox forms of being human (Fataar, 2018). Fataar argues that 'all knowledge forms ought to be brought into play in intercultural education that promotes epistemic openness to the knowledges of all humanity. Decolonisation seeks to mitigate knowledge parochialism, which is the idea that one's own knowledge system is superior and thus sufficient for complex living. The call is for schools, colleges, and universities to cultivate respect for people and their cultural and knowledge systems. These institutions should make available to their students' knowledges across the widest possible human spectrum. University curricula should work across the various knowledge and science systems to establish dialogical platforms about actual and potential futures' (Fataar, 2018, p. VII).

Therefore, 'decolonising higher education' may not be generalised, but rather contextualised as higher education institutions operate in different situations and conditions unique to their country and internal structures. In South Africa, the call is towards ending of domination by 'white, male, Western, capitalist, heterosexual, European world views in higher education and incorporation of other South African, African and global 'perspectives, experiences (and) epistemologies' as the central tenets of the curriculum, teaching, learning and research in the country' (Shay, 2016, p. 1). It is indeed important to clearly understand what or features we intend to decolonise.

Undergraduate curriculum is simply no longer fit for its purpose. Shay explains the fitness from two parameters: (1) the massive expansion of higher education, without the curriculum actually being 'relevant for these new students, many of whom don't fit the profile of the typical 'mainstream' middle class, white, 'university-ready' 18-year-old school leaver'. (2) 'fitness for the rapidly changing world into which graduates of these degrees move into' (Shay, 2016, p. 2). Uganda, following the Government White Paper 1992, adopted the policy of liberalisation and privatisation of education, leading to massive expansion of higher education without embracing and revamping curriculum review to address the demographic and future world workplace. The president attributed this decision to the success stories in European and Asian countries – like Germany and Japan have developed because of prioritising sciences over humanities. He argued that 'science teachers unlike their arts counterparts, are difficult to replace if they relocate to the neighbouring countries in search of better renumeration' (Daily Monitor, Thursday May 31, 2018). Such political decision reflects the effect of surviving structure of colonialism and the state as agent of neo-colonialism and neo-imperialism.

The question of real-world relevance of curriculum poses another area for decolonisation. The question is who determines, and to whom is the curriculum relevant. Uganda continued to use the colonial education system, curriculum, and Western knowledge system. This notion of 'relevance' is a challenge especially in the humanities and social sciences. There is a politically induced definition of 'relevance' of curriculum which gives preference for STEM in education (Science, Technology, Engineering and Mathematics). The aim is to prepare students to be competitive and ready to work according to their preferred fields by equipping them with the 21st century skills such as critical thinking, creativity, logical, innovative, productive and directly related to real conditions. This has led to the 'discriminatory' higher salary scale in favour of the science teachers effected in the Financial Year 2019/2020 (Daily Monitor, Thursday May 31, 2018). This has left humanities and social science disciplines to grapple with their relevance to the 'real world'.

It becomes evident that African universities' humanities and social science curriculum, are becoming more focussed to prepare their graduates for what Shay calls 'the problems of first world specialists' than for their own local context. However, Shay noted that this shift in focus 'on problems' raises other issues: the balance and sequence of theory and practice, and the plurality of theories and methods required to solve the problems. Very few of today's 'wicked' problems can be solved through one perspective or one method of investigation. These kinds of curriculum change are highly complex and contested but are being tackled in many disciplines' (Shay, 2016, p. 2).

Decolonising could take the form of student-centered approaches and curricula by empowering students in allowing their influence, decision, active involvement and input in planning their learning processes. 'Students' voices must be heard, and they need to have a voice or a say in curriculum matters that affect them' and their future. It points towards 'meaningful representation of students on departmental and programme governance structures' (Shay, 2016, p. 2). 'Students are not naive about their role in curriculum change. They know they are not the experts – they have come to university to be taught by the experts. But they do have a perspective that comes from their experiences both inside and outside the classroom. If students' input is valued, the overall quality of the curriculum will be strengthened' (Shay, 2016, p. 2).

Decolonising curriculum content to suit the local context is one strategy to decolonising higher education. 'Decolonising' is all about knowledge pluralism and co-existence. The content, theories and methodologies of learning and acquiring knowledge are dominated by Western forms. In the case of South Africa, decolonising movement is focused on removal of 'how curriculum content is dominated by – to name some – white, male, western, capitalist, heterosexual, European worldviews. This means the content under-represents and undervalues the perspectives, experiences, epistemologies of those who do not fit into these mainstream categories' (Shay, 2016, p. 2).

Uganda's colonial history of education clearly depicts the nature of missionary and colonial education which focused on character formation and building. Education was used as a tool for character building and to civilise the colonised people. Character education through teaching moral principles was implemented in face-to-face school teachings and meetings (Sakban & Sundawa, 2023). At independence in 1962, education was a tool for nation building. Education and English-speaking influences the public on determining takes up political offices. Individuals with speaking, reading and writing skills in English are thought to bear ability to contribute positively towards service delivery when given political offices as compared with those that lack the good command of English. Therefore, having good command of the English

language and required academic qualifications were synonymous to good leadership and better service delivery (Kisitu & Ssebunya, 2016).

From a power-relations perspective, transforming education reflects enormous power play. According to Ortmann (1997) many, if not most, institutions of higher education have fallen on fiscal hard times. Because revenue-enhancing strategies have for the most part been exhausted, administrators in such institutions increasingly 'restructure' or 'reengineer' their institutions to balance budgets. Unfortunately, reengineering and similar 'quality practices' have failed to deliver on their promises in one out of every two cases in manufacturing and other service industries. He attributes the high failure rate to a lack of theorising, and he proposes to 'rethink' organizational design while keeping in mind that organizational outcomes are a function of cognitive patterns of managers. With many colleges and universities embarking on 'restructuring' and 'reengineering' experiments (Ortmann, 1997); transforming education is full of 'restructuring' and 're-engineering' and experimenting transformation of education. Yet, Ortmann argues that 'there is scant evidence that colleges and universities address the problems in the same dramatic manner that has been forced on firms in manufacturing and other service industries' (Ortmann, 1997, p. 488). Shay notes that, power plays a challenge in that 'many curricula are taught in oppressive classrooms by academics who are demeaning, unprofessional and use their power in ways that discriminate unfairly against students' (Shay, 2016, p. 3). Misuse and abuse of power by academics on students or students on academics is simply wrong. The inadequacy of existing policies and procedures for exposing and addressing the abuse of power has been brought under a very harsh spotlight at South African universities. The extent to which academics are unaware of their 'rank' and its potential harmful consequences on students will nullify everything else that's done. Transforming education when not well conceptualised, may reproduce inequalities in curriculum and particularly its assessment systems which serve to reproduce society's broader inequalities (Shay, 2016). This challenge has received very little attention in the recent debates on 'decolonising'. It is the way in which the curriculum at every point – from who gets admitted, who thrives, who survives, who fails – mirrors back the historical and current unequal distribution of educational resources in the broader society.

A clear strategy is key as some of these challenges may fit more or less appropriately on the 'decolonising the curriculum' agenda. Perhaps it does not matter, they are all important. The point is that they will require different strategies, different kinds of resources and expertise, different lines of responsibility and accountability. The risk of not having a clear strategy is that the curriculum will look no different in 2020 than it does in 2016 (Shay, 2016, p. 3).

5 Continuity and Change Continuum

The structure of colonialism continues to thrive and present itself in various ways in African education and knowledge generation. The humanities and social science in African universities continue to thrive on colonial structures, raising concern of their relevance, and need for transforming education. Similarly, higher education institutions in Uganda are 'colonial' in nature, following a dominant British colonial academic model. This has resulted in the adoption of Eurocentric principles which attributes truth primarily to the Western ways of knowledge production (Mbembe, 2016).

5.1 *The Workshop Methodology as a Continuity and Change Continuum*

The workshop methodology used in transforming education can be seen as a paradox, perpetuating neo-colonialism as a continuity of colonialism, as well as initiating decolonisation and localisation as form of change. Whereas Ørngreen and Levinsen observe that workshops as a means are aimed at domain-specific issues and seen as a means to achieve a goal, they can perpetuate neo-colonization and dominance in the knowledge domain. Here workshops focus on the heuristics, frameworks, guidelines, and instructions for how to design, orchestrate, conduct, and facilitate workshops goals. On the other hand, workshop reports outcomes regarding participants' new competencies, practices, knowledge, or ideas as a result of participating in authentic workshops (Ørngreen & Levinsen, 2017). The study noted in the south-north partnership through co-designed workshops, elements of unequal power relations in knowledge, competencies and skills. This widens the north-south inequalities in knowledge generation, adoption and use. The use of future workshops and workshops as tool to create desirable futures for social invention especially for transforming education as advanced by Jungk and Müllert (1987), seems to create speculation on recolonising education and knowledge.

At the center of transforming education at Gulu University is ICT and digitalisation of knowledge, research, teaching and learning which often leads to the dominance and exclusion of developing countries from the global knowledge economy. Similarly, it affects the humanities in higher education. This is not to say that developing countries do not have a niche in the digital world. The widespread application and untapped potential of ICT, digitization and big data, Internet of Things (IoT), cloud computing, blockchain technology, new thinking paradigms, smart collaborations, optimization and personalization technologies, public-private partnership and open-innovation platforms are said to be among the building blocks of the next generations (Zackery et al., 2022) of knowledge and a transformed education. The term transforming

education from a post-colonial perspective, requires educationists and policy makers to reimagine and reshape knowledge generation and usage to its local context, bringing the interplay and shift from colonisation to decolonisation and contextualising/localising. To transform education, the north-south collaboration needs to encourage equal partnerships to provide inspirations rather than being duplicate north education. During the collaboration, the Aalborg University PBL model inspired the development of Gulu University PBL model with a strong component of action research and community engagement being the pillar of the institution.

5.2 *Localising Knowledge Generation and Adoption*

In the north-south collaboration, new ways of learning and knowledge generation were acquired and customised to the local needs. The introduction of PBL concept and way of learning was tailored to the local needs as graduate students were sent to the schools, institutions and enterprises in the communities. Whereas, the term PBL seemed new and Western in practice, the facilitators from the Faculty of Education and Humanities noted that it was not a new phenomenon in the African indigenous knowledge context. In the Faculty of Business and Development studies, and Department of Computer Science, the PBL model encompasses partnership with the private sector and business enterprises. This has led to the introduction of internship in the two faculties, exposing students to real life work experiences and challenges. This led to the adaption of the Aalborg University form of PBL to develop a 'Gulu University PBL Model' customised to the curriculum and training needs of faculties and institutes to promote graduate employability. The Gulu model uses the local environment and materials, knowledge, practices and values crafted and guided by the national education frameworks and policies. This presents a case of adapting the transformation of education to the local needs and aspirations. However, it is important to be cognisant of partnership which promotes equality and equity in generating, sharing and using knowledge and information for a common good. This will give meaning to equal partnership for transforming education in the north and south (see Chapters 12 and 15).

6 Conclusion

Whether foreign financing of higher education is a re-invention of colonialism (neo-colonialism/neo-imperialism) or, a transformation agenda to decolonise or localise knowledge generation to the global south remains a key area for research. In exploring the nexus between transforming education,

decolonising and localising education, new ideas, theories, practices and pedagogies are being incorporated into the existing largely unchanged curriculum alongside the radical rethinking of how to teach the disciplines to minimise dominating external influences. Therefore, developing nations and economies need to bear with the reality that they remain on the receiving side of the globe until the individual states adopt a deliberate effort to localise knowledge, its production and usage. Aware that we live in a shared world, the global north and south need to reconsider and rethink strategies to equitable knowledge generation and use. Instead of the global south advocating for decolonisation, they need to rethink their rhetoric towards blending their education and knowledge system to the needs and aspirations of the local community. Foreign financing of higher education should not mean a re-invention of colonialism or neo-colonialism. This calls for a shift in discourse from the concept *decolonising* to *localising*, *contextualising* and *blending* north and south modes of knowledge generation, a strategy to close the north-south knowledge divide.

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CHAPTER 3

Okot p'Bitek's Literary Inspirations for Decolonisation of Education

Charles Nelson Okumu

Abstract

Okot p'Bitek (1931–1982) is an internationally renowned poet, polemic writer and cultural activist. From an early age he imbibed Acoli culture through informal education from his parents who were practitioners of Acoli culture. His formal education began in Gulu Primary in 1938 and ended in Oxford in 1963. Okot's brilliant scholarship, a combination of literary and polemic writings, is a contribution to humanistic education and therefore a contribution to decolonization of education not only in Acoli but in Uganda's education system. In his poetry and polemic writings, he challenges the colonial centre which dominated the educational system which was inherited by Uganda at independence in 1962. In this chapter, post-colonial theory is used to show how Okot writes back from the periphery to the colonial centre. The chapter examines Okot's poetry, religious and political writings and how they contribute to decolonization of education. The study uses qualitative methodology, and the main method is document analysis. The main literary text is Song of Lawino (1966). The Chapter concludes that Okot's inspiration is supportive of humanistic education which contributes towards a balanced educational system in Uganda where the emphasis is shifting towards Science and Technological education.

Keywords

Acoli – inspiration – decolonisation – education

1 Introduction

1.1 *Okot p'Bitek: The Poetic and Polemic Writer*

Okot p'Bitek was born on 9th June 1931 to Jebedayo Opii and Cerena Lacwee in the house of Miss Cave Brown, a Church Missionary Society member in Gulu. He is an internationally renowned poet, polemic writer and cultural activist.

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He had both traditional (informal) education through his parents and colonial education (1938–1963) through the British colonial education system which was introduced in Uganda in 1877 and reached Acoliland in 1910. From his parents, he learnt Acoli oral literature which played an important role in his creative poetic writings as evidenced in his most famous poem written in the Acoli language: Wer pa Lawino (1969) rewritten in English as Song of Lawino (1966). (No confusion about the publication dates: the rewritten English version was published first followed three years later by the original Acoli text). Okot's other poems in English are: Song of Ocol (1970), Song of Malaya (1971) and Song of Prisoner (1971). He published collections of Acoli: (1) oral songs, including some from his mother: Horn of My Love (1974); (2) oral narratives, some of which he learnt from his father, Hare and the Hornbill (1978) and (3) proverbs: Mere Words (1978). His only prose fiction written in the Acoli language, Lak Tar Miyo Kinyero I Wi Lobo (1953), was written when he was a student. This was later translated and published as White Teeth (1989). His polemic writings include: Religion of the Central Luo (1971), African Religions in Western Scholarship (1970); two collections of critical and analytical essays: Africa's Cultural Revolution (1973) and Artist the Ruler: Essays on Art, Culture and Values (1986).

Okot's creative and polemic writings point to one fundamental issue: decolonising the minds of the educated Africans and not just the Acoli people as is the case in Wer pa Lawino/ Song of Lawino which are directed at the colonially educated Acoli who had become alienated from their Acoli culture represented by Lawino and symbolised as 'the pumpkin in the old homestead which must not be uprooted'. It is Okot's negation of colonial education and western culture in his writings that makes him an inspiration in decolonising and transforming education.

1.2 *Conceptual Background: Decolonising Education*

Decolonisation, in general terms, means changing our ways of thinking and behaviour from what we learnt from the colonialist through systematic education which was generally to the benefit of the colonisers. For example, the educational system introduced in Acoliland by the British through the Church Missionary Society in the 1910s was to train those who could read and write so that they either support the church teachings or work in the colonial administration as clerks and other low-level jobs under the supervision of the colonial officials. Colette (2017), in her recent study, examines the feminist side of the Missionary education in Acoliland where emphasis has been on male education to serve the colonial system. Many were also trained as teachers, especially those who went beyond the primary level and joined teacher training colleges.

Most were vernacular teachers and some few went to train as secondary school teachers when they gained either Grade Five certificates or Diploma in Education. Okot was trained as a Grade Five teacher and taught in the junior section of Sir Samuel Baker School in Gulu from 1954–1958. What the teachers taught was a colonially prepared curriculum devoid of African culture and history.

Decolonisation therefore demands a reform in the curriculum which will transform not only the pedagogy but also the content of what is being taught especially after political independence. Unfortunately, the very Ugandans who took over the administration of education at independence in 1962 were themselves products of colonial education. They could not therefore effect decolonisation of the educational system that nurtured them as Mutibwa (1992) argues in his book: Uganda since Independence: A Story of Unfulfilled Hopes. In transforming education, it is first important 'to recognise a historically specific set of colonial power relations, and how they continue to play out in structures, institutions, relations and processes today', Faul and Welply (2021, para. 2). For this to happen, Gulu University takes the view that transforming education includes not only the University academics but the communities within which the University is situated and hence its motto of *For Community Transformation*. For Gulu to transform its education meaningfully, I agree with three of the areas suggested by Faul and Welply (2021): (1) teaching by 'questioning what we currently leave out of students' education in terms of knowledge, changing pedagogies to be more inclusive … bringing the students' cultures, languages, gender perspectives into the classrooms … and decolonising assessment by allowing different forms of knowledge and expression beyond testing against so called ' standards'. (2) Research: we should conduct research with our northern partner on equal terms and not as in the colonial period where the data is collected from the South, analysed in the North and published in the North with South partners given the lowest placing in the order of authors and (3) 'The Northern institutions should be supported through institutional development and individual staff who do the teaching and research'. (Faul & Welply, 2021, para. 5, 6, 7). This is happening in Gulu University in the Building Stronger Universities Project. The Northern partners mentored the Gulu staff through short courses, seminars both in Gulu and Denmark and also supervision. Within the ten years (2011–2021), the capacity of Gulu staff members has been built with many PhD holders who now do joint supervision and research with partners from the North. This is part of the decolonisation which is leading to 'transforming education' with the community being involved through community engagement policy of the University. Gulu is also changing the pedagogies to include digital learning through the introduction of eLearning leading to hybrid teaching. In the Faculty of Education and Humanities,

Faculty staff members are now called facilitators where the focus has shifted to student-centred learning. This is the decolonisation Okot called for in 1970 in *Africa's Cultural Revolution* (1973, pp. 14–42, 94–102). It is important to end my discussion by agreeing with the Faul and Welply's conclusion in Global Challenges (2021):

> Decolonisation crucially addresses what we can do to allow education to live up to its potential as a transformative crucible for individuals and societies (communities). It is difficult to justify ignoring the perpetuation of inequalities forged in the colonial (and post-colonial/post-independence) era. On the contrary, it is time to collaborate to build and foster decolonised educational practices as advocated by Faul and Welply. (2021)

2 Contextual Background

2.1 *Missionary and Colonial Education in Uganda* (*1877–1962*)

The Missionaries of the Church Missionary Society (CMS, a part of the Church of England) arrived in Uganda in June 1877 under the leadership of Shergold Smith and C.T. Wilson. They were followed by a team led by Alexander MacKay. MacKay built his Mission house in Kampala with the help of the natives whom he had given rudimentary technical training in addition to teaching them basic concepts of Christianity. To aid the team of Missionaries in their conversion, MacKay introduced literacy and numeracy benefitting from a printer that he had brought along with him. This was the basic form of education that the British brought to Uganda from 1877 onwards. Mary Stuart, in her book, *Land of Promise* (1958), states that what prompted the CMS Missionaries to come was Speke's appeal in the London Daily Telegraph of 15th November 1875. Part of the dispatch reads: 'It is the practical Christian tutor who can teach people how to become Christians, cure their diseases, construct dwellings … turn his hand like a sailor- that is a man who is wanted' (p. 82). Alexander MacKay's team was the perfect team Speak called for. They involved themselves in conversion, teaching, and treating people.

The CMS, according to Scanlon (1964), began teaching literacy and numeracy using the translations from the Bible to Luganda. The need for educated manpower both for Mission and Government work led to the spread of basic education. To cut down on transport costs and better control of the learners, they were housed in boarding schools. One of the schools was King's College, Budo near Kampala which started in 1906 (p. 8) However, the Catholic Missionaries of the Mill Hill Fathers, were the first to start a boarding school

in Namilyango College for sons of Catholic royals in 1901. The curriculum was designed to train potential leaders and hence emphasis on English Grammar, Geography and Mathematics.

The CMS reached Acoli, after pacification of Acoliland in 1916. The Rev A.B. Lloyd started a Mission station in Keyo in 1906 which was later moved to Kobo and then finally to Gulu after the establishment of the Colonial District Headquarters in 1916. Llyod's CMS Mission station was built close to Gulu Town for security purposes. Since the Acoli had challenges in pronouncing CMS, the domination was known as *CEMEC* and MISSION was Acolinised *MICAN*. This is where Okot p'Bitek's father, Jebedayo Opii, was one of the first converts and because he was taught basic reading, became a Catechist teacher and hence Okot's birth in Mican, in 1931.

2.2 *Postcolonial Theory*

For a better understanding of post-colonialism, a brief definition of colonialism is important. Philip Mitchell (2001) in Key Terms in Post-Colonial Theory, defines colonialism as:

> The imperialist expansion of Europe into the rest of the world during the last four hundred years in which a dominant emporium or center carried on a relationship of control and influence over its margins or colonies. This relationship tended to extend to social, pedagogical, economic, political and broadly culturally exchanges often with a hierarchical European settler class and local, educated (compractor), elite class forming layers between the European 'mother' nation and the various indigenous peoples who were controlled (the Ocols in *Song of Lawino*). Such a system carried with it inherent notions of racial inferiority and exotic otherness. (p. 1)

In my study of colonialism in Acoli, I noted Postlethwaite's 'exotic otherness' of the Acoli men which made them targets for recruitment into King's African Rifles. In his book, he describes the notions of 'racial inferiority' of the Acoli as 'unsophisticated outlook' (1947, p. 2). In *Song of Lawino,* Okot mockingly plays on this racial inferiority notion by making Ocol refer to Lawino and all the uneducated Acoli as inferior and their culture is 'primitive and backward' (1989). Okot calls Ocol 'his master's dog .... A good dog pleases its master' (1989) and Franz Fanon in *The Wretched of the Earth* (1961) refers to the Ocols as caricatures, men of no substance who are neither rooted in their culture or the colonial culture. Okot's literary contribution to the growing list of African writers such as Fanon, Achebe, and Ngugi, made him one of the African writers

to challenge the colonial centre making him a post-colonial writer and an inspiration for decolonising education. However, the colonial structures have continued to persist in the educational systems in Uganda at all levels of education in spite of the many Government efforts. As discussed in the conceptual background, through following the Gulu model of transforming education under the Building Stronger Universities and borrowing from Okot's proposal to change our curriculum and pedagogies (Okot, 1973, pp. 14–42, 94–102), we can begin the process of decolonising education through localization.

2.3 *Historical Background*

The British colonial expansion to Acoliland was in 1910 when the British Colonial Government established its administrative headquarter in Gulu. This expansion was resisted by the Acoli people of Lamogi whom the British wanted to disarm since many of them had guns acquired from the Arab slave traders (Amone & Okullu-Mura, 2013). They fought a fierce battle but the colonial troops with superior fire power pushed them to take refuge in the Guruguru Hills. The fighting ended with the surrender of the Lamogi fighters. Though the Acoli were forced to accept colonial administration, they again resisted forced labour. This resistance is immortalised in two songs by the blind, Omal Lakana. He became an inspiration to Okot p'Bitek who included both songs in his collection of Acoli oral songs, *Horn of My Love* (1974, pp. 12–13). The Acoli resistance made the British to respect and fear Acoli men. Their bravery and 'superior physique, habits of discipline, and unsophisticated outlook combined with their height (5.8 feet)' gave them an edge when recruitment into the colonial army. King's African Rifles (KAR, Acolinised as KEYA) began in 1947. Postlethwaite, the District Commissioner, jokingly wrote, 'the Acholi took to soldiering like ducks in the water' (1947). Many of the illiterate foot soldiers were later recruited into the regular Ugandan Army at Independence in 1962, making the Acoli the majority in the army. However, during the Iddi Amin coup in 1971, many of them were killed and some fled to Sudan and Tanzania. The genesis of the Lord's Resistance Army (LRA) is traceable to this original British-trained but largely illiterate soldier whose main language was the military-Kiswahili. Okot captures the lives of this group in his Acoli novel, *Lak Tar Miyo Kinyero wi Lobo* (1953) translated as *White Teeth* (1988)

This brief history of pre- and post-colonial Acoliland situates Gulu University and Building Stronger Universities (BSU) within the context of this chapter. Gulu University was started in 2002 during the Lord's Resistance Army (LRA) insurgency (1998–2008) when northern Uganda was politically, socially, economically and educationally unstable thus making it a beneficiary of the BSU funding under: *Stability, Rights and Democracy* (SDR, 2011;

Okumu, 2018). Though Okot's literary works predate the 20-year insurgency in northern Uganda and BSU, it is a source of inspiration for decolonizing colonial, post-colonial and national political independence educational systems.

2.4 *Theoretical Framework*

Postcolonial literary criticism is a theoretical framework that emerged in the 1980s and gained prominence in the 1990s thereby displacing the controversial Commonwealth literature as a response to the legacy of colonialism and imperialism. It focuses on analysing literature produced in colonial and postcolonial contexts, examining how colonialism has influenced literary texts and how these texts reflect, resist, or negotiate colonial power dynamics. The roots of postcolonial literary criticism can be traced back to the mid-20th century, particularly with the works of intellectuals like Frantz Fanon, Aimé Césaire, and Edward Said. These thinkers critically examined the psychological, cultural, and political impacts of colonialism on both colonisers and colonised peoples. Postcolonial literary criticism gained prominence with the publication of influential texts such as: Bill Ashcroft et al. (1989). *The Empire Writes Back: Theory and Practice in Post-Colonial Literature*; Edward Said (1994). *Culture and Imperialism* and Homi Bhabha (1994). *The Location of Culture*. These scholars challenged traditional Western-centric literary canons and highlighted the importance of considering the perspectives of formerly colonised peoples who were writing their own narratives challenging the colonial centres. Postcolonial literary criticism provides a framework for understanding the complex legacies of colonialism and imperialism in literature and culture, emphasising the importance of perspective, power, and resistance in the analysis of literary texts. Post-colonial scholars present their analysis around the following arguments; the need to retell the narratives of Africa, the desire to bring to light the native languages and the resilience of indigenous cultures. Okot's *Song of Lawino* (1966) is a good example of a literary text that challenges the colonial centre in Uganda through decolonizing both the English Language and western culture which the educated Africans acquired through the colonial educational system. Lawino's main argument is that Ocol was a 'wholly Acoli man' but since his colonial education, especially the three years at Makerere University and abroad (she does not tell us where), he has become westernised in all aspects of the word. It is this blind acceptance of colonial values that Okot, through Lawino, negates and calls upon the colonised to return to their cultural values which includes cultural integration into the formal localised education bringing humanity back to mainstream education and not only science and technology education.

Okot further challenged the colonial centre in his polemic writings, especially in *African Religions in Western Scholarship* (1971) and *Religion of the Central Luo* (1971) which I analyse in detail under data analysis. Okot's criticism of the western and some African Christian scholars is that their writings supported colonialism in Africa. This is my justification for choosing post-colonial literary theory.

3 Methodology

The methodology I have used is qualitative research methodology and one of the tools is document analysis as a method. My main source is Glenn A. Bowen's *Document Analysis as a Qualitative Research Method* (2009, pp. 1–14). Here he defines document analysis as:

> systematic procedure for reviewing or evaluating documents-both printed and electronic (computer-based and Internet-transmitted) both material. Like other analytical methods in qualitative research, document analysis requires that the data be examined and interpreted in order to elicit meaning, gain understanding, and develop empirical knowledge (Corbin & Strauss, 2008; and Rapley, 2007). Atkinson and Coffey (1997, p. 42) refers to documents as 'social facts' which are produced, shared, and used in socially organised ways. (2009, p. 2)

Bowen further indicates that the rationale for document analysis is that it can be used as a means of triangulation, which Denzin (1970) as cited by Bowen, says is, 'the combination of methodologies in the study of the same phenomenon (for example, the Acoli social world). For the researcher to triangulate, he/she is, 'expected to draw upon multiple (at least two) sources of evidence; that is, to seek convergence and corroboration through the use of different data sources and methods' (p. 2).

One of the most useful roles of document analysis is that documents provide supplementary research data. Information and insights derived from documents can be valuable additions to a knowledge base. In my own case, reading through Uganda Argus of 1st November 1967, I was able to establish the date and reason(s) why Okot was dismissed from the National Theatre as its first African Director. The reason given by the Chairman of the Board of Directors was that Okot was not 'pulling his weight' in the administration of the Theatre. Okot himself thought it was because of his criticism of politicians in *Song of Lawino.* Document analysis also leads the researcher to content analysis of

the selected texts where the focus is on selected theme(s) from the text(s). I selected only one out of the four Songs published by p'Bitek: *Song of Lawino.* The key themes are: Okot's negation of the dominance of colonialism through the introduction of western education leading to a disconnect between the few colonially educated and the majority of the uneducated indigenous Acoli people. In the polemical writings: *African Religions in Western Scholarship* (1970) and *Artist the Ruler* (1986) Okot's focus is on rejecting the colonial criticism of African religions using colonial critical perception. In *Artist the Ruler*, Okot examines Acoli aesthetic values to justify humanistic values in both formal and informal education and thus advocating for a holistic educational system where both science and humanities are central in the life of the educated citizens. The current educational system in Uganda favours science and technical education at the expense of humanities. This is made plain by the Government which pays science teachers four times more than their arts teachers.

4 Data Analysis

4.1 *Poetic Writings*

Song of Lawino was published in 1966 but its composition started soon after the publication of *Lak Tar Miyo Kinyero iwi Lobo* (1953) when Okot joined Sir Samuel Baker School in Gulu in 1953. Okot confirms that his mother often challenged him with her songs, and he decided to compose his own which he would read to her whenever he visited her (interview with Lee Nichols (1981). Lawino, the singer of the poem, is the mouthpiece of the poet. Her criticism of the colonial educational system is generalised based on the colonial University education of her husband, Ocol. Ocol was in love with this beautiful but uneducated girl. The change in Ocol came after his colonial university education and the western cultural values he acquired during the three years in Makerere University College. He has become what Mitchell (2002) describes as, 'local, educated (compractor), elite class forming layers between the European 'mother' nation and the various indigenous peoples who were controlled' (para. 1). By choosing Lawino as his mouthpiece, Okot is fortifying his criticism of the colonial education and western culture making Ocol a master copy-cat in using the same abusive language that colonialist used in abusing Africans as reported by Lawino:

> My husband pours scorn
> On Black People,
> ...

He says Black people are Primitive
And their ways are utterly harmful,
Their dances are mortal sins
They are ignorant and diseased!

Ocol says he is a modern man,
A progressive and civilised man,
He says he has read extensively and widely
(Song of Lawino, 1989 ed., 38–39)

Ocol's abusive language was just a re-echo of what the colonial administrators and missionaries were saying about black people and their culture. Lawino reports Ocol's abusive language verbatim throughout the poem. In Chapter 12, 'My Husband's House is a Dark Forest of Books' Lawino confirms that Ocol's colonial education with focus on 'work without play' killed Ocol's Acoliness and manliness:

My husband has read much,
...
He has read among white men
And is clever like white men

And the reading
Has killed my man,
In the ways of his people
He has become
A stump.

He abuses all things Acoli
He says
The ways of black people
Are black
Because his eyeballs have exploded,
(SoL, 116)
...
.. you behave like
A dog of the white man!
...
The dogs of white men
Are well trained

And they understand English!
(SoL, 118)

Her conclusion is that Ocol's loss of his black identity is due to the colonial education that he went through symbolised in his house being 'a forest of books' were if you stay for long in it, 'the deadly vengeance ghosts of the writer/ Will capture your head,/And like my husband/You become a walking corpse' (SoL, 118). She finally laments:

For all our young men
Were finished in the forest
Their manhood was finished
In the classrooms,
Their testicles
Were smashed
With large books!
(SoL, 120)

On the contrary, Okot too was colonially educated and 'read extensively and widely' (1938–1963, in Uganda and United Kingdom with a six-month stint at the Hague) but remained committed to his culture. He continued to participate in Acoli cultural activities while in England and Wales and he organised cultural festivals in Uganda as well as Kenya. These festivals reveal the rich African cultures of the Ugandan and Kenyan peoples (Okumu, 2021). *In Song of Lawino,* Lawino displays her wealth of Acoli culture throughout her Song. For example, in Chapter 4, 'My Name Blew Like a Horn the Payira', she describes her beauty:

When Ocol was woo me
My breasts were erect.
And they shook
As I walked briskly
...
You trembled
When you saw the tattoos
On my breasts
And the tattoos below my belly button,
And you were very fond
Of the gap in my teeth!
...

I was the chief of the youths
Because of my good manners,
Because my waist was soft.
I sang sweetly
...
Nobody's voice was sweeter than mine!
(pp. 50–51)

In Chapter 5, 'The Graceful Giraffe Cannot Become a Monkey' she contrasts her Acoli beauty (the graceful giraffe – natural Acoli beauty) with Clementine (the monkey) Ocol's concubine) who 'wants to look like a white woman' by using western cosmetics. Ocol and Clementine are victims of blindly copying western culture ... Ocol in his 'blanket suit in the middle of the hot Acoli sun' and 'the anorexic Clementine who falsely believes that white men like slim women'. In Chapter 6, Lawino takes Ocol and the reader to show them Acoli architectural beauty:

Come brother
Come into my mother's house!
...
Look
Straight before you
Is the central pole.
That shiny stool
...
Is my father's revered stool.

Further on
The rows of pots
Are the stores
...
Look up the roof
You see the hanging?
The string nets
Are called cel.
...
Here on your left
Are the grinding stones
...
On your left

...
Stacked right to the roof
Is the firewood

The tour is accompanied by detailed explanation of each object and its function, a display of her depth of knowledge of Acoli material culture and the aesthetic beauty which Okot discusses in detail in *Artist the Ruler: Essays on Art, Culture and Values* (1986, 2011, pp. 5–37). In Chapter 7, she again displays her knowledge of Acoli division of labour according to the 12 hours of daylight unlike Ocol's 24-hours western clock according to which different activities are assigned. Lawino also knows the Acoli traditional medicines and which one to apply when someone is sick. Ocol in his *Song* laughs at her 'primitive' medicinal knowledge (Chapter 3, pp. 132). Chapters 8–12 are devoted to Okot's criticisms of Western religions and political systems of Democracy which were colonial tools for subjugating the colonised to subservience. Lawino ends her Song (Chapter 13) by appealing to Ocol to return to his traditional culture and his first wife. She identifies the cause of his 'illness' as the colonial education which, as Mitchell says, created an 'elite class forming layers between the European 'mother' and the indigenous people' for example the Acoli. Ocol should begin by asking forgiveness for all the insults he foolishly heaped on black people because of the colonial education and western culture he blindly adopted but which can neither change his race or colour. This would be followed by a cleansing ceremony at the traditional shrine conducted by the elders and asking his ancestors to restore his manhood:

Ask for a spear that you will trust
One that does not bend easily
Like the earthworm.
Ask them to restore your manhood!
For I am sick of sharing a bed with a woman!
(SoL, 122)

Okot ends the English poem by making Lawino perform what she knows best: dancing to show her love for Ocol but ending with the central proverb:

Let no one uproot the Pumpkin.

The proverb calls upon Ocol and his cohorts to be 'real Acoli/black men' and not colonised intellectual slaves of colonial education and western culture. In identifying colonial education and blind following of western culture, Ngugi

describes Okot as one of 'East Africa's foremost surgeons who is concerned with the 'psychological wound inflicted on a whole generation of us through colonialism and Christianity' (Kahyana, 2017).

4.2 *Criticism of Colonial Education in Okot's Polemic Writing*

Okot's polemic writings include: *African Religions in Western Scholarship* (1970) and *Religion of the Central Luo* (1971). In *African Religions in Western Scholarship*, Okot rebuts Western scholars who have made pronouncements on African religions without empirical evidence through research. In the introductory chapter, Okot points out that the African scholars should correct the misconceptions of western scholars about Africa, including 'the myth of the primitive Africans' which was to justify colonialism. He also cautions African religious scholars who 'now claim that African deities have all the attributes of the Christian God' His advice is that 'The African scholar is called upon to participate fully in nation building, and he can best do this by presenting the Truth about Africa' (p. 7). The focus of the book is on the three categories of scholars: (a) The Christian apologists mounting a counter attack on the 18th and 20th century non-believers including his Oxford professors: E. Evans-Pritchard, Godfrey Lienhardt; (b) African nationalists fighting a defensive battle against the vicious onslaught on African cultures by western scholarship and these included: Jomo Kenyatta (Facing Mount Kenya (1938), Leopold Sedar Senghor … and John Mbiti and (c) The missionaries scheming what they call, 'a dialogue with animism'. The first group, Okot argues, 'addressed their works mainly to Western scholars and church men. They use African deities to prove that the Christian God does exist and is known among African people'. The second group, he argues, rejects any western scholars who claim that African cultures and religions are primitive. The protests are addressed to the unbelieving Europeans and 'they dress up African deities with Hellenistic robes and parade them before the western world'. The third group, the missionaries include: Edwin Smith, John Taylor and Placide Temples whose book, *Bantu Philosophy* (1959) Okot directs his criticism at since he regards it as a misrepresentation of the Banyoro religion. Okot's disagreement with Western scholars on African religions is partially supported by Ali Mazuri who wrote the epilogue to Okot's book. Although he does not totally agree with the author's criticisms but admits that:

> reading this book has been an educational experience for me. I have learnt certain things I did not know about. … Above all, I have been fascinated by the great interaction between personal anger and patriotic anguish in the whole temper of the author's style. There are moments

> … when I stopped and reflected: 'Here surely is Africa's indignation at its most eloquent. Here also is African scholarship in a mood of unabashed commitment'. (p. 134)

This was Okot the auto-ethnographer of African culture at his best. He challenges the colonial centre and in so doing he calls for decolonization of education. His rejection of African religious scholars Hellenizing African gods is a call to nationalism and localization of education. Okot's critical appraisal of Western scholarship on African religions comes to fruition again in *Religion of the Central Luo* (1971) where he presents his own empirical study of the Luo religion, a subject he poetically presented in Song of Lawino (Chapters 8 and 9). Lawino's questions about the origin of the Christian God are discussed by Okot in detail in Chapter 3 of *Religion of the Central Luo.* Okot's criticism of Baker and other Western religious leaders (Catholics and Anglicans) on their methods of studying or forceful extraction of information from the central Luo chiefs, traditional, and religious leaders led him to conclude that the western scholars' ontology:

> It is not a useful approach, in that the ontology does not represent a conclusion reached after the facts have been studied; but a framework into which the facts must be fitted. (p. 56)

Having rejected the western ontology of Jok equated with the Christian God, Okot focuses on the Chiefdom *Jok*, which Lawino refers to in her Song (Chapter 9, pp. 103–104). The Acoli clans worship clan *Jogi* at particular places and times in the year. The annual ceremonies are elaborately described in *Religion of the Central Luo.* Okot's conclusion is that 'There was no ultimate power (like the Christian God), one responsible for the sum total of man's suffering and life' (p. 85). Below the chiefdom is the ancestral shrine (*abila/kac*) which is dedicated to one of the great clan heads. Okot describes in detail the ancestral worship of his own clan: the Pacua and the shrine is in the homestead of a man named Lakwor. The parent shrine is located in Ajulu and headed by Olango, the son of Apille. This shrine was where Okot's father, Opii came from to Gulu where he became a convert in the newly established Anglican church. The ancestral shrine is very important to the family and located in the centre of the home. Ancestral prayers and ceremonies are held here. It is here that Lawino in *Song of Lawino* advices Ocol to go and beg the elders for two things: forgiveness and also give him a new spear for procreation. This advice is derived from a prayer chanted at the shrine (pp. 98–100).

The book ends with Okot discussing how evil spirits of different types are handled among the Acoli (Chapter 6) and how the different types of witchcraft and sorcery are also handled (Chapter 7). The evil spirits, witchcraft and sorcery are treated by the Acoli in particular as antisocial and those who practise them are regarded as potential killers who must be driven out of the society. These are different from those who diagnose sickness and provide medicines which they have learnt from their ancestors or grandparents (medicine people). They play the role of modern health service providers. Okot concludes that when even these health care providers fail and all the sacrifices at the Chiefdom or clan shrines fail, the Central Luo accept this as fate against which no one can act to avert. This is summed up in the cry of hopelessness against the unknown, 'Wi-lobo This is the way of the world' (p. 169). The conclusion is similar to that in *African Religions in Western Scholarship* (1970) and in *Song of Lawino* (1966)*:* 'The Last Safari to Pagak' Chapter 10:

> But when the day has dawned
> For the journey to Pagak
> No one can stop you,
> White man's medicines
> Acoli medicines,
> ...
> None of them can block the path
> That goes to Pagak (place of no return)
> *Song of Lawino*, (1989, p. 105)

Okot's last work that I want to briefly refer to here is directly related to decolonizing education: *Africa's Cultural Revolution* (1973) which is a collection of essays, speeches, and two interviews covering the period 1964–1971. The central theme of this collection is the same as in the poems: decolonizing the mind of the colonially educated Africans so that they stop aping Western culture. Instead, they should take what is good in African culture and Western and create a hybrid that will be helpful in creating a new breed of Africans, neither the Ocol type nor totally the Lawino type. In an interview from which the title of the collection is taken: *Africa's Cultural Revolution'* (pp. 94–102) he ends with a call to 'Africanise our curriculum in a meaningful manner. Let African culture form the core of our curriculum and foreign culture be at the periphery' (p. 102). This was indeed a call for decolonization of the educational system. Whether reacting to comments from other African scholars in the University of Nairobi or not, Okot clarified his position by writing three essays on Literature:

What is Literature?; The Future of Vernacular Literature and Literature and Man (pp. 14–42). Okot's definition of literature is that it should be 'inclusive of all creative works of man expressed in words' (p. 20). Okot's literary colleagues in the three East African Universities which had just been decolonized from University Colleges of London University in 1970, responded to Okot's call and changed the name from Department of English to Department of Literature with African Literature as the core of the literature taught (same here in the Department of Languages and Literature, Gulu University).

In concluding my data analysis, I must emphasise that Okot's poetic and polemical writings all contribute to the decolonization of education in post independent Uganda. However, the decolonization is not yet complete as there are many visages of colonial education from the primary to university education. In line with my chapter, we need to move the decolonization further as we advocate for the nationalisation of the educational system in Uganda with a balance between the humanities and the sciences. Currently, the Government of Uganda is putting a lot of emphasis on science and technology without looking at the future negative human beings the country will produce. This change will support Okot's call for a hybrid between the two stems of education: humanities and science with technology embedded in both stems. Okot's writings are indeed literary inspiration for decolonising education. Okot's literary inspiration is supported by other East African writers who share his views on decolonisation of the mind leading to decolonisation of education making it possible for the African nations to transform their educational systems.

Ngugi (1986) shares with Okot the importance of decolonisation of the colonised through education and especially humanistic education. He propagates decolonising the language of education since prioritising Western knowledge through the use of European languages, especially English and French, perpetuates colonialism whereas a decolonized education requires centring indigenous knowledge through indigenous languages. He put his declaration into practice by shifting his creative writing from English to Kikuyu and Kiswahili. For him, this shifting is a form of resistance which challenges the dominant narratives imposed by colonialism. The shifting thus empowers the marginalised. In Kenya and Tanzania, Kiswahili is the language of Government and education whereas in Uganda we still use English as the language of education although the Ministry of Education's new lower primary curriculum makes teaching in the indigenous (mother-tongue) language compulsory from Primary One to Three in Government schools. Private schools continue to use English which is the language of examinations (Primary Leaving Examinations, PLE) at the end of the seven-year cycle of primary school.

Ngugi's emphasis on decolonising education through decolonising the English language was also emphasised by Austin Bukenya in Makerere when the Department of Literature celebrated his 80th birthday. He made three key statements: *Humanities are under-funded and yet writers write to convey what is in the society*. His conviction is the same as that of Ngugi who says literature mirrors what is happening in any society and hence its importance. Secondly *Literature connects people through the emotions of members of the society* and thirdly, *Literature teaches you to feel, i.e. brings out the humanities in human beings and connects them.* A report can give statistics of so many people dead, but a novel set in a war situation is emotionally touching. He concluded by stating that the Performing Arts is an industry that brings out the humanity in people in total contrast to a scientific invention that may improve the quality of lives but without bringing out the emotional experience by someone watching a dramatic play in the theatre or a film on the silver screen. In Charles Dickens' Hard Times (1854), Mr. Sleary, the proprietor of the Circus Company says to Mr. Gradgrind, 'People must be amused, they must have an escape from work and study' and not just fed on facts, a key utilitarian principle during the industrial revolution and the centre of education in Mr. Gradgrind's school.

5 Conclusion

My conclusion is that Okot, Ngugi and Bukenya as writers, are key inspirations for decolonization of education and proponents of an educational system which proposes equity between science, technology and humanities. The current Ugandan Government policy which favours Science, Technology, Engineering and Mathematics (STEM), is intended to produce students with key skills including: problem solving, creativity in an interdisciplinary and applied approach for the 21st Century world. However, without the Humanistic skills, the government will produce near robotic graduates lacking emotional skills to cope with 21st Century stress.

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CHAPTER 4

Curricula Transformation in Gulu University

A Response towards Community Needs and Challenges

Denis Thaddeus Ofoyuru and Collins Okello

Abstract

Despite the fact that Gulu University stands for community transformation, a number of socio-economic challenges abide in its locale—the Acoli subregion. There is also an assumption that the University has transformed itself in response to these challenges. However, the nature and extent of this transformation is scarcely explored. The purpose of this study is to investigate the nature and extent of institutional transformation in response to community challenges. The specific objectives are to assess the curricula and pedagogical changes in response to community challenges and needs. The study is informed by the neo-institutional theory by DiMaggio & Powel, which focuses on institutional changes in light of dynamics in its organisational fields. The exploratory qualitative case study design was employed. Documents review was used with strategic plans and academic programmes from 2014 to 2023 as data sources. A qualitative thematic analysis was employed. The study reveals that the curricula expanded catering for diverse societal needs, while institutional pedagogy is changing from teacher-centred to learner-centred and problem-based approaches. Thus, Gulu University is responsive to community needs and challenges and has transformed its curricula and pedagogy profoundly in response to the same.

Keywords

Gulu University – transformation – community – higher education – isomorphism

1 Introduction and Background

Globally, scholars such as Boyer (2016); Maassen (2019); Chatterton and Goddard (2000) advocate for scholarships that respond to societal challenges/needs. Chatterton and Goddard (2000) speak to curricula and pedagogy that should meet societal challenges. Doberneck et al. (2010) reveal that curriculum

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can be responsive to community needs. This is in congruence to Glass et al. (2011) that universities address societal challenges through curricula. Similar findings are implied in Doberneck and Schweitzer (2017). Andersen (1987) points to inclusion of gender issues in curricula in response to the gender movement triggering development of new academic programmes and revision of old ones. In China, studies by Xu and Fan (2017), Huang (2017), and Cai (2013) demonstrate that curriculum changes respond to lingua franca issues, demand for higher education (HE) involving economic as well as science and technology needs respectively. In the United Kingdom, Munk (2010) and Williams and Cochrane (2010) indicate that community challenges can be addressed through curricula. These literature reveal that universities tend to tailor curricula and teaching to societal challenges, but they do not address the concern in respect to Gulu University.

In Africa, similar changes in curricula in response to societal challenges are evident. Higgs (2016) calls for curricula review to respond more to African needs. Ramrathan (2016) uses one academic programme to demonstrate how curricula can align to socio-political dictates. Blignaut (2021) augments the trending debate in the case of post-colonial South Africa. Whereas these were country studies, continental studies such as Bekele et al. (2021), Bekele and Ofoyuru (2021) and Bekele et al. (2024) give a good analysis of the continental perspective. For instance, Bekele et al. (2021) reveal that African universities embrace the concept of contributing directly to society. This is manifested in many ways including teaching and curricula. Bekele and Ofoyuru (2021) relying on analysis of strategic plans, point out that different societal needs inform higher education. Bekele et al. (2024) using modified Delphi technique confirmed that university curricula and teaching are informed by societal needs, although they do not explicate how these are being done. According to Maghanga & Tabo (2023) universities also transformed their pedagogy in response to the novel Corona Virus disease of 2019 (COVID-19) and embraced online teaching.

In Uganda, there is burgeoning literature that university curricula are transforming in response to societal changes. Kalule et al. (2016) document the student-centred outreach (S-C-O) model in the Faculty of Agriculture and Environment, which achieves societal challenges while meeting curricula requirements. This is supported by Ofoyuru (2018), who expanded the debate to address the situation in Gulu University as a whole with four Faculties represented: Agriculture and Environment; Education and Humanities; Business and Development Studies; and Medicine. Maghanga and Tabo (2023) highlight the changes in pedagogy with more blended learning being adopted as a result of the COVID-19 standard operating procedures. Tagulwa et al. (2023) studied

the relationship between curriculum review and graduate employability, they found that curricula review targeted inclusion of skills required in the marketplace. Tuyizere (2021) and Kalanda et al. (2021) in separate studies carried out in Uganda indicate that some specific workplace skills were targeted in academic programme reviews. Adebua et al. (2024) argue that universities follow the National Council for Higher Education (NCHE) guidelines to ensure that curricula are responsive to societal needs. However, none of the studies analysed curricula documents which are considered in academic circles as the most relevant documents on curricula and pedagogy. Thus, the study based on analysis of curricula in Gulu University is clearly warranted.

Gulu University is located in northern Uganda in Gulu City (Gulu University, 2016, 2020), Acoli sub-region. The Acoli sub-region comprises Gulu, Amuru, Lamwo, Pader, Nwoya, Agago, and Kitgum districts (Muyinda & Whyte, 2011). The region suffers many socio-economic challenges (Blattman et al., 2012; Hickey, 2009), with per household expenditure lower than the national average; illiteracy, and disease prevalence leading other regions in household poverty (Uganda Bureau of Statistics (UBOS), 2021). There is also under-achievement in both numeracy and literacy (Uganda National Examinations Board (UNEB), 2012). These are all undesirable indicators of human development that negate a number of national aspirations.

The region has continually received fewer public investments relative to its southern counterparts (Nannyonjo, 2005). Muyinda and Whyte (2011) observe that the northern region languished in poverty and lagged behind economically despite the fact that the first Prime Minister Dr. Apollo Milton Obote 'was himself a northerner' (p. 122). Idi Amin's regime when it expelled Asians partly exacerbated the socio-economic situation in Uganda including that of northern Uganda (Muyinda & Whyte, 2011). Destructive cattle rustling by the Karimojong with evils such as rape, killing, terror, and theft of cattle also in part account for the lagging socio-economic realities in northern Uganda (Nannyonjo, 2005). However, this state is further made worse by the protracted 20-year civil war which ended around 2006 (Blattman et al., 2012).

The atrocious civil war was sparked off by the 1986 military takeover (Nannyonjo, 2005). It transformed into the Lord's Resistance/Movement (LRA/M) war posing serious socio-economic consequences such as looting of homes for supplies, forced conscription of youth and children, killing and maiming, and conscription into sexual slavery (Annan et al., 2011; Blattman et al., 2012; Nannyonjo, 2005; Muyinda & Whyte, 2011). The war disrupted all aspects of socio-economic life, particularly, it destabilised peace and tranquillity; agriculture, education, livelihoods, and health (McCormac & Benjamin, 2008). It is claimed that 'conflict and insecurity in northern Uganda has resulted

in chronic and intergenerational poverty' (Bird et al., 2010, p. 1194). No wonder, underachievement in education, low levels of literacy, high poverty levels and high attrition are reported (UBOS, 2021). The post war population is also fragile and volatile (Komakech, 2021). Whereas different agencies have made interventions to these societal challenges (Bird et al., 2010), more still needs to be done. It is against this backdrop that Gulu University positions itself to contribute to transforming its curricula and pedagogy in its strategic plan for 2020/2021–2024/2025 (Gulu University, 2020). Building stronger Universities Project (BSU), a collaboration between Danish Universities and Gulu University has been at the forefront of promoting curricula and pedagogical changes with novel methods such as problem-based learning (PBL) (Alidri, 2019; see also Chapters 1, 2 12, 13, this volume). However, as Jensen and Lassen (2020) reveal this curriculum and pedagogical transition has not been as smooth as expected.

Thus, the nature and extent of curricula and pedagogical transformation is scarcely explored. Burgeoning literature related to this (Adebua et al., 2024; Ofoyuru, 2018; Ofoyuru et al., 2019; Kalule et al., 2016), do not explore the nature and extent of institutional transformation as a response to societal challenges. Thus at least it is known by stakeholders that the university stands for community transformation and could be undertaking deliberate measures to do so, however, our understanding as scholars of institutional transformation/responses by Gulu University to societal needs through curricula and pedagogical changes remain limited. The specific objectives for this chapter are to: (1) assess the nature and extent of curricula changes and, (2) to assess the pedagogical changes that address community challenges and needs. Therefore, the chapter answers the research question: How and to what extent is Gulu University undergoing curricula and pedagogical changes to address societal needs/challenges? To provide a better understanding, a theoretical basis for the study is explicated hereunder.

The social constructionist neo-institutional theory by DiMaggio and Powell (1983) is used. In this theory, institutional isomorphism is explicated in three mechanisms: coercive, mimetic and normative processes (DiMaggio & Powell, 1983; Meyer, 2008). Coercive isomorphism results from both formal and informal pressures brought to bear on organisations by other organisations upon which they depend and by cultural/societal expectations (DiMaggio & Powell, 1983; Scott, 1987). These, 'other organisations' constitute the organisational field (DiMaggio & Powell, 1983). Such pressures may be put in terms of force, persuasion or invitation (DiMaggio & Powell, 1983; Caravella, 2011). Mimetic isomorphism occurs as a response to uncertainty. When organisational technologies are poorly understood, when goals are ambiguous or when the environment creates symbolic uncertainties, organisations may model themselves on other organisations which they deem to be more successful (DiMaggio &

Powell, 1983; Caravella, 2011). Normative isomorphism occurs as a result of professionalisation, a collective effort of members of an occupation to define the conditions and methods of their work (DiMaggio & Powell, 1983; Caravella, 2011). As Maassen and Potman (1990, p. 406) notes 'various kinds of professionals within an organisation may differ from one another, they may exhibit however much similarity to their professional counterparts in other parts in other organisations'.

Meyer and Rowan's (1977) paper indeed portend the notion of isomorphism, they argue that:

> Many of the positions, policies, programs, and procedures of modern organisations are enforced by public opinion, by the views of important constituents, by knowledge legitimated through the educational system, by social prestige, by the laws, and by the definitions of negligence and prudence used by the courts. (p. 343)

Institutional isomorphism occurs within the realm of an organisational field (DiMaggio & Powell, 1983; Scott, 1987). Organisational field includes organisations whose aggregation are recognised as the area of institutional life: key suppliers, resource and product consumers, regulatory agencies and other organisations that produce similar services or products constitute an organisational field (DiMaggio & Powell, 1983). In respect to this study, the coercive anchor of neo-institutional isomorphism and the notion of the organisational field resonate well with the findings as is seen in the results section.

This chapter provides scholarly proof that Gulu University draws its curricula from and tailors its pedagogy to respond to societal challenges at global, national and local levels. The study also adds to the emerging literature on university-community engagement in Gulu University in particular, and in Africa in general. Other public higher education institutions (HEIs) especially in similar socio-economic contexts could model themselves after Gulu University.

2 Methods

This is an exploratory qualitative case study. The ontological disposition is that reality is subjective and multiple realities exist. The interpretivist worldview was found useful with its tenet that reality is subjective, and multiple but also constructed. The documents studied contained curriculum or curriculum related matters. The curriculum and the meaning the curriculum developers

made out of them were understood not with intention to quantify, make predictions, or generalisation to other universities.

Documents were identified purposively based on the knowledge that they have content germane to the research questions. Programme documents for the Higher Education Access Certificates (Gulu University, 2019a, 2019b, 2019c, 2019d, 2019e); Bachelor Degrees Programmes (Gulu University, 2022a, 2022b, 2022c, 2022d, 2022e); Master Degrees Programmes, and the University Strategic Plan (Gulu University, 2020) were the main documents used. From the academic programme documents, all the preliminaries were skimmed and excerpts made that speak to the research objectives. Indicative academic programmes were chosen from the Faculty of Education and Humanities and Faculty of Agriculture and Environment.

For practical reasons two faculties were chosen, Faculty of Education and Humanities, and Faculty of Agriculture and Environment. The Faculty of Education and Humanities is considered to be a flagship faculty in teaching and learning and therefore could give a better representation of what goes on in Gulu University in terms of curricula and pedagogical changes. The Faculty of Agriculture and Environment is also included as it was meant to be the original faculty when the university was established. Indeed, the University was meant to be a university of Agriculture and Environment but modifications in the purpose and name occurred along the way. Also, agriculture is considered to be the backbone of the country's economy. For theoretical reasons, the two disciplines are also representative of the soft applied and hard applied disciplines respectively. These are generally more amenable to application and responsive to societal challenges compared to the soft pure and hard pure disciplines (Biglan, 1973a, 1973b).

Qualitative text-based data were generated. Transcripts were made from sections relevant to the research objective to allow for a better navigation of the data and identification of codes which are basic units of meanings (Saldana, 2009). In some instances, codes were single words, in other cases a few words, sentences or whole paragraphs. Meanings were drawn in context. For practical reasons documents could not be transcribed in totality as they were bulky and many.

Initial skimming was done. Sections relevant to the research questions were initially selected and highlighted as bigger data chunks. Basic meaning units, that is, codes were labelled. Codes having similar meanings were grouped. The line-by-line coding culminating into themes, and pseudo statistics culminating into percentages were used. In effect, thematic analysis was blended with modified content analysis.

3 Results

The study reveals that the curricula expanded catering for diverse societal needs, while institutional pedagogy also transmuted. Expansion of the curricula has manifested in new bridging academic programmes, bachelors and graduate programmes; and revision of existing academic programmes. These changes/transformations are deliberate, planned, and proactive as per Gulu University Strategic Plan (2019/2020–2024/2025). The strategic plan also identifies the specific societal needs/challenges clearly and proposes interventions required to surmount them. The sub-sections that follow provide the details of these institutional transformation in terms of curricula and pedagogical changes as well specific societal needs/challenges targeted.

3.1 *Development of New Curricula and Revising Old Ones*

Development and introduction of new curricula in terms of academic programmes manifested at the certificates, bachelors and graduate levels. This finding has been authenticated based on the data from both the strategic plan and the curricula documents for those academic programmes that were either developed or revised.

3.2 *The Higher Education Access Certificates*

In the planning phase, the University identified low and inequitable access to higher education as a challenge in the region. Thus, to address the issue of 'low and inequitable access to higher education' (Gulu University, 2020, p. 28) the university was poised to undertake a number of interventions including 'introduction of bridging courses' (p. 28) to promote the transition from secondary education to university for students that may not possess the required grades for automatic admission. This particular intervention involved five accredited programmes. The bridging courses with the generic name 'Higher Education Access Certificate (HEAC)' are in five important combinations, Biology/Chemistry; Biology/Agriculture; Physics/Mathematics; Chemistry/Mathematics; Language/Literature combinations. The programmes are implemented in the Faculty of Education and Humanities.

> HEAC Programmes target students from disadvantaged backgrounds and poor communities such as those affected by socio-economic barriers to successfully complete higher education. Targeting the disadvantaged communities in Uganda will address the challenges of inequality, and promote such communities to "catch up" in economic competitiveness, social inclusion and eventually civic engagement. … Therefore, the

> proposed Higher Education Access Certificate (HEAC) programme targets Ugandan citizens who have been left out due to dismal performance in UACE to merit admission to programmes in higher institutions of learning due to the environmental challenges which were beyond their intellectual ability... An access programme is developed to offer opportunity for such disadvantaged students to enable them progress successfully to appropriate courses that match their educational career path and their aspirations for their future career. (Gulu University, 2019a, 2019b, 2019c, 2019d, 2019e)

This excerpt emphasises access to higher education by the *disadvantaged*; formerly *left out* (in society); and the final part of this passage is very spot on underlining preparation not only to access but also to 'successfully complete university or tertiary institution programmes'. This response certainly qualifies as institutional as it is embedded in the institutional fabric such as strategic planning, decisions, as well as structures and is targeted to a defined societal challenge.

3.3 *Bachelor and Graduate Degrees*

The majority of the academic programmes developed and mounted in Gulu University were a response/change triggered by the needs of the community. Societal need has been cited in every curriculum developed and mounted in the period. For instance, most of the programmes in the Faculty of Education and Humanities claim to respond to the sustainable development goal 4, which avers quality education for all; address the need of teachers created by the universal primary education (UPE) and universal secondary education (USE) in Uganda. The latest revisions of 2024 indicate that some of the programmes are poised to address the demand created by the teacher policy to ensure that teachers attain the minimum qualification of a bachelor degree by a certain date (Gulu University 2024a, 2024b, 2024c). Most programmes in the Faculty of Agriculture and Environment are responding to Sector Strategic plans (SSPs), SDGs and National Development Plans (NDPs). Indicative meaning units such as value addition; improvement of household income; agriculture value chain; climate change; sustainability; and promotion of Agri-entrepreneurship typify the justification sections as well as programme objectives for the academic programmes in the Faculty of Agriculture and Environment. These attest to the reality that Gulu University's emerging curriculum changes are a transformative move to meet societal needs and challenges. Admittedly, these buzzwords mirrored in the academic programmes are nested in the University's strategic plan and the NDP III.

The increase in the number of academic programmes generally constitutes a change that is societal oriented. A university that initially started as a university of Science and Agriculture quickly expanded to proliferate academic programmes in fields of science, business, development studies, education, humanities, and agriculture among others. In general, the number of academic programmes in different fields of study increased almost dramatically. For instance, there was growth in the number of academic programmes from two undergraduate in 2014 to five in 2024 in the Faculty of Agriculture. During the same period, the faculty launched seven new master's programmes and one PhD programme. The curriculum development and review process were found to integrate a series of consultations, including benchmarking with other universities offering similar programmes. A number of these workshops were supported by BSU in terms of stakeholders' facilitation, meals, time compensation and transport refunds to participants.

3.4 *Review of Existing Curricula*

Aside from introducing new ones, the University has revised existing academic programmes to respond to societal needs/challenges. In the Faculty of Agriculture and Environment there are in total 13 accredited academic programmes, and reviews were done after every five years, as required by the NCHE, the regulator of higher education in Uganda. Stakeholder workshops are organised involving experts, key community persons and alumni of the programmes, who together give feedback on areas that need improvement for a curriculum under review, and suggestions for curriculum design for new programmes. These are aimed at ensuring that curriculum responds to societal needs.

Information from the Bachelor of Science Agriculture programme, which was first mounted in Gulu University in 2005, and had undergone three cycles of reviews, reveal some of the targeted skills/needs. Specifically: (1) Technical competence with hands-on skills and ability to practically perform common agricultural operations along the entire value chain, (2) Entrepreneurial orientation with ability to become job creators rather than job seekers, (3) Socially conscious of the environment in which smallholder farmers operate, and (4) Environmentally conscious with ability to develop agricultural production systems that minimise wastage and zero tolerance to environmental pollution. The revision has also underscored the importance of the 21st Century skills which include critical thinking, problem solving, communication, and teamwork (Gulu University, 2023).

A scrutiny of the course content of the curriculum indicates that all the core graduate attributes articulated above were integrated in the programme. Agronomy courses that aim at addressing societal needs related to crop production constituted 31% of the minimum graduation load, while those responding to animal production constraints constituted 13% of the graduation load. Economics, Extension and Entrepreneurship related courses that contribute to the core graduate attributes on social consciousness and entrepreneurial orientation constituted 24% of the graduation load. Courses that respond to societal needs on engineering/labour savings technologies; postharvest management and value addition; and environmental conservation constituted 10%, 7% and 5% of the graduation load, respectively.

Integration of vocational skills training during recess terms of Year I & II under the Uganda Vocational Qualification Framework, assessed by the Directorate of Industrial Training (DIT), was highlighted. This competence-based training and assessment constitutes 6% of the graduation load, leading to the award of additional certificates at DIT Level II and Level III. This innovation was specifically to respond to the Skilling Uganda Strategy and will go a long way in making the graduates more job ready as advocated for by employers during the stakeholder consultation process. The community attachment in the recess term of Year III of the programme, constitutes 3% of the programme load, and is designed to support technology and skills transfer between the university and the community using the S-C-O model. Therefore, the changes made in curricula content to meet societal needs are apparent.

The BSc in Agriculture example above illustrates a typical example of integration of the societal needs in the curriculum design process in the Faculty of Agriculture and Environment. Similar findings were seen in other undergraduate curricula in the faculty, with the core graduate attributes appearing to be cross-cutting to all the programmes. However, it can be argued that the course load for the BSc Agriculture programme presented earlier does not provide a balanced contribution to the graduate core attributes. The BSc in the Agriculture programme was the first programme to be launched in the faculty in 2005. Indeed, when it was realised that course loads in the BSc Agriculture programme were dominated by crop production courses, agricultural economics/entrepreneurship courses and animal production courses, other programmes were developed to make up for this imbalance. To address these gaps, the other undergraduates' programmes were developed to produce graduates with competencies in areas of postharvest and value addition; environment conservation; and engineering areas. Specifically, the BSc in Food Bioscience and Agribusiness was developed to address the societal needs in the field of postharvest handling and value addition.

Further, the BSc in Environmental Science and Natural Resources Management and BSc in Biosystems Engineering programmes are meant to address societal needs related to environmental conservation and agricultural mechanisation respectively. While BSc in Agri-Entrepreneurship and Communication Management focuses more on the need to produce entrepreneurs equipped with communications skills to support agricultural extension services to farmers.

3.5 *Changes in Pedagogical Approaches*

There is a general trend that is gathering momentum in higher education for practical student-centred teaching and learning. This aims to translate theoretical knowledge to practical problem-solving ideas that model the students as problem solvers and society as beneficiary from students' knowledge while teaching and learning transpire. Notably the emerging changes include introduction of practical student-centred sessions, and student placement in the community in most of the academic units, implementation of the student-centred outreach model in the Faculty of Agriculture and Environment and general student placement in terms of school practice and general internships.

3.6 *Move to More Practical Teaching*

Most of the curricula reflect student-centred and problem-solving approaches such as practical lessons. The Higher Education Access Certificate programmes have practical components which are very elaborate, detailing what the students are expected to do practically in order to develop practical skills and become problem solvers. Key areas of assessment in the practical sessions are: planning, execution, measurement and observation; presentation of data and observations; analysis, conclusion and evaluations. These are detailed as follows:

> *At the Planning Level*
>
> Candidates should be able to: define the question/problem using appropriate knowledge and understanding; give a clear, logical account of the experimental procedure to be followed; describe how the data should be used in order to reach a conclusion; assess the risks of the experiment and describe precautions that should be taken to keep risks to a minimum. (Gulu University, 2019a, p. 6; 2019c, p. 7, 2019d, p. 6, 2019e, p. 6)
>
> *At the Manipulation, Measurement and Observation Level*
>
> Candidates should be able to: demonstrate a high level of manipulative skills in all aspects of practical activity; make and record accurate

observations with good details and measurements to an appropriate degree of precision; make appropriate decisions about measurements or observations; recognize anomalous observations and/or measurements (where appropriate) with reasons indicated. (Gulu University, 2019a, p. 6, 2019c, p. 7, 2019d, p. 6, 2019e, p. 6)

At the Presentation of Data and Observations Level

Candidates should be able to: present all information in an appropriate form; manipulate measurements effectively in order to identify trends/patterns; present all quantitative data to an appropriate number of decimal places/significant figures. (Gulu University, 2019a, p. 6, 2019c, p. 7, 2019d, p. 6, 2019e, p. 6)

Analysis, Conclusions and Evaluation (ACE)

Candidates should be able to: analyse and interpret data or observations appropriately in relation to the task; draw conclusion(s) from the interpretation of experimental data or observations and underlying principles; make predictions based on their data and conclusions. Identify significant sources of errors, limitations of measurements and/or experimental procedures used, and explain how they affect the final result(s); state and explain how significant errors/limitations may be overcome/reduced, as appropriate, including how experimental procedures may be improved. (Gulu University, 2019a, p. 6, 2019c, p. 7, 2019d, p. 7, 2019e, p. 7)

Such are the kind of details that typify the HEAC programmes which are in the field of natural and applied sciences. However, for the HEAC programmes these are their first versions, it may thus be hard to talk of change in pedagogical practice. However, the emphasis on practical student-centred pedagogy is clear. Generic skills such as critical thinking, problem solving, writing skills, communication, mathematical skills and research skills are also inherently inculcated through such learner-centred and problem-based teaching. The rest of the academic programmes, particularly in the physical and biological sciences have also embraced more practical teaching. For instance, students training to become Biology teachers go for a two-week fieldwork in year two and three in which they relate theory to practice as well as societal challenges: they observe what had been taught theoretically. They carry out tests and interact with members of the community and observe nature in a natural setting.

3.7 *Entrenching Student Placement*

Student placement which takes eight weeks during the recess terms is another component of student-centred pedagogy. In the Faculty of Agriculture and Environment there is the S-C-O model which serves both curricula and community outreach functions. In it, students work with farmers, identify challenges which may be animal or crop related and propose solutions. In most cases, they implement those solutions under the guidance of their lecturers. In the Faculty of Education and Humanities, student placement takes the form of school practice done by students of year two and year three, for eight weeks in each of the two years. In school practice, student teachers prepare schemes of work, lesson plans, organise teaching learning resources and deliver lessons. They also participate in handling discipline cases among learners and supervising routine activities in schools.

In the Faculty of Agriculture and Environment, the BSc in Agri-Entrepreneurship and Communication Management curriculum integrates the S-C-O model, which places students in the field to work with farmers while benefiting from technical backstopping from their lecturers. These curricula innovations are embedded in the Bachelor of Science in Agri-Entrepreneurship and Communication Management:

> Under the S-C-O model, the students are attached to the community right from year one and in that way, they acquire adequate real experience working with the communities while at the same time contributing to provision of extension services. On the other hand, the supervised student enterprise scheme enables the students to work with real case studies that offers opportunities for experiential and Problem Based Learning (PBL). The students are enabled to obtain hands-on experience on business plan development and implementation through the supervised enterprise scheme. (Gulu University, 2023, pp. 43, 54, 109)

Community-oriented pedagogical activities identified in the Faculty of Agriculture and Environment curriculum included university-industry linkages through activities such as work placement, students' attachment and service learning. Students' attachment or work-placement and for students enrolled for masters' programmes in the faculty was one of the innovations in the Ugandan higher education system. The attachment is done at the end of the first year of the masters programme. This is aimed at helping the graduate students to identify community problems as a basis for their research during their second study. In this way, the faculty has been able to carry out research that focuses on addressing societal needs. An excerpt from the Master of Science in

Renewable Energy Curriculum course description for work placement is given here:

> Placement is an essential component of the MSc REA programme. It is designed to enable the student to be acquainted to the real-world challenges facing the energy access sector. Each student shall engage in work placement with an industry, during which students shall work closely with the industry and their supervisors. Where applicable, the student will work in the research and development or projects department of the industry. During the placement, students are required to identify a problem and develop innovative solutions, in close collaboration with the industry. The course facilitator shall monitor, follow-up the student in order to ensure successful collaboration during the study period. (Gulu University, 2021, p. 9)

Thus, there is indicative corroborative evidence that the university is deliberately changing old curricula and designing new ones with pedagogy that encourage not only societal oriented but also student-centred approaches. The societal orientation is that students learn while serving the communities in terms of teaching, training, giving feedback, direct problem solving in farms or schools as the case may be. The student-centeredness is that the students are deployed in the study context with guidance of what to do but much of the tasks are left to the students supported by external workplace mentors from industry.

3.8 *Specific Societal Needs/Challenges Targeted*

Some of the specific societal needs addressed in the new and revised curricula included in Gulu University in the field of education are(a) to meet labour market needs (b) to expand access to education (c) to meet lifelong learning needs (d) meet broader societal needs. Specifically, the needs being responded to in the field of Agriculture include: (a) bridging skills gaps (b) fighting poverty (c) promoting entrepreneurial skills and mindset in graduates and (d) promoting 21st century skills.

3.9 *Meeting Labour Market Needs*

All the programmes of studies cited had the explicit goal to meet the labour market needs of their respective industries. We quoted a few verbatim to support the theme. Notable among them is the pioneer graduate programme in the Faculty of Education and Humanities, which was first launched in 2003, the Master of Education in Educational management whose rationale states:

> Given the increase in the number of universities, both public and private, in Northern Uganda, still the increase is not commensurate with the demand for trained educational managers at various levels. That is why this programme being offered at Gulu University still scores a high rationale in meeting this demand of specialised education managers. (Gulu University, 2022e, p. 5)

At level one, a need is expressed for educational managers for higher institutions of learning including public and private universities in the hitherto perceived marginalised northern Uganda, to which these programmes claim to respond. Unless, disproved, this claim may be believable based on this data from the curriculum developers. In the same academic programme, it is stated that:

> The current policy that makes it mandatory for all heads of secondary schools and other post-secondary educational institutions to be holders of a minimum of a Master's degree, with specific emphasis on education management, further augments the rationale for running this programme at Gulu University. (Gulu University, 2022e, p. 5)

From this excerpt, it is inferred that, the need addressed by the same curriculum is to fill the manpower gap for educational managers specifically in secondary schools as per the government policy requiring all heads of institutions.

However, another programme justification states:

> The programme will widen employment opportunities of the individual graduates. Candidates may find relevant work in education (both secondary and higher), culture, publishing, journalism, etc. in the public as well as in the private sector, both nationally and internationally. (Gulu University, 2022d, p. 2)

This rationale is also aligned to the national crisis of unemployment which has been sounded in many national documents such as the Vision 2040, the Third National Development Plan (NDP) and SSPs.

3.10 *Fostering Lifelong Learning* (*LLL*) *Needs*

A number of new and revised academic programmes also have statements that explicitly point to response to the need for long life learning. This is a further testimony that Gulu University evolves its curricula to meet changing societal needs as lauded in different national and international documents. This is

evident in this background statement for the Bachelor of Arts with Education programme which states:

> This revised programme is hinged on the United Nations Sustainable Development Goal number four; to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. (Gulu University, 2022a, p. 8)

The statement above in respect to lifelong learning is corroborated by the verbatim quote from another curricula document, which states:

> The programme, to be run over the weekend, is aimed at advancing both linguistic and literary knowledge of those with a good background in the two fields. Graduates from Gulu University and other universities in the country and beyond will find the programme useful for furthering their studies. (Gulu University, 2022d, p. 1)

Still the same curricula document makes emphasis:

> In line with the Uganda National Development Plan's strategic objective of transmitting general and applied knowledge as well as skills development under the broad social sectors of education and sports, and skills development, this programme is intended to address the problem of a high student-teacher ratio in secondary schools and to make education more accessible to the rapidly growing number of Diploma graduates with the need to further their professional development in Education. (Gulu University, 2022a, 2022d, pp. 8, 9)

Indeed, such codes as 'advancing', 'furthering … their knowledge' and 'to further their professional development' were interpreted in context to mean lifelong learning. Thus, it is interpretable that Gulu University curricula are designed with cognisance and intention to meet LLL needs, which have been emphasised in the SDG 4, Goal 2 of the African Union (AU) Agenda and the East African Vision 2050. In as far as these are players influencing this response, we construe this alignment as isomorphic.

3.11 *Response to Regional and Global Aspirations*

Other aspirations such as quality education, equity, inclusiveness, and bridging educational asymmetries have been variously mentioned in separate but

sometimes multiple academic programmes. For instance, the Bachelor of Arts Education programme is so explicit on the global and national goals.

> This revised programme is hinged on the United Nations Sustainable Development Goal number four; to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Africa Vision 2063 (The African Union Commission, 2015) also emphasises quality of education under goal number two "well educated citizens and skills revolution underpinned by science, technology and innovation". In line with the Uganda National Development Plan's strategic objective of transmitting general and applied knowledge as well as skills development under the broad social sectors of education and sports, and skills development, this programme is intended to address the problem of a high student-teacher ratio in secondary schools and to improve education. (Gulu University, 2022a, p. 8)

Whereas the passage above depicts the mindset of Gulu University in relation to regional and global goals mainly related to education, similar responses are expressed in academic programmes in the Faculty of Agriculture relating to ending hunger, value chain, value addition, and mitigating climate change. Indeed, deliberate references are made to the East African Vision 2050, The African Agenda 2063, as well as SDGs. This implies that the university is developing new curricula and reviewing old ones to respond not only to local community challenges but to regional aspirations and global goals as well.

4 Discussion

This section discusses the study results in light of the broader higher education context, Gulu University context, empirical literature and theoretical literature. The study findings are summarised as follows (a) curricula response to societal challenges/needs takes the form of development of new academic programmes tailored to societal needs (b) programme reviews deliberately seeking to address local, national and globally expressed challenges, needs and aspirations are evident. Societal needs are targeted through curricula and pedagogical interventions.

Development of new academic programmes and review of existing ones tailored to societal needs and challenges are two sides of the same coin. Both aim at addressing societal problems through curricula and pedagogy which mirrors the broader requirement of the NCHE which dictates that universities

should develop academic programmes relevant to societal needs as appropriate (NCHE, 2014). In the same vein, this response is in line with Gulu University's avowed mission which emphasises rural transformation and the six stated functions namely to (a) expand access to higher education (b) increase the number of basic and applied science teachers (c) increase professionals in agriculture and environmental sciences (d) produce engineering and technology graduates (e) produce medical personnel in health services cadres and (f) develop appropriate human resources for public administration. The responses are also anchored in the national, regional and global goals. In the immediate environment, the university also sits in a region typified by low literacy rates, low transition from primary to secondary (UBOS, 2021), underachievement in literacy and numeracy (UNEB, 2016), need for graduate teachers; poverty (UBOS, 2021), and asymmetric development (Nannyonjo, 2005; Muyinda & Whyte, 2011) which require deliberate response from stakeholders (Blattman et al., 2012). Thus, the responses are driven by societal challenges/needs.

This finding is in consonance with the notion that curricula and pedagogy meet community needs while developing students academically (Wade & Demb, 2009). Credit, or non-credit bearing programmes; with explicit purpose for and in partnership with the community (Doberneck et al., 2011) are efficacious in solving societal challenges. Service learning – which denotes curricula designed while consciously and concurrently rendering service constitutes a core domain where curricula and pedagogical activities converge to address societal needs (Barnes & Tate, 2022). This is in line with Kalule et al. (2016) and Ofoyuru (2018). Apart from meeting the identified needs, the ripple effect of community engaged curricula and pedagogical activities are enormous (Barnes & Tate, 2022). Bekele and Ofoyuru (2021) reveal that universities in Africa express intention to engage with communities in their strategic plans through a number of activities including but not limited to curricula and pedagogical ones. Indeed, this is amplified in Bekele et al. (2024) who confirm based on a Delphi data about African universities that their 'curricula reflect societal challenges or needs', their 'curricula embody local or national knowledge systems', student internships or experiential instruction was taking traction and 'instruction that promotes skills and competencies relevant to society was burgeoning. The current finding portends that the case university is on a good trajectory.

These findings echo the coercive tenet of the neo-institutional theory by DiMaggio and Powell (1983) which states that organisations respond to pressures from the environment such as laws, instruments, conventions, regulations and needs among others. It is apparent from the findings that the university is conscious of and aligns its curricula to respond to pressures from the society. The development of the curricula is thus informed by needs at the local level;

national and regional aspirations as well as global goals. In theoretical terms it means that the university is operating not in a vacuum but within an organisational field – which constitutes other organisations, agencies or institutions whose policies, laws, regulations or situations affect the university's curricula and pedagogy. Such organisations include schools, farming communities, professional bodies, community of practices, and other stakeholders. At the national level, bodies such as the Parliament of Uganda, the NCHE, and the National Planning Authority are important actors that put considerable pressure on the University. For instance, the University claims to nest its strategic plan in the National Development Plan III. At the regional and global level, a number of programme objectives were also claimed to be tailored to meet specific SDGs that address different spheres of life such as education (SDG4) which embed quality education, lifelong learning, and equitable access for boys and girls. It is thus tenable to argue that the case institution responds to societal needs and challenges while designing the curricula and choosing pedagogical approaches. Ultimately, there are salient institutional responses to societal needs/challenges that can ring true to the neo-institutional theory. However, it should be noted that we did not necessarily use the theory as an analytical lens.

5 Conclusion and Recommendations

Gulu University is cognizant of and responsive to community needs and challenges, contextual and local; national, regional, and global. Indeed, the university has expanded its curricula through introduction of new academic programmes, and new course units that address societal challenges directly or through the employable graduates. The university transformed its pedagogy profoundly moving away from teacher-centred approaches to student centred approaches that directly lead to problem solving. This transformation is influenced by pressures from accrediting bodies, particularly the NCHE which requires universities to develop and mount programmes relevant to societal needs. Other stakeholders in the organisational fields such as the United Nations, the African Union, the East African Community have also unknowingly influenced Gulu University's curricula and pedagogy in a way that qualifies as isomorphic based on DiMaggio and Powell's (1977, 1987) usage of the term. It is recommended that these changes be streamlined throughout the University and studies investigating policy and structural trajectories are encouraged. Standalone studies at national and continental level with more universities specifically focusing on the contribution of universities in

implementing national, regional and global goals should also be commissioned by the various agencies and undertaken by higher education scholars.

5.1 *Contribution*

This chapter offers the first empirical evidence on curricula transformation by Gulu University based on analysis of academic programme documents. The PBL, initially introduced through the BSU Project may have changed the pedagogical terrain in Gulu University alongside the other aspects such as the field trips, S-C-O model in Faculty of Agriculture and Environment, and school practice in the Faculty of Education and Humanities which were already in existence. The paper affirms in part the commitment by Gulu University of being an agent for community transformation. Whereas it principally focuses on curricula transformation, it affirms that the university is not just cognizant but responsive to community needs and challenges to a large extent. This could be a basis for lobbying from stakeholders including the Government of Uganda. Methodologically, the study underscores the use of academic programmes as a potent document source for credible qualitative data that needs to be explored further in higher education. We found academic programme documents to be rich and firsthand data sources on curricula matters. A similar design could be adopted for studies on curriculum transformation in universities in similar contexts.

5.2 *Limitations*

The study considers two academic units out of seven namely Faculty of Agriculture and Environment, Faculty of Business and Development Studies, Faculty of Education and Humanities, Faculty of Medicine, Faculty of Law, Faculty of Science and Institute of Peace and Strategic Studies. This implies that information from the other five academic units could have been left out allowing for partial data that informed the study. However, the choice of the two faculties was justified in the method section that the two units can be a proxy for what goes on in the University. Thus, the study can be generalised to Gulu University but not other universities. Although its partial relevance to other settings may not be ruled out.

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CHAPTER 5

Community Transformation by Higher Institutions of Learning

An Engendered Perspective in Northern Uganda

Asaf Adebua, George Oriangi and Abola Benard

Abstract

Paucity of understanding exists on gender perspectives of how socio-demographic characteristics influence transformation of communities by higher institutions of learning. Studies indicate that the female gender is disadvantaged in terms of access to land, education and leadership amidst scarce resources which affects their ability to transform communities. The Activity Theory, which explains transformation of individuals and their power to change their communities was used to examine the gender perspective of indicators of community transformation and socio-demographic characteristics that influence Gulu University's role in transforming the community. To collect data on socio-demographic characteristics of males and females as well as the economic, social, physical, political, and spiritual dimensions of community transformation, 390 researcher-administered questionnaires were employed. Principal Component Analysis was used to determine the indicators of community transformation while logistic regression was used to establish potential socio-demographic predictors of community transformation by Gulu University. Findings revealed that variables in the economic, physical, political and spiritual dimensions contributed more to transformation of the surrounding community of Gulu University while, the female occupation rather than male occupation significantly contributed to community transformation. The study informs policies on affirmative action to continue gazetting certain positions for female occupation.

Keywords

university – community transformation – gender – northern Uganda

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1 Introduction

The capacity of higher institutions of learning to transform their surrounding communities has been raised as a cardinal contemporary issue (Fumasoli et al., 2019; Mascarenhas et al., 2020; Compagnucci & Spigarelli, 2020). Global recognitions and appreciation have been given to the role of universities in facilitating change through Education for Sustainable Development (ESD) (Hagen, 2002; Neary, 2018). In addition to developing a greater grasp of societal concerns and producing technology and policy solutions, universities are expected to be leaders and mentors in society. Kessler (2011) however observes that the challenges confronting the organisations and communities of today, such as marginalisation of sexual and gender minorities, require a renewed focus on the approaches through which higher education can contribute to community transformation. Even though there has been a lot written about the necessity of mainstreaming gender and its implementation, there remains a clear disconnect between purpose and reality worldwide. Yang (2016) reported that while more than half of the universities in the developed countries have contributed knowledge requirements for the transformation of society, there is a limited understanding on how socio-demographic characteristics influence the capacity of universities to contribute to the transformation of the surrounding communities. When it comes to the Sub-Saharan African (SSA) context, universities have tried to fulfil their objectives of transforming their communities by skilling the young people that have occupied different sectors of government. However, communities around universities in SSA are still grappling with high levels of poverty, food insecurity, illiteracy and disease (Cloete, 2015; Banya, 2001). Additionally, the male gender is reported to have better chances over the female gender in terms of quality of health, education, employment opportunities, income and saving (Blythe et al., 2018). Into the bargain, Cloete (2015) noted that out of eight African countries they studied, no single one had a clearly stated community development strategy involving the universities. Few studies such as (Tierney, 2011; Feuer et al., 2013) have embraced a comparative perspective that offers a more comprehensive understanding of the role of higher education from a gender perspective.

This study, defines community transformation as a description of change and empowerment in the current way of people's livelihood (economic, physical, social, political and spiritual) setups to a better preferred way, adopting from Getu (2002). In the study, Activity Theory (Engeström, 2001; Roth, 2004), which explains transformation of individuals and their power to change their communities, is used to examine the socio-demographic characteristics that influence Gulu University's role in transforming communities in post-conflict northern Uganda and the indicators of community transformation.

2 Literature Review

2.1 *History of Community Transformation by Universities*

Although the original mediaeval institutions of higher education were intended to be teaching only, from the beginning of the 19th Century they began to focus on how community transformation becomes an important focus (Brennan et al., 2004; Clark, 1983; Perkins, 1972). As a result, there has been more calls on universities to shift their focus to transformation of society. And in the process, universities are now under pressure to reinvent and broaden their objectives to focus on how their surrounding communities can be transformed economically, environmentally, socially, politically and spiritually (Rubens et al., 2017; Brown & Baker, 2021; Barnes & Fairbanks, 1997).

Indeed, in recent years, there has been an increase in demand on universities to add the element of societal transformation in addition to their primary missions of teaching and research (Urdari et al., 2017; Abreu et al., 2016). To pursue community transformation, however, a number of activities are involved. Thus, many proponents provide precise information on how community transformation can be defined and measured. According to Getu (2002), community transformation is a deeply rooted change in people's economic (i.e., occupation, income, savings, material wealth, investments, trained workforce, tax streams, and improved national output), physical (i.e., housing, electricity, water, and roads), social (i.e. health, skill, and education services), politics and freedom (i.e. free participation in leadership issues, taking part in political parties and civil society organisations and the ability to express oneself), and spiritual (i.e., love, joy, peace, long suffering, kindness, goodness, faithfulness, gentleness, and self-confidence) aspects of life.

Getu (2002) explains that transformation is an ongoing process of changing and improving the way of doing things in the community and the indicators for measuring community transformation are not meant to imply that certain goals may be reached at a certain time frame but assist in assessing how the journey is being walked. Additionally, Freire (1996), Harvey and Knight (1996), and Waghid (2002) view transformation from the social perspective measured through high standards of living, fitness for purpose, value for money, life-experiences of student's empowerment, and enhanced abilities to perform tasks. According to Brown and Baker (2017), community transformation refers to initiatives to build up, energise, and stabilise social, environmental, and economic problems that limit community members' possibilities to better their living conditions. They measure community transformation by empowerment, engagement, trust, cohesion and leadership role. This study borrows largely from Getu (2002), Harvey and Knight (1996) and Waghid (2002) and will define

community transformation as a description of change and empowerment in the current way of people's livelihoods (economic, physical, social, political and spiritual) set ups to a better preferred way. It will measure community transformation using the following: economic (i.e., occupation, income, savings, material wealth and investments), physical (i.e., housing, electricity and water), social (i.e. health, skills, and education services), politics and freedom (i.e. free participation in leadership issues, taking part in political parties, civil society organisations and the ability to express oneself), and spiritual (i.e., love, joy, peace, long suffering, kindness, goodness, faithfulness, respect, and self-confidence) aspects of life. It is important to note that the terms determinant, dimension and factors will be used interchangeably, and the terms, indicator and variable refer to the same thing.

Notwithstanding Chankseliani and McCowan (2021), assert that aside from the universities' efforts to address global concerns through generation of employment opportunities, wealth creation through investments, access to energy, ecosystems protection, access to universal education, and health; universities in developing countries do not seem to put much emphasis on these, which could actually enable them achieve SDGs. Given the limited scope of the universities' community engagement activities in developing countries, McCowan (2016, 2019); Barakat and Milton (2020) and Owens (2017) recognize a gap and thus emphasise the need for documentation of the range of activities directly aligned to community transformation and attainment of SDGs.

McGrail (2013) reports that Lehigh University in America approved four main priorities, including support for public education aimed at working with the neighbourhood schools and the district as a whole to improve student performance, aiding local businesses, enhancing commerce, and reducing crime by fostering partnerships with neighbourhood law enforcement organisations. The area is given life and collaboration chances by the university, with the possibility of cross-cultural integration. This generally fits well with the claim made by Bonilla-Santiago (2020), who argues that the university provides social and intellectual capital to strengthen a partnership through civic engagement and community development for college students, faculties, and staff, as well as research and support for new innovations. Santiago's study focused on community development of the Cooper neighbourhood at Rutgers Camden University and LEAP Academy School.

Interestingly, Rukarwa (2018) claims that some universities in Africa offer unique contributions to a change process by playing an important role as leaders in education, research and technology development and transfer. Additionally, a study on institutional policy for community transformation activities in Uganda, (Ofuyuru, 2018; Ofoyuru et al., 2018) observed through literature

that some universities in the region were reported to have developed academic programmes geared towards transformation of community (see Chapter 4). He points out that some universities adopted the opening of campuses in the communities away from their main campus. Others started open and distance education, along with community cultural activities like arts, drama, music and dance. Meanwhile others created specialised units in the form of centres for indigenous knowledge. Analysis of the aforementioned literature shows that paucity of knowledge exists on the gender perspective of the socio-demographic characteristics that influence Gulu University's role in transforming communities in post-conflict northern Uganda

2.2 *Factors that Influence University Contribution to Community Transformation*

Several studies on factors that influence university contribution exist (Stensaker & Fumasoli, 2017; Fumasoli, 2019; Openjuru & Ikoja, 2012; Stenaker et al., 2014). Fumasoli et al. (2020) indicated that the factors that influence the contribution of universities to community transformation are both external and internal. The external factors are made up of socioeconomic conditions of the population, policy frameworks, pressures of the competitive market, aggregate demand, inflation and price changes. While internal factors include funding to support the community engagement activities and availability of clear institutional policies and guidelines. In conformity to Fumasoli's argument, Rukarwa (2018) asserts that exogenous forces in African universities and university systems are important factors in determining how a university is positioned to contribute to community transformation. On the other hand, internal elements such as managerial choices, abilities, and actions influence how university operations flow and have an impact on the community, which reflects the institution's role in the transformation of the community. Meanwhile, Mascarenhas et al. (2020) assert that the motivation of new knowledge generation and transfer for the benefit of the community occurs when there is teamwork between the university, industry and the community (see also Chapter 14). However, Marozau et al. (2019) emphasised that it is creativity and innovation capacity of the university leaders and authorities that determine the contribution of the university to the knowledge based economic transformation of the community.

In a study on 'People First' which examined the factors that support or hinder community transformation in Arizona USA, Brown and Baker (2021) have shown that there is need for local capacity in skills and leadership within the local community along with trust for one another and with a shared purpose for a collective empowerment to occur (Walzer et al., 2020). Hudson (2013) investigated a federal comprehensive community initiative, the promise

neighbourhood programme in America in order to understand higher education community engagement in an embedded context. She discovered that higher education institutions commit to partnerships through mission related practices associated with teaching, research and community outreach service which in themselves are the use of the knowledge tasks identified by Fleming (1999). According to Fleming (1999), universities have a responsibility to respond to the call for them to partner with local communities to help in solving mutual problems that face the urban universities and communities. He asserts that urban involvement must be undertaken in such a way that it involves scholarly pursuits and interests of the university faculty in order for the university to have a higher chance of staying. Therefore, availability of scholarship remains the distinguishing factor for the university community outreach partnership and needs to become a regular part of the life of the university. This thereby supports the framework of Activity Theory where the interaction of the university-community is an active point of the activity system and a reflection of collaborative and network engagement. The literature explores the factors that influence university contribution to community transformation in different parts of the world. However, paucity of knowledge exists on the gender perspective of socio-demographic characteristics which are external in nature that may influence the capacity of the university to contribute to community transformation. Thus, the second aspect of this current study was to examine the gender perspective of the socio-demographic characteristics that influence Gulu University's capacity to transform the surrounding community in post conflict northern Uganda.

3 Materials and Methods

3.1 *Location of the Study Area*

The study was conducted in Gulu City located in post conflict northern Uganda. The study area is bordered to the north and east by Gulu District, to the south by Omoro District, to the southwest by Nwoya District and to the west by Amuru District. There are two divisions in Gulu City (Pece-Laroo, and Bar Dege-Layibi) and Gulu University is located in Pece-Laroo Division (see Figure 5.1). The justification for the choice of Gulu City is because it forms the surrounding community around Gulu University. Additionally, the area is chosen based on its location in an area that suffered conflict from 1986 to 2006 characterised with low level of socio-economic development and limited human capital and the University was established as one of the ways to reduce the conflict (Gulu University Strategic Plan 2004/05–2008/09).

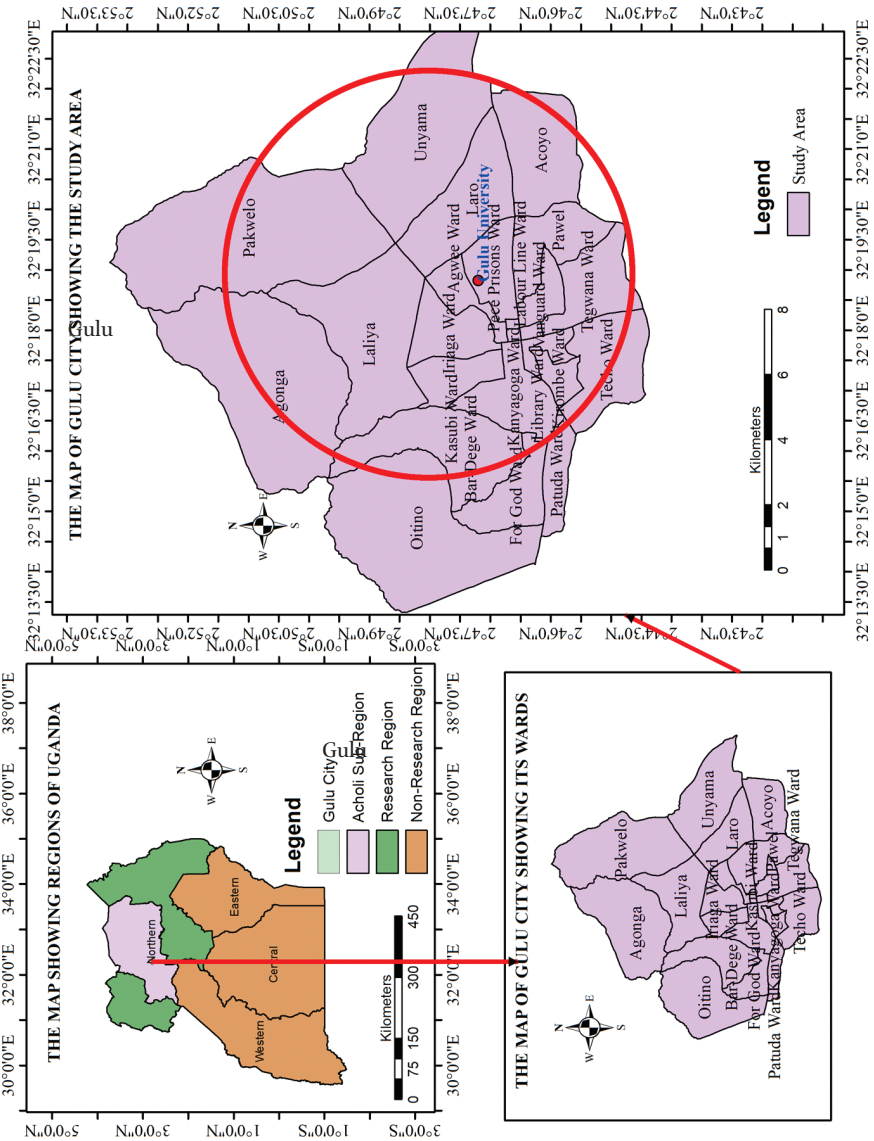


FIGURE 5.1 Location of Gulu University in Gulu City in northern Uganda (UBOS, shapefiles, 2020)

3.2 *Research Design*

The study employed a cross-sectional research design to capture the opinions, perceptions, attitudes and insights of respondents on their sociodemographic characteristics and the indicators of community transformation. The community surrounding Gulu University formed the target population because the study issues were centred on university's contribution to community transformation and the socio-demographic factors influencing the university's contribution to community transformation. The unit of analysis was the household.

3.3 *Sample Size Determination*

The study selected a sample of 390 respondents from two divisions in Gulu City: Laro-Pece, and Bardege-Layibi. These are constituted by 21 parishes. However, out of the 21 parishes in Laro-Pece and Bardage-Layibi Divisions, only four parishes were sampled i.e., Pece-Prison and Agwee in Laro-Pece Division and Kanyagoga and Labour line parishes in Bardege-Layibi Division. These four parishes were selected purposely based on their proximity to the university. The sample size was computed from the household population of the four parishes and from those individuals above 18 years. The sample size was computed using the approach developed by Israel (1992).

3.4 *Sampling Procedure*

The study adopted a multi-stage sampling procedure as suggested by Bennett and Liyanagec (1988). This is because it has a high level of flexibility, cost effectiveness, with more than two sampling stages that can be embraced. In this study, the first stage involved stratified sampling of two divisions in Gulu City. The second stage involved purposive sampling of two parishes from each division. The third stage involved random sampling of households and individual members while using a structured interview questionnaire. Random sampling was deemed appropriate at this stage because every household in the selected parishes was likely to be affected by the university activities, thus assumed to be uniform and selecting any household would be representative of the total population.

3.5 *Data Collection Methods*

Self-administered questionnaire was employed to collect data on the indicators of community transformation and the sociodemographic factors of respondents. The researchers approached the respondents at their homes, sought their consent before administering the questionnaire. The questionnaire consisted of 74 questions which were mostly closed-ended because they offer a quick tool for data collection, coding, interpretation, quantification, and outcome comparison across (Jones & Tanner, 2015).

3.6 *Data Analysis*

For questionnaire data, first Principal Component Analysis (PCA), was used to determine the gender-based contributions of the indicators of community transformation. The study had five (05) dimensions of community transformation as earlier mentioned: economic, social, physical, political and spiritual. Each of these dimensions had varying numbers of indicators, i.e., economic-6; social-5; physical-14; political-5, and spiritual-8 variables and in total, there were 38 variables. The data used in the study was analysed using IBM SPSS Statistics (Version 27). All these variables were subjected to PCA, however the study began by assessing the prerequisites of PCA as suggested by Tabacnick and Fidell (2007, 2011). That is (i) sampling adequacy and (ii) the strength of inter-correlation within the correlation matrix which is measured by bivariate correlation coefficients which must be 0.30 and above. When the data was tested, the results met all the requirements, that is, Kaiser-Meyer-Olkin (KMO) statistic was 0.78 which was quite above the minimum (0.6) for the sample adequacy and Bartlett's test of sphericity was statistically significant ($p < .001$). Furthermore, most inter-correlations in the correlation matrix were above 0.30. This demonstrated the suitability of using PCA as a statistical tool for data reduction technique in this study.

The first phase of PCA, started with extraction of determinants, where the extraction process was to aggregate the determinant and determine their numbers. The study applied scree plots with the purpose of aiding visualisation of the eigenvalues associated with each variable. Eigenvalue is the measure of the amount of variation in the variables associated with each determinant. The larger an eigenvalue of a variable, the more the variation explained by the variable in the dimension. Moreover, variables with eigenvalues less than 1 are usually considered to be less useful. This makes it possible to assess the quality of empirical determinants that are essential to the group of variables. In this way, one is able to judge the number of empirical determinants fundamental to a set of variables. Moreover, the variables that quantify the percentage of the variance are accounted for by the predefined dimension presented. Usually, this estimate is called communality estimates (weight). The variable's communality estimates should, as a rule of thumb, be at least 0.30 (Tabachnick & Fidell, 2007).

The next phase was rotation performed to illustrate the relationship between each variable and the determinant. This is where empirical evidence of factors is reconstructed. Since, the study conceived or hypothesised the dimensions of community transformation based on literature review. The study performed oblique factor rotation techniques based on a pro-max algorithm; this approach allows for correlation between dimensions since Bartlett's test indicates correlation ($p < .001$). This result was presented using a pattern

matrix which provides additional evidence on the communality criterion used to present the determinants of community transformation. Putting it differently, it represents the relation between a variable and a factor after removing the influence of other determinants.

Second, the study used a multivariate logistic regression model to establish the potential sociodemographic predictors of community transformation by Gulu University. The choice of the regression model stems from the fact that the dependent variable was categorical variable, that is, the respondents were asked whether they think the existence of Gulu University has transformed the surrounding community. And the response was either *No* or *Yes*. In a logistic regression model, it is well known that the independent variables (IVs) can either be categorical or continuous or both. However, in this study, all the IVs were categorical in nature, and coded for analysis. For more details, see table 2 in the PhD thesis about the contribution of Gulu University on community transformation by Adebua (2024).

The study began the analysis by exploring whether the condition of multicollinearity within independent variables were violated using variance inflation factor (VIF) with VIF between 5 to 10 indicating the presence of multicollinearity. Furthermore, goodness-of-fit check was performed using Hosmer and Lemeshow (H-L) test and also reported explained variation using coefficient of determination, that is, Nagelkerke R Squared.

4 Results and Discussions

4.1 *Indicators of Community Transformation by Gender*

Findings on the indicators of community transformation by gender revealed that there are many dimensions/components of community transformation. However, 13 dimensions are shown to contribute more to community transformation as indicated by scree plots with eigenvalues greater or equal to 1 for both female and male, Figures 5.2a and 5.2b, respectively. The cumulative percentage variance of the 13 indicators by gender revealed that for females is 63.9 and for males is 64.3 which showed not much difference. The remaining indicators are probably unlikely to make much of an impact on the study's conceived dimensions. Therefore, much as there are many indicators used to measure community transformation in this study, the 13 dimensions explain about 60% of the variation.

Findings on the contribution of the five dimensions used for measuring community transformation revealed that, in the economic dimension, in the PCA component 1, reported in Adebua (2024), alternative income, savings

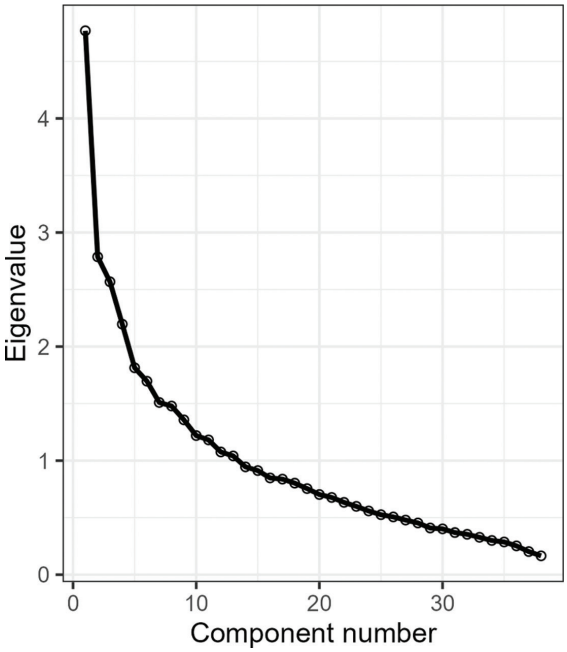


FIGURE 5.2A Female scree plots for indicators of community transformation by gender

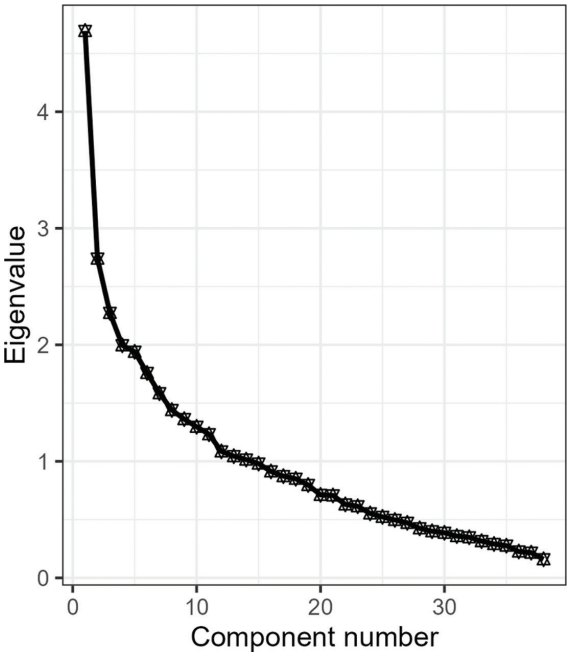


FIGURE 5.2B Male scree plots for indicators of community transformation by gender

and access to credit had a high contribution to transformation for both the female and male categories. For the female gender, the factor loading ranged from 0.45–0.61 while for male, it ranged from 0.49–0.57. This is likely to be due to several opportunities that Gulu University could have created which are enabling the surrounding community to involve in alternative income generating activities, they are able to save and have easy access to credit and the community in their opinions are appreciating the importance of these variables in transformation. Several studies demonstrated the importance of savings and credit in contributing to rural transformation in the Africa context (Kumburu & Pande, 2020; Bwalya & Zulu, 2021).

Whereas for the political dimension in PCA component 1, (Adebua, 2024) the female opinions indicated that free participation in leadership issues, taking part in the activities of political parties, membership to associations, freedom of expression in public and independent decision making contributed more to transformation and the factor loading ranged from 0.44–0.59, for the male, it is only free participation in leadership issues, taking part in the activities of political parties and membership to associations with the factor loading ranging from 0.63–0.69. This result implies that in the community surrounding the university, the economy has a close relationship with the political dimension. It is likely that individuals' economic standing influences their involvement in political activities. This is seen in the Ugandan situation where individuals may not easily succeed in a political election to be able to fulfil their aspirations of community transformation; therefore, these two dimensions of community transformation seem to speak closely to one another which agrees with a report by Sharkansky and Hofferbert (1969) and Haggard and Kaufman (1995) who found a closer link between the economic and political dimensions. It is prudent to argue that the positive relationship of the political and economic dimensions is most likely the result of a hidden community strategy to find talented or competent individuals (leaders) who can defend and support their way of life or even work with higher authorities on community transformation.

For the physical dimension in PCA component 2 (Adebua, 2024), the results indicate that housing aspects contribute more to community transformation for both female and male. For the female, the factor loading for housing variables range from 0.69–0.84 while for male, they range from .75-.87. These are high factor loading, meaning that these variables have a high impact on the physical dimension and consequently to community transformation. These could imply that housing in terms of rental, hostels and restaurants could be very helpful investments that are transforming the community and most of the housing demand is likely to be a result of the existence of Gulu University. This finding is in line with a report by Pacini (2017) who emphasised the importance of housing in transforming communities.

In the spiritual dimension, the female variables of love, joy, peace, kindness, respect and belief in God contributed more to transformation in the PCA component 5 (Adebua, 2024) and the factor loadings ranged from 0.33–0.73. While for male, love, joy, peace, faithfulness, and respect contributed more and the factor loadings ranged from 0.36–0.79. The result implies that the females do more acts of kindness and believe in God as compared to the male. It is possible that these spiritual aspects have been popularised by the religious denominations that have been attracted by the existence of Gulu University and indeed, they have prospered in preaching spiritual transformation which is creating harmony and good grounds for investments. This is in line with the assertion by Haussmann et al. (2024) and Getu (2002) who indicated the importance of spiritual aspects in community transformation.

4.2 *The Influence of Socio-Demographic Characteristics on the Capacity of Gulu University to Transform the Community*

Findings derived from the unpublished PhD Thesis (Adebua, 2024) revealed that female occupation had a statistically significant (p = .029) contribution towards community transformation. Occupation was further dis-aggregated into four i.e., farmer, business, civil servant and those who are having 3 occupations at ago (i.e., farmer-civil servant-and business) being the reference point. In this, the contribution of the female gender, who were purely doing business was 9 times more than those females who were scattered in 3 occupations at a time, and this was statistically significant (P = .013, OR = 9.23, 95% CI [1.59–53.49]). While for male, this was not the case. More still, the females who were purely civil servants contributed 26 times more than those who were in three occupations at the same time. And this was statistically significant (p < .001, OR = 25.83, 95% CI [2.17–307.92]) and for the male, this did not contribute more to community transformation. This finding implies that the business and civil service occupations had a higher multiplier effect on transformation for the female gender as compared to the male. It is likely that females who are in business and civil service put whatever they earn in productive ventures that could be bringing transformation in the community as compared to the male who are in the same occupation. This finding relates with the finding of Laliberte (2019) who reported and reiterated the importance of occupation in contributing to the improvement of individuals quality of life, and the transformation of the society.

Additionally, despite the contributions of the age groups not being statistically significant, the male age category 18–27 years contributed 9 times more than those who were in age category 58 and above and this was statistically significant (P = .019, OR = 9.13, 95% CI [1.45–57.54]). This could be because this is a youth age category who are often associated to be good drivers of societal

change. This is in line with the finding by Campbell and Erbstein (2017) who noted that youth are a potential resource for community transformation.

Finally, for the male, those who had alternative sources of income, their contribution was marginally significant (P = .056, OR = 0.31, 95% CI [0.09–1.03]). The males with alternative sources of income are likely to have a high propensity to spend their time and money at social gatherings of relaxation with friends which make little contribution to community transformation unlike the females who most likely give less of their time and money to social satisfaction. In this way the male who have alternative source of income marginally contribute to community transformation

5 Conclusion

The study finds that the economic, political, physical and spiritual dimensions play a bigger role in transformation in the context of the community surrounding Gulu University in Gulu City. These dimensions can be used to measure community transformation by other studies in a similar context to that of Gulu. Furthermore, the study findings also revealed a close link between the economic and the political dimensions of community transformation. Therefore, there is a need for interested stakeholders to find mechanisms of promoting a healthy economic and political environment in communities to support transformation, since the two are closely linked.

Notwithstanding, the spiritual and the housing indicators in the physical dimension emerged to have the highest contribution to community transformation, thereby reflecting the importance of emphasising and promoting spiritual and housing aspects by interested stakeholders.

More still, the socio-demographic variables which were tested revealed that the occupation of females and the age category 18–27 of males had a significant effect on community transformation. These results inform youth and gender policies to put more emphasis on these factors since they have a high multiplier effect on transformation of communities.

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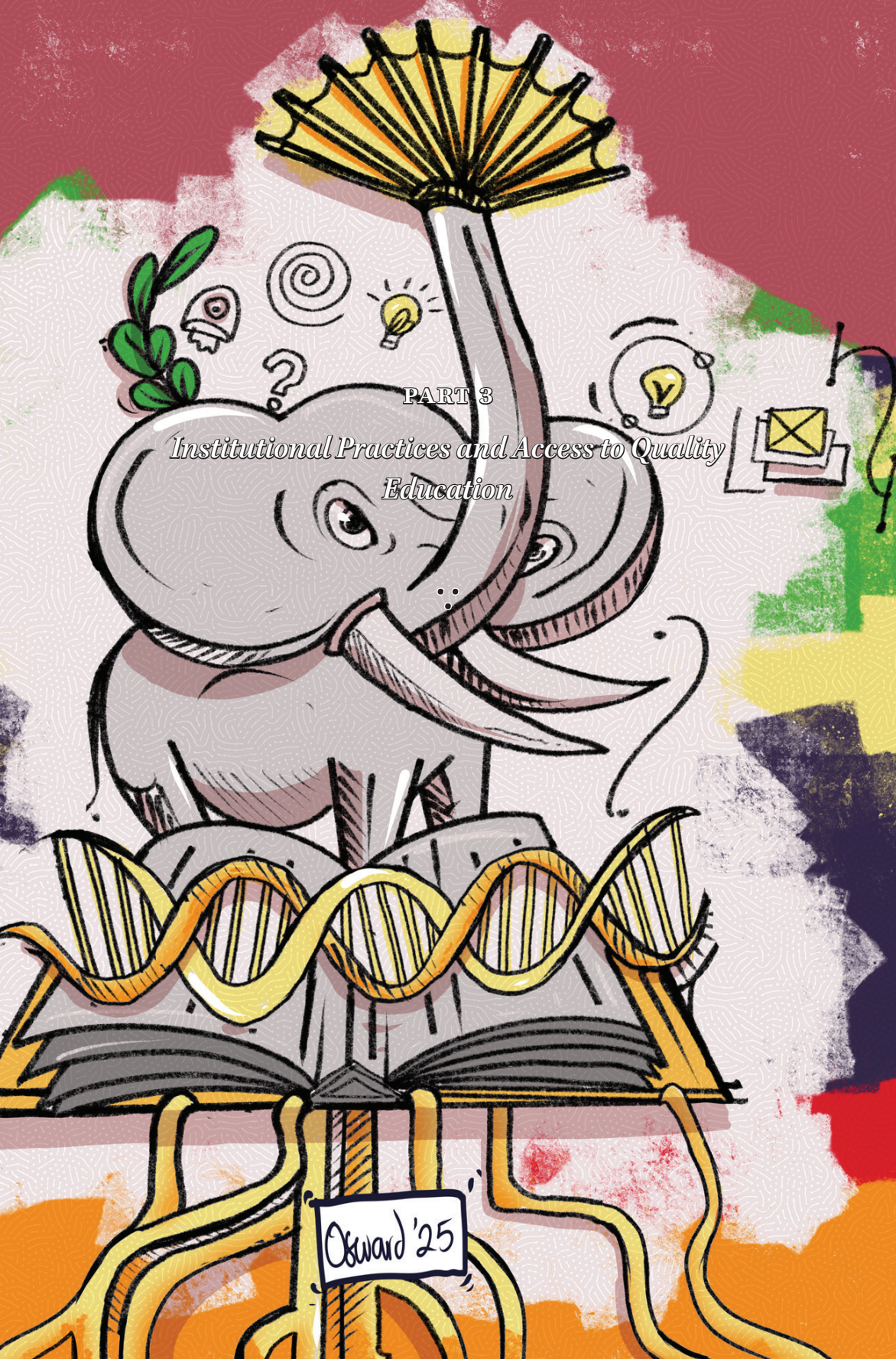
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PART 3

Institutional Practices and Access to Quality Education

CHAPTER 6

Secondary School Inspection Practices in Western Uganda

Implications for Pedagogy

Jerry Bagaya, Betty Akullu Ezati, Wycliffe Scot Wafula and Palle Rasmussen

Abstract

The quality of teaching largely depends on the nature of professional support teachers get. While evidence for the influence of inspection on school performance has been established, there is a dearth of studies on the influence of inspection on pedagogy in developing countries' inspection contexts. In this chapter, the authors explore the question: How do inspection practices influence pedagogy? For this purpose, they draw on Habermas's Theory of Communicative Action. Adopting a concurrent triangulation design, data were collected using a questionnaire survey and key informant semi-structured interviews with teachers, head teachers, and inspectors. Linear Regression Analysis and Narrative Analysis were used to analyse the data. The study revealed a statistically significant positive, though moderate, influence of inspection practices on pedagogy, albeit with some unintended negative effects. Inspection has contributed minimally to improving pedagogical practices in schools in Uganda, with its nature of control and insufficient funding as inhibiting factors. The study calls for an appreciation of how the Theory of Communicative Action can be applied in transforming education, through inspection in northern Uganda, based on findings from Western Uganda, a host to internally displaced people due to armed conflict in northern Uganda.

Keywords

inspection – inspection practices – improvement – pedagogy – communicative action – secondary schools – Uganda

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1 Introduction

The quality of teaching largely depends on the nature of the professional support teachers get. This support may lead to better pedagogical outcomes. In Uganda, there is a widely shared concern that pedagogy in schools is poor (Education Standards Agency (ESA), 2003; Lugujjo, 2008; Ministry of Education and Sports (MoES), 2007; Mulanda, 2019; Otaala et al., 2013; Winkler et al., 2008). A case of secondary schools may not be an exception. This chapter presents and discusses insights from a study on the influence of secondary school inspection practices on pedagogy in Western Uganda. Findings from the study, focusing on the character of school inspection practices as well as on the influence of these on lesson planning, have been published earlier (Bagaya et al., 2020a, 2020b). Western Uganda was and still is a host to internally displaced persons and refugees as a result of armed conflict in northern Uganda and South Sudan. Despite the fact that the conflict ended, most students in the Northern Region continued with their education in secondary schools in Western Uganda. In addition, because of the close proximity of Gulu University to Western Uganda, a number of students in secondary schools in Western Uganda continue with their education at the University, with some choosing to serve in the Northern Region after completing studies. The study findings, therefore, are of significance to transforming education in northern Uganda.

Major social, economic and political developments since the 1980s have influenced the nature of the education system in Uganda. More stakeholder involvement, massification of education, international commitments, and employer expectations have made schools more open to public scrutiny demanding accountability and quality education (MoES, 2017; National Planning Authority, 2020; Republic of Uganda, 2013; United Nations, 2015; Wilcox, 2000). As such, quality assurance services to improve the effectiveness of teaching have become a focus for many countries. Over the 40-year period, the inspection system in Uganda has been restructured to ensure quality education service provision (Ali, 1998; ESA, 2006; Government of the Republic of Uganda, 1992; Lugujjo, 2008; MoES, 2000, 2004, 2008, 2017; Winkler et al., 2008).

Inspection is a programme specifically intended to improve the efficiency and effectiveness of schools by critically examining all the factors that affect teaching and learning in the education system (De Grauwe, 2007; Eddy-Spicer et al., 2014; Ehren, 2016). In this study, inspection was taken as a planned programme by the Directorate of Education Standards (DES) aimed at enhancing teachers' pedagogical skills.

Pedagogy, on the other hand, refers to designed and performed tasks aimed at positively changing the behaviour pattern of learners (Aggarwal, 2001). Burton (1963, as cited in Chauhan, 1983, p. 4), defines pedagogy as 'stimulation,

guidance, direction and encouragement of learning'. Pedagogy, therefore, is manifested in various teacher activities designed to attain pre-determined goals. Pedagogy was characterised by planning and instruction. Planning involves developing a blue-print of teaching and learning activities (Aggarwal, 2001). Instruction is a means through which desired changes in student behaviour are brought about (Aggarwal, 2001) and learners' progress judged (Farrant, 1988). In this study, implications on pedagogy refer to the significant influence of inspection practices on pedagogy.

Despite the massive investments in and restructuring of the school inspection system in Uganda, the legacies of the colonial era remain. The inspection system has remained too rigid and bureaucratic. Inspecting officers are so busy with administrative duties that they hardly find adequate time to undertake pedagogical duties (Macharia & Kiruma, 2014); exemplified by an inspection that is poorly planned, pays little attention to classroom practices, provides inadequate feedback, lacks systematic follow up arrangements, over dependant on flying visits and thereby according inspectors limited contact time with teachers. Moreover, poor teaching methods that render learners inactive remain predominant. Reports indicate that current pedagogy encourages cramming at the expense of understanding concepts (Education Standards Agency, 2003; Lugujjo, 2008; Ministry of Education and Sports (MoES), 2007; Winkler et al., 2008). These challenges are reflected in the low achievement levels in national assessments (MoES, 2012; UNEB, 2014).

While evidence for the influence of inspection on school performance has been established, there is a dearth of studies on the influence of inspection practices on pedagogy. Even so, other studies have posted mixed and contradictory results (Lee et al., 2008; Perryman, 2010; Ventura, 2007); thus, the need for the investigation. The objective of this chapter, therefore, is to examine how secondary school inspection practices influence pedagogy in Western Uganda. Specifically, the chapter seeks to explore inspectors' strategic and communicative actions, using the theoretical lens of Habermas, in helping teachers reflect on their teaching practices for improvement.

2 Review of Related Literature

Evidence regarding the influence of inspection practices on pedagogy is scanty and divergent with some scholars claiming that inspection results in school improvement while others are sceptical about the impact of inspection.

On the one hand, studies across various contexts have reported a significant influence of school inspection practices on classroom teaching and management (Aldaihani, 2017; Blunsdon, 2002; Govinda & Tapan, 1999; Gustafsson,

2014; Her Majesty's Inspectorate of Education [HMIE], 2010; Matthews & Sammons, 2004) in the Global North. Similarly, in the Global South, scholars have found out that inspection leads to pedagogical improvement (Aldaihani, 2017; Amadi & Solomon, 2018; Komba & Nkumbi, 2008; Masaba, 2004; Matete, 2009; Tesfaw & Hofman, 2014). On the other hand, opponents claim that the available literature does not provide strong empirical evidence of the impact of inspection but mainly rely on anecdotal evidence. Reviewed studies have found that inspection practices have negligible impact on school improvement (Chapman, 2001; De Wolf & Janssens, 2007; Finnigan et al., 2009; Gaertner et al., 2014; Jensen, 2010; Kent, 2013; Klerks, 2012; Male, 1999; Rosenthal, 2004; Scanlon, 2001; Whitby, 2010).

Inquiries into the side effects of school inspection have revealed factors responsible for the ineffectiveness of the inspections, with stress, fear, increased workload and window dressing being the common side effects (Altrichter & Kemethofer, 2015; Ehren et al., 2015; Jones et al., 2017; Lee et al., 2008; Murphy & Skillen, 2015; Penninckx, 2017; Penninckx et al., 2015, 2016; Perryman, 2009, 2010; Tunc et al., 2015; Ventura, 2007; Warner, 2018). The studies attribute feedback, an inspection practice, as a mechanism through which improvement is achieved (Ali & Al-Adawi, 2013; Brookhart, 2008; Butty et al., 2015; Dobbelaer et al., 2013; Education First, 2015; Ehren, 2016; Ehren et al., 2017; Jones & Tymms, 2014). Since feedback seems to play a central role as a mechanism through which inspection improves pedagogical practices, the current study, in light of Habermas' Theory of Communicative Action, will attempt to explain how inspection practices improve pedagogy.

In this section, the literature relating to inspection practices and pedagogy has been considered. The reviewed studies centred mainly on inspection in developed countries and basic education with little or no say on what the teachers, headteachers and inspectors in Uganda think about the influence of inspection. This study, therefore, sought to extend the limited work done in Uganda so that the influence of inspection could be tested out on a much larger sample of teachers, headteachers and inspectors using mixed research methods.

3 Theoretical Underpinning

This study drew on the Theory of Communicative Action (TCA) advanced by Jürgen Habermas (Habermas, 1984; Habermas & McCarthy, 1987). TCA presupposes the use of language as a medium of reaching a common understanding through empirical rationality and verification. The theory postulates that: 'Actors in society seek to reach a common understanding and to coordinate

actions by reasoned argument, consensus and cooperation rather than strategic action strictly in pursuit of their own goals' (Habermas, 1984, p. 86). The theory emphasises widespread participation by all stakeholders, with a practical attitude, and reaching consensus on the plan of action through stakeholder dialogue without exercise of power (Bolton, 2005; Mitrović, 1999).

Communication presupposes a framework of mutual knowledge and assumptions about language and its use. The persons in the communicative activity are assumed to have mutual beliefs concerning the salient features of the context, common language and mutually recognisable illocutionary intentions (relating to the communicative effect of an utterance; Habermas, 1984; Tuomela, 2002) or put simply that every person in a communicative activity is presumed to be competent to speak and act. TCA distinguishes between two types of human action based on different rationalities: Strategic action and communicative action. Strategic action coordinates interaction by force or influence while communicative action coordinates social interaction via dialogue and consent (Habermas, 1984).

A number of scholars have shown that Habermas's Theory of Communicative Action can be applied to education (Alkutich, 2015; Ärlestig, 2008; Garland, 2008; Han, 2002; Kemmis, 1998; Khan, 2009; Mabovula, 2010; Rasmussen, 2007; Salleh & Tan, 2008; Terry, 1997). These authors posit that all education processes can, in one way or the other, be explained as communicative interactions; for example, between teachers and learners, headteachers and teachers, inspectors and teachers. The ultimate goal of the communicative interactions is working towards achieving good education outcomes in a participative manner through commitment and harmonisation of plans of action. This is critical in a hierarchical education system, in the Western and Northern Regions of Uganda, where exertion of power must be reciprocated with obedience, providing no opportunity for arguments and counter-arguments.

As applied to this study, TCA holds that inspectors can only be considered as change agents when their interactions with stakeholders are coordinated through a medium of language and practical discourse on a plan of action for improvement; thereby modifying the way stakeholders think and act.

In adopting TCA, however, the authors are aware of its limitations. TCA requires individuals to have a defendable rationale for their goals and values, mutual agreement and proximity in space and rank for validity claims to be assessed, a task not very easy to achieve (Rienstra & Hook, 2006). TCA, however, pays special attention to inspection techniques, methods and styles that are appropriate to effectively and efficiently guide the teachers in improving their pedagogical skills and competencies, hence promoting continuous professional growth and development. In agreement with Rasmussen (2007),

modern trends towards 'scientific' methods and technologies in education increase the importance of theories like TCA, because such theories can help in pinpointing the risks and identifying the resources for meaningful education.

4 Methodology

Pragmatism, where researchers use methods that provide the best answers to research questions (Creswell, 2009), was adopted as the philosophical underpinning of the study. To investigate the problem, the study employed the Concurrent Triangulation Mixed Methods Design in which both quantitative and qualitative data were collected roughly at the same point in time but analysed separately. A sample of 399 participants consisting of teachers, headteachers, deputy headteachers and inspectors were randomly selected from an accessible population of 2673 in secondary schools in Buliisa, Masindi, Kyenjojo and Kasese districts.

The study used a questionnaire and an interview guide as data collection instruments. The questionnaire had 60 items: 40 measuring inspection practices and 20 measuring pedagogy on a Five-point Likert Scale. The interview guide explored specific changes participants had observed in the teaching-learning process as a result of inspection. The instruments were tested for validity and reliability and found to have high content validity and high internal consistency.

Data from the questionnaire were analysed descriptively (using frequencies) and inferentially (using Linear Regression Analysis). Interview data were analysed using Narrative Analysis.

5 Findings

The study examined the influence of secondary school inspection practices on pedagogy. In this section, data are summarised and explanations about the meaning of the data are presented. The analysis of the quantitative data was integrated with that of the qualitative data into a coherent whole. The assumption that: *Secondary school inspection practices do not influence pedagogy in Western Uganda* was tested.

The study findings, derived from an Unpublished PhD thesis (Bagaya, 2019), shows that only 10% of the items relating to the influence of inspection practices on the preparation of departmental schemes of work (with 48% disagreeing) and enhancement of teacher's mastery of the subject matter and

pedagogical skills (with 45.3% disagreeing), were more negatively perceived by the respondents. The other 90% of the items were more positively perceived. For example, 62.6% of the respondents reported that as a result of inspection, teachers consistently prepared schemes of work and lesson plans while 77.4% of them indicated that school inspection had an influence on the way teachers planned lessons. In addition, the majority of the respondents (66.8%) were of the view that DES inspection had enabled teachers to stimulate interest in topics by emphasising their rationale at planning phase and 70.0% indicated that DES inspection had made teachers more creative in the way they planned lessons. Furthermore, a significant number of respondents (74.0%) reported that inspection had empowered teachers to provide opportunities for learners' interaction and discussion while 72.7% of the respondents felt that inspection facilitated teachers in using more of learner-centred teaching methods. In addition, 73.2% of the respondents indicated that inspection had empowered teachers to regularly conduct self-evaluation of their lessons, and 73.4% of them reported that inspection resulted in learners' work being displayed in classes to foster incidental learning. These findings suggest that inspection practices positively influenced pedagogy in the sampled schools. However, the extent to which the influence is sustainable in the long run needs to be determined.

Based on a Simple Linear Regression Analysis, the study found that a statistically significant proportion of the total variation in pedagogy was predicted by inspection practices, $F(1, 375) = 81.932$, $p < .05$; and that inspection practices account for approximately 17.9% of the variance in pedagogy among the sampled individuals. According to Cohen (1988), this suggests a moderate influence effect size, implying that, on the average, inspection positively influences pedagogy, affirming the predictive power of inspection practices on pedagogy.

To further support the quantitative data and to delve more in-depth into the perceptions of participants, six teachers, eight headteachers, five deputy headteachers and three inspectors were interviewed. The participants were asked to describe the changes they had observed in the teaching-learning process as a result of inspection. The majority of the participants were of the view that pedagogy improved as a result of inspection. One teacher summarised his experiences as follows:

> We have involved the science teachers mainly in Physics, Chemistry, Biology and Mathematics and really the discussions we had with them after post-mortem of the lesson has made us realise the gaps because it is group teaching. The gaps have really helped the teachers to narrow down and see that there has been a very big mismatch in how the conducting of lessons is. It has improved. It is trying to shape.

Headteachers made similar observations as indicated in the following statements:

> One thing I have observed previously was that it was teacher-centred but now it is student centred. Actually, you would find the teacher on the chalkboard talking alone without involving the learners; but now because there is inspection coming in, there is a guided discovery method, there is group discussion … Even the other thing is the notes the students are getting are generated from themselves and then a teacher modifies, and that has really improved mastery.

Another headteacher added that:

> As a result of inspection, actually this concerns mainly with confidence, self-esteem about the teachers. There are some teachers who cannot deliver when somebody is behind. But through this inspection, they tell you it is not for marking you but it's just for improving your delivery.

In agreement with the teacher and headteachers, one inspector indicated that:

> When you look at the teaching-learning process, at least the teaching approaches have changed a bit whereby teachers are trying to involve the learners in their lessons, although some teachers still have that element of lecturing to the students. But there is some slight change taking place.

Participants were further asked to mention the factors that hindered teachers in bringing about improvement after inspection. The most predominant factors were perception of inspection as fault finding, lack of follow up visits and inadequate resources. Participants, for example, stated that: 'I don't think they have assigned enough money to sincerely have these inspections followed up regularly' and 'others do more or less of fault-finding'. Talking about the quality of inspection, another inspector noted that:

> then also may be the time spent in schools can also be a challenge because when you look at the kind of work we are doing today, people look at numbers which affects the quality of the work which we do.

In addition, fear of inspection, resistance to change and window dressing were reported as the most contributing factors inhibiting improvement after

inspection. One headteacher, for example, indicated that: 'there are some teachers who are not ready to change'. Another participant indicated that:

> One challenge I have seen is that there are some inspectors, first of all when they come, they begin threatening; we are going to summon you … You know when they talk of summoning you all the time, I think it is not helpful, it is a weakness. It brings that kind of a mind-set that really this man has come to finish me.

Another headteacher summed up the factor of window dressing as affecting the effectiveness of inspection as follows:

> People do not act in the way they normally act. So, the arrival of the inspector elicits a very unnatural response and it gives a bad, a wrong, not a true picture because people are trying to impress or to hide.

The qualitative data supported the quantitative results that there is a statistically significant positive, though moderate, influence of inspection practices on pedagogy. The findings on the factors affecting the effectiveness of inspection support and reinforce the result that inspection in secondary schools in Western Uganda has a moderate influence on pedagogy. There were several instances of agreement between the data sets, and for many, qualitative data helped to explain findings in the quantitative data and offers a basis for deeper understanding.

6 Discussion

This section provides a critical discussion of the findings and analyses, when set against the existing literature and in light of the research assumption relating to secondary school inspection practices and their influence on pedagogy.

The researchers investigated the influence of inspection practices on pedagogy. The effects of inspection practices on pedagogy have not been adequately investigated in middle- and low-income countries' inspection contexts. The researcher assumed that inspection would not lead to pedagogical improvement. The study revealed that inspection practices appear to have a statistically significant influence on pedagogy. The finding that inspection practices influence pedagogy is supported by the observation that 17.9% of the variance in pedagogy is explained by inspection practices, implying a moderate influence, albeit with some negative effects.

Evidence of the possible relationship between inspection and pedagogy comes from a number of empirical studies (Aldaihani, 2017; Amadi & Solomon, 2018; Ehren et al., 2013; Esia-Donkoh & Ofosu-dwamena, 2014; Gustafsson, 2014; Jones & Tymms, 2014; Kemethofer et al., 2017; Matete, 2009; Penninckx et al., 2015; Tesfaw & Hofman, 2014; Usman, 2015), which concluded that inspection has an impact on school improvement through various mechanisms. Results of the present study, therefore, add to the evidence on the value of school inspection. Without effective school inspection, it is hard to imagine that schools would independently plan improvement initiatives. As evidence from this study suggests, inspection can be an effective mechanism of informing school improvement planning. The negative effects of inspection were a surprise that emerged from the qualitative data. Participants reported negative effects such as window dressing, fear, distraction of school programmes and stress. Exploring the negative effects of the inspection was not one of the research questions of the study but is worth exploring. These findings are consistent with prior research which indicated that inspection results in unintended negative effects. For example, inspection led to unintended strategic behaviour (Penninckx, 2017; Penninckx et al., 2016; Perryman, 2009), distraction of normal school life (Penninckx, 2017), stress (Penninckx, 2017; Penninckx et al., 2016; Scanlon, 2001), discouraging new teaching methods and narrowing of the curriculum (Altrichter & Kemethofer, 2015; Ehren et al., 2015; Jones et al., 2017). The data collected supported these themes as they were manifested in quotations from interviews and responses from the survey.

The perception of inspection leading to both positive and negative effects may be attributed to several factors, all of which are implicitly mentioned by the participants in their responses to interview questions. These factors are feedback mechanisms and capacity building (Ehren, 2016).

First, the feedback delivery mechanisms are likely to determine whether or not the inspection will result in pedagogical improvement. Research shows that good feedback improves teaching practices (Ehren et al., 2013; Ehren et al., 2017; Gustafsson, 2014; Jones & Tymms, 2014; Klerks, 2012; Macharia & Kiruma, 2014; Mwaniki, Njuguna, & Itegi, 2018; Penninckx, 2017; Quintelier et al., 2018; Tesfaw & Hofman, 2014). These scholars suggest that delivery of clear, timely and useful feedback that identifies areas of growth and guides continuous professional development is likely to improve practices. For any feedback to be effective and therefore acceptable, the inspector must be considered credible in the eyes of the teachers and other stakeholders, and trusted, he/she must give it in an interactive manner, provide actionable information, timely, offer alternatives, and continuing support (Ali & Al-Adawi, 2013; Brookhart, 2008;

Butty et al., 2015; EducationFirst, 2015; Hattie & Timperley, 2007; Jones, 2005; McFadzien, 2015; Shute, 2008; Stuhlman et al., 2012).

The finding that the participants perceived negatively the reporting of inspection results lends itself to ineffective feedback mechanisms in secondary schools in Western Uganda, which probably could partially account for the established moderate, though significant, influence of inspection on pedagogy. As reported in the qualitative findings, the duration of the inspection was very short. This means that the lack of time, and perhaps skills, did not allow for more interactive and effective feedback sessions. One would therefore question whether inspectors in Uganda are adequately trained to provide effective feedback or it is the problem of inadequate duration of the inspection reported in this study. A number of scholars have shown that training of feedback providers has a potential to significantly improve the quality of feedback received by the teachers (Dobbelaer et al., 2013; Ehren et al., 2017; Jones, 2005; Nasatir, 2016; Park et al., 2014).

In light of this research and with specific reference to feedback mechanisms, the findings and arguments therein seem to support the application of Habermas TCA at a micro-level within the school system. Explaining feedback using TCA seems to be well founded since feedback itself is essentially a communication (speech acts) through which the inspector seeks to establish a common understanding with the teachers. From this study, drawing from Habermas' concepts of communicative action and strategic action, inspectors in secondary schools in Western Uganda appear to influence teacher actions using feedback in a forceful or strategic way, steered by power and manifested in traditions, by-laws, and state apparatus. As a result, this attempt seems to be unsuccessful as revealed by the study. This is of course not necessarily a conscious practice of inspectors; it may be seen as a result of the institutional environment in which the inspection system operates.

The second possible explanation for the findings concerns the capacity of the inspectors and/or teachers to design and implement Continuing Professional Development courses to address the training needs identified in the inspection reports. Research shows that effective school inspection identifies training needs of the staff (Egbo, 2011; Ehren, 2016; Sağır, 2014) and builds the capacity of schools to enhance efficiency, resourcefulness and competence of teachers (Ali, 1998; DeMonte, 2013; Komba & Nkumbi, 2008; Sağır, 2014; Warner, 2018).

The available evidence from this study, however, points to challenges with capacity building in secondary schools in Western Uganda. As earlier reported, participants were concerned about the limited contact time between inspectors

and teachers, quality of inspection reports and feedback, and competence of inspectors in all subject areas. These factors have a bearing on the capacity of inspectors to contribute to teacher professional development and/ or raising motivation levels of teachers to bring about changes in classroom teaching practices. If there is limited contact time between the inspectors and teachers, chances are high that inspectors will not be in position to identify and determine the type of capacity that needs to be built in teachers. This probably explains why feedback to the teachers was limited to providing the strengths, weaknesses and improvement areas without recommending interventions for improvement in a way of developing targeted professional development programmes focusing on specific needs. For inspectors to be change agents, they should have a deeper conceptual understanding of the content that teachers are expected to teach. This can only be effectively done if the subject specific mode of inspection is strengthened, enriching teachers' content knowledge and pedagogical methods in subject areas.

An effective capacity building programme, however, demands that the necessary resources are made available. Both research and anecdotal evidence reveal that school inspection systems world over, Uganda inclusive, are riddled with inadequate resources to promote effective pedagogy. This was reported by the participants in this study as factors affecting the effectiveness of the Ugandan school inspection system. With the knowledge that resources will never be enough, inspectors are encouraged to re-examine their mandates and methods of work to fit within the available resource envelope while remaining effective. It may, therefore, help to target the limited resources where there is the most need.

7 Conclusion and Implications

The study investigated the influence of inspection practices on pedagogy in secondary schools in Western Uganda. This was in relation to the dearth of studies on the influence of inspection in middle- and low-income countries. The study specifically sought to examine how inspection practices influence pedagogy. The study revealed that inspection practices had a moderate influence on pedagogy. Given the findings and the discussions thereof, this study concludes that inspection, in practice, has only contributed minimally to improving instruction and therefore pedagogical practices in secondary schools in Uganda. The positive effects of inspection on pedagogy are neither comprehensive nor do they seem sustainable in the long run. Inspectors' authority seems to lie with their accountability functions and not pedagogical functions, which is likely to

be driven internally by the teachers and headteachers. Inspection alone, therefore, cannot claim to lead to pedagogical improvement. The responsibility for instructional improvement lies with the actors at the school level, with inspectors only acting as catalysts or triggers for action.

The theoretical lens for the study was the TCA to support the explanation of the assumed relationship between inspection practices and pedagogy. TCA has been found to be a compelling theory for developing and understanding educational processes as communicative actions (Alkutich, 2015; Ärlestig, 2008; Garland, 2008; Han, 2002; Kemmis, 1998; Khan, 2009; Mabovula, 2010; Rasmussen, 2007; Salleh & Tan, 2008; Terry, 1997). Hence, the study's argument that inspectors' interactions need to be coordinated not through power but medium of language and practical discourse reinforces TCA. The study, therefore, makes a theoretical contribution by explaining the process by which inspection influences pedagogical practices, addressing calls to understand how TCA can be used in school improvement measures through inspection.

To address the side effects of inspection, reported in the study findings as fear, perception of inspection as fault finding, and window dressing, school inspectors need to rethink their inspection practices from its control nature to a collaborative approach. The collaborative approach calls for rational dialogue and coordinated action; before, during and after inspection. In addition, the power dynamics between inspectors and teachers need to be balanced for meaningful feedback, action plans and change.

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CHAPTER 7

Educational Leadership Styles and Quality of Primary Education in Gulu City, Northern Uganda

Stephen Odama, Agatha Alidri, Charles Nelson Okumu and Iben Jensen

Abstract

Education in a post-conflict zone is a critical and challenging undertaking. The negative impacts of conflict on the teaching learning process of the child include no psychological balance, unconducive environment, violence and antisocial practices. This explains why schools in post-conflict region like Gulu City have registered low quality education – low literacy and numeracy rates, and low grades in Primary Leaving Examinations. Effectively addressing these challenges requires applying good school leadership styles as proposed by behavioural Leadership Theory. This research investigated the leadership styles applied by the headteachers in Primary Schools in Gulu City. A cross-sectional design was employed using interviews and focus group discussion methods of data collection. Qualitative (textual and visual analyses) was used to analyse data from interviews, and summative thematic content analysis was used to analyse data collected through focus group discussions. The findings revealed that headteachers applied empathetic, transformational, dictatorial, and laissez-faire leadership styles. Empathetic and transformational leadership styles had a significant influence on the performance levels of the different schools and were recommended for headteachers in schools in northern Uganda.

Keywords

behavioural leadership theory – emphatic – transformational – leadership style – primary schools – Gulu City – northern Uganda

1 Introduction

Education in a post-conflict zone is a critical and challenging undertaking (Dasgupta, 2024). The negative impacts of conflict on the learning process of the child include no psychological balance in teaching learning process.

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The environment becomes unconducive, some children are introduced to violence and antisocial practices, while some of them involuntarily assume tendencies of early adulthood (Tarpeh, 2013). This is true for Gulu City and northern Uganda at large because the region had had a two decades of insurgency (1986 to 2006). Normal teaching learning process was disrupted by the war leading to the fall of the quality of education in primary schools in Gulu City.

Effectively addressing these challenges requires a comprehensive and collaborative approach involving local communities, governments, NGOs, and international organisations to rebuild and transform education in post-conflict zones. This calls for school leaders who can exert strong influence on student learning and achievement through their ability to impact the types of organisational school features necessary for high-quality teaching and learning (Hitt & Tucker, 2016; Leithwood et al., 2020; Leithwood et al., 2010; Robinson et al., 2008; Supovitz et al., 2010). Gurr et al. (2007) observed that headteachers who made contributions to schools, particularly in the areas of capacity building and teaching and learning, their characteristics and qualities showed a common and consistent set of personal traits, behaviours, values and beliefs, such as honesty and openness, highly developed communication skills, flexibility, commitment, passion, empathy with others, sense of innate goodness, support of equity and social justice, a belief that all children are important and can succeed, being other-centred, high expectations and belief that schools can make a difference. Thus, there was need to investigate leadership styles applied by the headteachers of primary schools in Gulu City especially when northern Uganda is recovering from the two decades (1986–2006) of the Lord Resistance Army (LRA) War of Joseph Kony.

1.1 *Background*

The Government of Uganda has made considerable progress in improving the well-being of its children. Uganda adopted the Dakar Framework of Action (2000) - "Education for All" in 1996 and became the first country in Africa to institute Universal Primary Education (UPE), an action the Government of Uganda should be commended for because access to education is a human right and as such should be available to all (Heninger et al., 2005). This increased school enrolment dramatically from less than 3 million in 1997 to 6.8 million in 2003, rising to about 7.4 million in 2004. The figure has then stabilised at about 7.2 million in 2005, as the problem over age learners has been contained. Enrolment in primary schools in Uganda by 2017/2018 financial year was now 8,841,000 (3,978,450/45%) girls and 3,951,927/55%) boys. Enrolment grew by 17% from 2007/2008 to 2017/2018. In our pilot schools in Gulu City, the record

showed that 3,299 (1449 boys and 1850 girls) enrolled in the four schools. All the four schools were UPE and Government aided primary schools.

Quality of education remains a challenge in schools despite government efforts as reflected in low literacy and numeracy rates, poor performances in Primary Leaving Examinations (PLE), high dropout rates. Public schools such as the primary schools including those in Gulu City in northern Uganda are facing an increasingly competitive and dynamic educational environment, as well as numerous challenges, such as a general public demanding for quality education in terms of the number of passes of candidates in grade one. The UNEB's results of PLE 2023 released on 26th January, 2024 ranked the schools based on percentages of candidates passing in Grade 1. It revealed that only 85 (4.5%) schools from northern Uganda out of 1904 schools were able to pass candidates in Grade one. This implies that there were many schools in northern Uganda whose children did not manage to score Grade one. When the UPE schools were ranked by UNEB according to the number of candidates they passed in Grade 1, only 58 (4.2%) schools out of 1397 UPE schools from northern Uganda managed to pass candidates in Grade 1 (New Vision, 26/1/2024). Among the 176 best districts and municipalities ranked based on aggregates, majority of the districts and municipalities from northern Uganda fell between serial numbers 91 to 176 with aggregate ranging from 23.6 to 29.4 (New Vision, 26/1/2024). This implies that most of the candidates from schools in northern Uganda cannot access schools from central Uganda whose cut off points range from aggregate 4 to aggregate 6. In the same ranking of the best 15 schools in each district and the cities in Uganda, the aggregates ranged from 7.0 in Lira City to 32.8 in Nakapiripirit (New Vision, 26/1/2024). Oluka (2024) revealed that out of the 15 schools where highest number of candidates scored aggregate 4 only one school was from northern Uganda. Even the previous results in 2019 and 2020 respectively revealed that all the 5 schools that had the highest numbers of candidates with aggregate 4 were all from central Uganda.

A number of policy strategies were set and implemented by the Ministry of Education and Sports to ensure provision of quality education for all. For instance, The Education Service Act of 2002 from which the Legal Notice No. 11, Part VI, Sections (1) and (2) stated that the headteacher is bound by the Code and is expected to set a good example in the strict observance of all provisions of the Code. For instance, by the Code, the teacher is expected to: Prepare schemes of work, lessons, instructional materials, teach all lessons as per the timetable, assess learners, mark the tests and give feedback to the learners. The teacher is further expected to show good morals and values, be obedient to rules and regulations. The headteacher is expected to enforce the observance of the Code by all teachers under him or her in accordance with laws,

regulations and provisions relating to the education service and shall promptly deal with all breaches of the code. In Section 3 (a) the headteacher is expected to be the custodian of good educational standards in his or her school and shall aim at high education standards through support supervision and encouraging continuous professional development of the teachers.

1.2 *Statement of the Research Problem*

The problems of low quality of education as reflected in low literacy and numeracy rates, poor performances in PLE, high dropout rates are observed in the schools in Gulu City (UNEB results 2017–2020; UWEZO, 2016, NAPE, 2016). Researchers have observed that school leaders can exert strong influence on student learning and achievement through their ability to impact the types of organisational school features necessary for high-quality teaching and learning. They further observed that headteachers who had made contributions to schools, particularly in the areas of capacity building and teaching and learning, had characteristics and qualities such as honesty and openness, highly developed communication skills, flexibility, commitment, passion, empathy with others, sense of innate goodness, support of equity and social justice, a belief that all children are important and can succeed, being other-centred, high expectations and belief that schools can make a difference (Gurr et al., 2007).

The particular situation in northern Uganda and the relatively low levels of literacy and numeracy achievement and poor performance in PLE calls for research into good leadership. This chapter examines the leadership styles of head teachers at primary schools in Gulu City: *How do head teachers at primary schools in Gulu City practice leadership and how can leadership style enable them to transform primary education?* The research focuses on the headteachers' ability to create and sustain an enabling school environment through stakeholder involvement; their efforts to work with teachers, parents and learners; their efforts to continuously improve teachers' teaching skills; and, to provide adequate support to reduce teacher absenteeism as a multi-level problem – absenteeism from school, absenteeism from the classroom, absenteeism from teaching.

2 Theoretical Framework

This research was guided by Behavioural Leadership Theory that was used by Lewin et al. (1939). He identified three core leadership styles, namely, *Authoritarian* (autocratic), *Participative* (democratic) and *Delegative* (laissez faire).

Cherry (2006) has further elaborated this, and suggest four leadership styles as below:

Autocratic leadership, also known as authoritarian leadership, is a leadership style characterized by individual control over all decisions and little input from group members. Autocratic leaders typically make choices based on their own ideas and judgments and rarely accept advice from followers. Autocratic leadership involves absolute, authoritarian control over a group. Characteristics of Autocratic leadership include little or no input from group members; group members are rarely trusted with decision or important tasks and group leaders dictate all the work methods and processes.

Democratic leadership, also known as participative leadership, is a type of leadership style in which members of the group take a more participative role in the decision-making process. Researchers have found that this learning style is usually one of the most effective and lead to higher productivity, better contributions from group members, and increased group morale. Democratic leadership can produce high quality and high quantity work for long periods of time. Many employees like the trust they receive and respond with cooperation, team spirit, and high morale. Characteristics of Democratic leadership include group members are encouraged to share ideas and opinions, even though the leader retains the final say over decisions. Members of the group feel more engaged in the process. Creativity is encouraged and rewarded. Typically, the democratic leader develops plans to help employees evaluate their own performance; allows employees to establish goals; encourages employees to grow on the job and be promoted; recognizes and encourages achievement.

Laissez-faire leadership, also known as delegative leadership, is a type of leadership style in which leaders are hands-off and allow group members to make the decisions. Researchers have found that this is generally the leadership style that leads to the lowest productivity among group members. Laissez-faire leadership is characterized by very little guidance from leaders; complete freedom for followers to make decisions; leaders provide the tools and resources needed; and group members are expected to solve problems on their own.

Bureaucratic leadership is where the manager manages 'by the book.' Everything must be done according to procedure or policy. If it isn't covered by the book, the manager refers to the next level above him or her. This manager is more of a police officer than a leader. He or she enforces the rules.

The Behavioural Leadership Theory focusses on leaders' behaviours and actions and assumes that the traits of leaders can be copied by other leaders. That the best predictor of leadership success is viewing how a leader acts. Patterns of behaviour are observed and categorised as styles of leadership.

The Behavioural Leadership Theory was adopted because it was assumed that it is the behaviour of the leader – the school headteacher – that would influence those with whom he or she works. In an Ugandan context this is the School Management Committee (SMC) including: Political Leadership, Parents Teachers Association (PTA) executives, Teachers, Non-teaching staff and the pupils. The primary school headteacher is expected to administer, control and coordinate the activities of the school in unison with his/her deputy, SMC, PTA executives, while being supported by his followers – the teachers, non-teaching staff and pupils-especially, the prefects. It is assumed that the success of the school will depend on the effective mobilisation of the stakeholders to carry out their roles effectively.

Traditionally, Democratic, Participatory and Transformative leadership styles facilitate the transformation of education. The headteachers of schools can make their followers owe whatever activity takes place in the school, because the decisions were taken with their involvement. According to Dulewicz and Higgs (2005), a headteacher should influence a group of individuals to achieve a common goal, while Opoku et al. (2015) and Northouse (2010) said leadership influences direction and vision occurring of an organisation through the relationships between leaders and followers. Northouse (2010) on the other hand said leadership goes beyond the leader's selfish short-term interests but contributes to the long-term performance of the whole group. According to van de Grift (2006), Educational leadership should stimulate, support and supervise teachers, so that the latter may execute their tasks as well and as effectively as possible. Ross and Gray (2006) in their findings held school heads accountable for students' achievements. They hypothesised that Principals contribute to student achievement indirectly through teacher commitment and beliefs about their collective capacity. Opoku et al. (2015) referring to Toor and Ofori (2006); Nicolaou-Smokoviti (2004) describes leadership style as a combined outcome of leader's self-related cognitive information, personality traits, primary motives and thoughts on operating situational variables; a stable mode of behaviour that a leader uses in his/her effort to increase his/her influence, which constitutes the essence of leadership.

In the literature review, transformative leadership was one of the focus area. Transformational leadership stresses the following factors:

> Building school vision and goals, providing intellectual stimulation, offering individualized support, modelling professional practices and values, demonstrating high performance expectations, and developing structures to foster participation in school decisions. (Urick & Bowers, 2014)

Transformative school leadership connects leaders to teachers within continual improvement processes so that combined efforts result in a collective efficacy and a positive school trajectory, with teachers motivated to look past their individual interests and invest in the success of the school (Leithwood & Sun, 2012). Further, integrated model was echoed in research by Marks and Printy (2003), who noted that integrated leadership, which stresses the importance of both instructional and transformational principal competencies, was found in schools with higher teaching quality and achievement. Integrated leadership

> acknowledges that a solid, results focused management approach must be in place before, or at least simultaneously to, expecting teachers to engage in transcendental and transformative work. (Hitt & Tucker, 2016)

2.1 *Assessing the Quality of Education during Post-Conflict in Selected Primary Schools in Gulu City*

Problems of low quality of education as reflected in low literacy and numeracy rates, poor performances in PLE, were observed in the schools in Gulu District (Uwezo Uganda, 2014, 2016, 2021; Ministry of Education & Sports, 2019). For instance, by district ranking, Uwezo Uganda (2014) ranked Gulu as having a competence level of (27%) in numeracy and ranked the 19th in the country. Ministry of Education & Sports (2019) revealed that according to the analyses by Uwezo Uganda (2016), northern Uganda where Gulu is falls among the 20 bottom districts with Primary 3 – Primary 7 pupils who could read a primary 2 level English story and do Primary 2 level divisions where competence in English literacy is approximately 23% while the competence in numeracy is approximately 43%. Lastly, Uwezo Uganda (2021) that used Kitgum district as a sample district in Acoli Sub-region where Gulu district is. The sample district was ranked number 27 where the competence level was 18.5%. These low literacy and numeracy levels have reflected themselves in poor PLE performances.

3 Methodology

3.1 *Research Design*

The study used a cross-sectional design while employing a collaborative research method that involved four primary schools within the catchment area of Gulu University. It was research that arose out of the expressed need

to contribute to the development of primary education in northern Uganda by providing insights into the leadership styles among headteachers in the school. It involved engaging with stakeholders in education to enhance the utility of research. The researchers were teacher trainers from Gulu University and a Professor from Aalborg University. Participants were members of School Management Committees (SMC), Parents, Teachers Association (PTA) executive members, headteachers and their deputies, senior female and male teachers, non-teaching staff and selected pupils. These were the persons who work hand in hand with the headteachers to manage the schools through planning, and management of the schools. The City Education Officer, and Inspectors of Education, Gulu City were required to provide some necessary information.

This research used mixed methods of research using both qualitative and quantitative measures. The respondents' opinions, feelings and experiences with the leadership styles of the headteachers were sought. This was done through interviews, focus group discussions, observations and group discussions during workshops to allow more diverse group of participants to provide a wider range of ideas. The data were continually used, categorized and refined to inform theory. The areas categorised included: school attendance by students and teachers; meeting attendance by teachers and parents; parents paying for the cost of education process of their children; participation by teachers, learners and others in school activities; headteachers' involvement of all stakeholders in the management and administration of the school; headteachers' leadership style. Observations were made from notice boards, files and notices in headteachers' offices and staffrooms.

The data collection traces back to 2019 in a period the researcher would call post-conflict period. The year 2006 was when Acholi sub-region where Gulu City started to feel peace after two decades of insurgency.

3.2 *Sampling Techniques*

Four primary schools were selected purposefully as they are the primary schools around Gulu University, and it's therefor convenient and obvious for Gulu University to work closely with these schools. Secondly, these are the primary schools that feed the secondary schools around Gulu University that prepare students to join Gulu University. From a sampling perspective the schools are different (see later), and therefor provide insights into a variation of schools.

The SMC Members, PTA Executives, Headteachers and their deputies, senior female and male teachers were selected purposively because they are the stakeholders that run the school and their numbers are few. Teachers, non-teaching staff and the pupils were selected by using the formular suggested by Krejcie and Morgan (1970) to get the representative sample and later by using stratified

random sampling technique to get the male and female, boys and girls and. This was because of their large numbers such that only a sample of them were chosen to participate in the research.

3.3 *Target Population*

The target population for this study were SMC Members, PTA Executives, headteachers and their deputies, senior female and male teachers, teachers, non-teaching staff and the pupils from the four pilot primary schools. Their perspectives and opinions on the leadership styles of their leaders were helpful to evaluate and assess the qualities of the leaders in the primary schools (Table 7.1).

3.4 *Accessible Population*

This study used 13 SMC members, 13 PTA executives, 4 headteachers and their 4 deputies, senior females (4) and male teachers (4), teachers (8), non-teaching staff (4) and 341 pupils from four primary schools in Gulu municipality, namely, School A, School B, School C, School D. The accessible population size for this study was 425 (305 males, 120 females).

3.5 *Data Collection Techniques*

Semi-structured interviews were carried out with headteachers and their deputies, senior female and male teachers, teachers, non-teaching staff and

TABLE 7.1 Target population and actual participants in the data collection

S. No.	Stakeholders	Total population	Number participated
1	Headteachers	4	4
2	Deputy Headteachers	4	4
3	Teachers of P3, P4	8	8
4	Pupils	3299	346
5	Senior Female Teachers	4	4
6	Senior Male Teachers	4	4
7	SMC Members	36	13
8	PTA Executives	44	13
9	Parents	5 Representatives per School	25
10	Non-teaching Staff	35	4
	Total		**425**

the pupils while focus group discussions were held with SMC, PTA executives during school visits. These are stakeholders who manage the school and who are being managed and therefore their perspectives and opinions on the leadership styles applied were explored through interview. They acted as evaluators of the performances of the headteachers and their deputies. While in the school, observations were done. The headteachers and their deputies were also being asked to give their side of the coin. This helped to answer the doubts about the results of a research analysed through a qualitative method that it creates a self-fulfilling prophecy stemming from expectancy-based information processing (Antonakis et al., 2003; Fiske, 1995). This process helped in special controls and triangulations to ensure that results converged from different categories of stakeholders (Antonakis et al., 2003). The interviews lasted between 45 minutes to one hour, they were held in confidentiality and responses were recorded with the participants' permission.

One day workshop was held for the parents' representatives with two presentations. These presentations were meant to open the minds of the parents to know their roles in the process of providing education for their children. Parents were then divided into groups to discuss in groups on certain issues concerning parents' meetings, class meetings, fees payment, gender sensitivity of the school administration and how they would describe their headteachers' leadership style.

3.6 *Data Analysis*

Preliminary visits were made to these primary schools (2017), to discuss with the headteachers and their deputies the poor performances and generally poor quality of education in their schools. They acknowledged and attributed the poor-quality education to challenges like poor attitudes of parents, lack of necessary scholastic materials, poor teacher attitudes leading to teacher absentees and poor children's disciplines. These challenges were confirmed by the SMC members, PTA executives, teachers and pupils during a sensitisation workshop organised by Faculty of Education and Humanities, Gulu University in conjunction with Building Stronger Universities (BSU). However, the issue of leadership styles contributing to the poor-quality education did not feature out prominently during the two occasions, thus, leaving a gap that this research will help to bridge.

The study used qualitative (textual and visual analyses) research approach to analyse the data from interviews, while the data collected through focus group discussions were analysed through summative thematic content analysis.

Inductive approach was used to identify the recommended leadership styles that the headteachers of primary schools in northern Uganda might apply to

improve academic performances in their schools. This was based on information collected from the stakeholders of the primary schools in Gulu City.

4 Key Findings

4.1 *Quality of Education*

The findings on quality of education revealed that there was low quality of education in Gulu City schools. The indicators of the quality of education were based on the levels of competency in; literacy, numeracy and PLE results. Generally, the performance was poor in all the schools with differences as indicated in Tables 7.2a and 7.2b)

From Table 7.2a based on the number of candidates who passed in Grade one, School C had the best performance in PLE examinations during the years 2017 to 2020, followed by School D. School B had the worst performance.

From Table 7.2b, performances in both numeracy and literacy levels in school C are the best, followed by Schools D, A and B respectively.

TABLE 7.2a Primary leaving examination results 2017–2020 in selected schools in Gulu City

School	Year	2017						2018					
	Grades	1	2	3	4	U	X	1	2	3	4	U	X
A		5	69	4	0	0	0	10	52	6	0	0	0
B		0	44	15	17	2	2	4	42	8	1	0	2
C		19	83	8	2	0	1	29	69	5	3	0	1
D		11	34	01	0	0	0	22	20	0	0	0	0

School	Year	2019						2020					
	Grades	1	2	3	4	U	X	1	2	3	4	U	X
A		2	88	14	1	0	0	3	76	10	0	0	2
B		0	29	9	3	0	0	0	33	16	5	0	1
C		24	81	3	3	0	0	28	104	5	3	4	1
D		7	40	01	0	0	2	15	28	0	0	0	1

TABLE 7.2b Numeracy and literacy levels in selected schools in Gulu City

School	Numeracy				Literacy			
	Fair	Good	Very good	Excellent	Fair	Good	Very good	Excellent
A	Fair in lower levels	Good in upper levels			Fair			
B	Fair				Fair			
C		Good				Good		
D		Good				Good		

4.2 *Students Attending School*

Another area investigated was students attending school and was found out that pupil's attendance in Schools A and C were the best (90%) while attendances in Schools B and D were (70% and 75%) respectively as shown in Table 7.3.

However, the headteacher of School C did not report the challenge of girls absenting from school as in Schools A, B, and D. In school A, the headteacher further informed that teachers usually follow up on those pupils who are absent; and parents usually call and inform about sick pupils. According to the headteachers, of Schools A, B and D.

> Usually, the beginning of the term is very hard, especially the 1st two weeks. Usually, the girls in upper classes are absent more, they look after

TABLE 7.3 Pupils' school attendance in selected schools in Gulu City

School	Total number of pupils			Pupils' attendance (%)
		Boys	Girls	
A	1570	910	660	90
B	507	236	271	70
C	948	535	413	90
D	657		657	75

the parents when they are sick. In some cases, they help the mothers with garden work or look after the young ones when the mothers have gone to work.

4.3 *Teachers Attending School and Teachers' Welfare*

The headteachers were asked to state the teachers' attendances and indicate the statuses of the teachers' welfare. The results were as shown on Table 7.4.

In Table 7.4, it is shown that teachers' attendance in all schools were good but was best in School C (95%), while in the rest of the schools, teachers' attendance was (70%). School C had all her teachers on government payroll while School D had the least number of teachers on government payroll (13 teachers out of 30 are on government payroll).

4.4 *Record Keeping Records of Teachers' Attendance and Using It to Enhance Learners' Performances*

Headteachers were asked 'How they kept the records of attendance of Teachers'? They reported that there were Attendance Record Books. The attendance record for teachers was kept by making teachers log-in when reporting to work and log-out after work. After every month the record was analysed and if a teacher was persistently late or absent, the teacher was called and talked to by the deputy headteacher. When asked how do they use the record to enhance students' performance? All the school leaders reported that the school records helped to make teachers be punctual and regularly attend their duties. This in turn helped the teachers teach, which helped to improve performance. The headteacher and her deputy of School C reported that the teachers' attendance record was used to ensure that the syllabus was completed.

On the Teachers' welfare the results were as shown in Table 7.5.

TABLE 7.4 Teachers' school attendance in selected schools in Gulu City

School	Total number of teachers	Sex		Teachers on government pay roll	% of teachers' attendance
		Male	Female		
A	27	17	10	24	70
B	19	9	10	17	70
C	33	12	21	33	95
D	30	21	9	13	70

TABLE 7.5 Teachers' welfare in selected schools in Gulu City

School	Rent for those not accommodated on school compound	Remedial lessons	Inducement	Meals (break tea and lunch)
A	30,000/=	4,000/= per lesson	40,000/= per month	Provided
B	Nill	3,000/= per lesson	25,000/= per month	Provided
C	40,000/=	4,000/= per lesson	40,000/= per month	Provided
D	Nill	1,500/=–2,000/= per lesson	70,000/= per month	Provided

From Table 7.5, it is observed that all schools care for teachers' welfare. Schools A and C pay rent for teachers who are not accommodated in school premises at 30,000/= and 40,000/= respectively per month. Schools also pay for teaching extra lessons where Schools A and C pay highest amount (4,000/=) per lesson, while School D pays least amount 1,500/= to 2,000/= per lesson. Schools also pay inducement to their teachers where School D pays highest amount of 70,000/= followed by Schools C and A who pay 40,000/= each per month. School B pays the least amount 25,000/= per month for inducement. All schools provide meals (tea and lunch) for teachers at their schools.

However, according to the teachers reports, it was only Schools C and D that paid promptly and where there were problems, they were handled transparently. Teachers were made in charge of the process of collecting the funds and paying the teachers. In Schools A and B, the payments were not always promptly paid. In some cases, there were arears of three to six months and no transparency is practiced.

4.5 *Parents Paying School Fees*

The Headteachers were interviewed on parents' paying of school fees. During a workshop, the representatives were also asked on the payment of school fees by the parents.

From the workshops at Schools A, C, and D, participants revealed that the fees included: Development fund; PTA contribution fees; Extra charges;

Church contribution; Co-curricular fees; Remedial lessons; Examination fee; Admissions fee; Medical fees and Bore-hole fee. But in School B, the details were not broken down but rather gave a block amount per section as follows: P1–P5 pay 59,400/=; P6–P7 pay 74,500/=. All the participants except those from School A agreed that they were part of the decision that made the charges and parents were aware of these charges. Stakeholders of School A informed that not all charges were known by the parents.

The stakeholders in School A informed that during the 2019/2020 f.y., parents paid only 80million/= (60.1%) out of the 133million/= budgeted. In School C the headteacher reported that during (2019/2020) only 100,320,000/= (66%) out of 152m/=budgeted was collected. In School D the stakeholders informed that 'Parents pay only 50% of the budgeted fees'. The reports from the stakeholders were confirmed by the headteachers of the schools.

The stakeholders in all schools revealed that parents do not pay the charges willingly because:

> there is poor accountability and poor record keeping; there is poor relationship between the headteacher and the parents; there is poor performance in the PLE thus some parents look at fees as wastage of resources; teachers come late to school, thus there is no proper teaching in the school; there is a report of divide and rule administration.

Thus, there is disaggregation in the school; and some parents are poor and majority are not employees, while some are single parents, especially, women. Some claim they have many children including grandchildren and some of them are single parents. Some mentioned the problem that the budget was not prepared in consultation with parents before being presented in Annual general meetings through the headteachers, 'the budget is presented in AGM that is attended by only 20% to 30% of the parents with positive attitudes who attend the AGM'.

However, the headteachers reported that

> some just have poor attitudes towards the education of children. They think the UPE grant provided by the Government is enough and should cater for all the requirements. They send their children to rural schools where the fees are low.

There was also a lot of interference by politicians who misunderstand the concept of Universal Primary Education being free. Government policy that

does not allow children to be sent home when they do not pay, the municipal education staff when addressing the headteachers, discouraged the headteachers from sending the children home when they don't pay the fees; misinterpretation of UPE policy by the parents and political interference.

Headteacher of School C reported that

> the school tries to involve the PTA chairperson and executives to help sensitise parents to pay school fees and that after one month of reporting to school, children are talked to so that they pay their fees; after two months, the school talks to parents; after which the children are sent home. However, the children are not supposed to be sent home but rather to convince the parents and children to pay the fees.

Thus, there was a proposal to lay strategies to sensitize the parents; where key persons in Municipality to talk to parents; parents (Class Day), meetings to concentrate on lower classes as well rather than on examination classes only; sensitise local council members; set district bylaws; leaders be asked to speak one language; visitation days should begin with parents/teachers meetings; The NGOS and schools should talk to parents; and District Education Ordinances be implemented.

4.6 *Staff Meetings*

When asked about the staff meetings, Schools A, B, and D reported that they hold two staff meetings per term, while school C holds three staff meetings per term plus other consultation meetings when need arises. Attendance of staff meetings in Schools A, B, and D ranges from 70 % to 75%, while staff meeting attendance in School C is 95%. Therefore generally, two to three staff meetings were being held in the schools per term and activities held during the meetings are the same.

4.7 *Involving the Teachers in Economic Planning* (*Distributing Government Money*)

The headteachers were asked how they were involving the teachers in economic planning (distributing the government money). The headteachers revealed various ways through which they involved their teachers, especially, in economic planning and distribution of government money. The ways involved forming a committee of teachers to plan to spend the UPE funds, and in Schools B, C, and D, the committee discussed issues to be discussed in staff meetings. School C went ahead to use the teachers to collect funds for extra lessons and pay the teachers who participated in teaching the extra lessons.

4.8 *Leadership Style*

The representatives of the four schools who attended the workshop were asked to state how involving the headteacher is and how they would describe their headteachers in terms of their leadership styles. The representatives assessed the leadership styles as in Table 7.6.

From Table 7.6, the headteacher of School C was described as having applied a *Democratic, Empathic* and *Transformative* leadership style. The SMC and PTA in their acknowledgement described their headteacher as being a *Transformational, Democratic* (*Empathetic leader*), 'that she was hard working, comes early, and leaves late'. Headteacher gave a report on good cooperation where she appreciated that the SMC raised funds (development funds) to renovate one old classroom buildings. where, newcomers bring a bag of cement. Teachers' inducement is 50,000/= per month; extra lesson is paid 3,000/= or 5,000/= per lesson; lunch is provided in the school all through the effort of the SMC. They agreed that those parents who had no cash could pay informally bringing food materials. Therefore, the headteacher involved the SMC and PTA in economic planning (distributing the government money). With her team they identified problems and set to find solutions together. She was followed by the headteacher of school D whose leadership style was described as *Democratic*. While headteacher of school B was rated as having applied the worst leadership style (*Laissez Faire*) or *Situational*.

4.9 *Staff and Parents Meetings*

The findings revealed that the staff and parents meet during class day meetings that are organised in all the schools. The class day meetings are most regular

TABLE 7.6 Leadership style of headteachers as described by stakeholders

School	Number of participants	Number who described	Leadership style
A	5	5 (100%)	Situational
B	5	3 (60%)	Laissez faire
		2 (40%)	Situational
C	6	4 (66.7%)	Transformational, Democratic
		2 (33.3%)	Empathetic
D	6	6 (100%)	Democratic
Total	**22**		

in Schools C and D where they are organised class by class every term. This implies that the two schools hold seven class day meetings each, every term, while School A holds only four class day meetings in a term; School B holds only three meetings in a term. Attendances of these meetings by parents were best in School C (50%) while in the rest of the schools only 30% of the parents attend. In School C there is effort to enforce the attendance and is proposing for radio talk shows to sensitize the parents. Issues discussed were learners' performances, discipline, and class plans including tours, remedial lessons; parents' and teachers' relationships and importance of parents' contributions to provision of quality education to their children.

4.10 *Sports and Other Activities*

In all schools the children participate in the games and sports. Schools C and D have been able to reach national levels. All schools get UPE grants from the Government to fund extra-curricular activities. However, the funds given by Government are not enough, thus, all schools face challenges of finances. Other activities the learners are involved in include Young Christian Society (YCS), Scripture Union (SU), Girl Guides, Boy Scouts, Environment Club, Health Club, Music Dance and Drama, Debating Club, to mention but a few.

4.11 *Gender Equality/Perspective*

Those from school A reported that the administration was gender balanced: the headteacher was male while deputy headteacher was female; SMC chair was male while the deputy was female. PTA chairperson was female, and the vice chairperson was male. The representatives from School C reported that there was gender biasness because the headteacher was a female, deputy headteacher was a female, the bursar was a female the only highest administrator who was a male was the director of studies. School D representatives reported that their school was gender sensitive. Headteacher was a female while the deputy headteacher was a male. Director of studies was a male; senior woman teacher was a Female.

4.12 *Gender in Relation to the Pupils*

Headteachers and representatives from all schools revealed that the children were treated equally. Children shared responsibility equally without segregation. Cleanliness was done every Monday by both girls and boys even mopping the rooms. However, the girls were given particular attention because of unique problems they face. For instance, they built toilets for them, to avoid sharing with boys. Girls were assisted at the time of their menstrual cycles with pads and have rooms where to bath and change from.

4.13 *Cleaning the School*

All the schools reported that cleaning of the school was done by school employees, but school children were also used to carry out cleaning of the school.

4.14 *Senior Male/Female Teacher*

All schools by Government policy have senior female and male teachers. The female teacher advises the girls and female teachers while the male teachers advise the boys and mate teachers. In most schools it was disclosed that the meetings are two times a term. In all schools they face challenges of negative attitudes and financial challenges.

4.15 *Involvement of Students*

Headteachers revealed that in all schools as guided by Government policy, the children were involved in electing their own prefects and other leaders democratically. In Schools C and D, the children were used further to induct the younger and new children, especially, P1 in boarding schools. Children were also involved in separating the small girls and big girls to make them sleep separately, especially, in boarding cases.

4.16 *Class Day Meetings or Parents Day?*

The headteachers were asked 'When did you last organise class day meetings or parents day?' Findings revealed, class meetings were already organised by Schools C and D only. School A was yet to organise, while school B had no plan yet.

4.17 *SMC/PTA Meetings*

Headteachers were asked if they had SMC/PTA meetings in their schools. In all schools, there were SMC and PTA meetings to help plan for the development of the schools. In all the four schools the bodies were able to meet once a term. But by implication in school C, they meet two times during third term where the two bodies meet. The PTA decides the fees structure and send it to the SMC after it is discussed in PTA annual general meeting. Headteacher of School C observed that they make good plans but are bogged down by poverty, sometimes the school goes to the extent of asking for food items instead of cash, e.g., 10 Kg of posho or 8 Kg of beans is equivalent to 10,000/. This was being innovative and understanding the situation on the ground.

While in School C the two were able to meet, in Schools A, B and D, there was no cooperation between the two bodies. Thus, there was need to sensitise the leaders of SMC and PTA to work together as in school C so that they can lay strategies to lobby parents and help teachers to enable them to teach to fulfil the pressure to get good grades.

4.18 *Internal Supervision*

The school leaders were asked how they carried out internal supervision? It was found that internal supervision was done by the headteacher and his deputy. In Schools C and D the heads of subjects were involved including the director of studies. According to the headteachers of Schools B and C the SMC and PTA were expected to monitor the activities of the school, e.g., how the school begun, how teaching was going on, they were free to enter classes, etc. They guided and counselled teachers, especially, problem teachers. So far three teachers were counselled and guided by the SMC and PTA. However, according to the headteacher of School B they came to school only when facilitated.

4.19 *Induction of P1*

The school leaders were asked 'How they inducted their pupils in P1?' All the Leaders of the four schools reported that induction for P1 was done through talking compound, general assemblies and during classes. Some of the information are in the syllabus.

5 Discussion

Whereas some headteachers had good leadership skills the following problems emerged: (1) Church founding bodies are interfering with Government policies, such as in School D, and School A where a lot of teachers were transferred on church interests, and (2) There is *Divide and rule* where the British colonial approach is used where the schools are rather disaggregated but not aggregated.

6 Conclusion

The four school headteachers applied various leadership styles in their schools which influenced the performances in the schools differently. Schools C had a headteacher who applied *Transformational, Democratic* and *Empathetic* leadership style as referred to in the literature. A leadership style striving to enhance relationships with her followers, prioritising the interests and needs of followers, raising awareness and gaining acceptance of school goals, focusing on long-term priorities without compromising values and principles, transcending daily affairs for the sake of long-term goals, and establishing opportunistic cultures. She comprised of charismatic behaviours such as role modelling, risk sharing and attributed charisma. She encouraged creativity and change

in followers, challenged assumptions, took risks and solicited followers' ideas. Finally, mentored, supported, encouraged and coached followers to use their competences. She showed intellectual stimulation that was found to be significantly related to job satisfaction. She worked with justice and integrity, and as motivator thus, there was positive relationship between her leadership style and motivation, that resulted in high level of performance and motivation by teachers and pupils.

According to Moses et al. (2015) the two headteachers of Schools C and D who embraced more *Democratic* and *Participatory* leadership styles encouraged group work and team spirit, performed significantly better than those that used more autocratic leadership styles that were largely dictatorial and highly centred on the headteachers.

In conclusion, the school leader of School C could be used as a role model. She is described as having applied *Democratic, Transformational* and *Empathetic* leadership styles and the pupils in the school are performing the best. She was considered hard working, a cooperative leader working with teachers, SMC and PTA. This was good for post-conflict period where people are psycho-socially disturbed and poor. The headteacher was able to talk to parents and get them to pay school fee. She has been able to influence the attendance of AGM of PTA to over 60% and attendance by teachers to 95%. These findings in school C reflected the advice by Connell (1999) who described schools as a place where everyone was involved in the work of the school. She found that a staff focused on engagement in the school was an important aspect of school success. For this to happen, the leader needed to adopt a proactive approach to management involving a management strategy for how to co-ordinate and inspire the individual efforts of teachers and students.

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CHAPTER 8

Exploring the Determinants of Entry Grades and Challenges Faced by Students Admitted to Public Universities in Uganda through Direct Entry Schemes?

Rosalba Aciro, George Oriangi, George Ladaah Openjuru, David Onen, Palle Rasmussen and Betty Akullu Ezati

Abstract

Entry into public universities in developing countries is highly competitive, presenting significant opportunities for aspiring students. While existing research primarily focuses on determinants of academic performance during university studies, there is limited exploration of factors influencing entry grades and challenges faced by students while at the university. Using the Input-Transformation-Output model, this research examines determinants of students' entry grades and challenges encountered by students in Gulu University in Northern Uganda and Makerere University in Central Region. Data on determinants of students' entry grades and insights into challenges faced by students while at the university were collected using key informant interviews and analysed using content analysis. Findings revealed that the programme of study, entry scheme, selection criteria, entry academic performance, and intake capacity determined students' entry grades. Students face numerous challenges, including inadequate facilities for those with disabilities, difficulties balancing academics with co-curricular activities, lack of career guidance, financial constraints, insufficient learning materials, limited internet access, high student-teacher ratios, and social obstacles. The study highlights the complex determinants of entry grades and the diverse challenges faced by students in Ugandan public universities and proposes targeted interventions to address these issues, thereby fostering academic success and equitable opportunities for all students.

Keywords

public universities – entry grades – students – direct entry schemes – academic performance

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1 Introduction

Issues surrounding students' entry grades, and the associated challenges faced by those admitted to universities in their pursuit of academic excellence have been highlighted as crucial within the global agenda (Mutie, 2011; Kuo, 2011; Mporanayo & Andala, 2018; Yan & Wu, 2020). Several studies have explored the impact of entry grades on academic outcomes (Cyrenne & Chan, 2012; Aciro et al., 2023; Aidoo-Buameh & Ayagre, 2013; Aboma, 2023). For instance, Cyrenne and Chan (2012) examined the influence of entry grades and other factors on students' academic performance at the University of Winnipeg in Canada, revealing that international students with solid entry grades sometimes performed poorly by the end of their university programmes. Similarly, Aidoo-Buameh and Ayagre (2013) investigated the relationship between entry grades in accounting at the undergraduate level and final academic performance at Central University College in Ghana, finding no significant correlation.

Aboma (2023) focused on the correlation between admission procedures and academic performance at Madda Walabu University in Ethiopia, reporting a significant positive relationship between the two. Furthermore, Aciro et al. (2023) explored the connection between high school grades and university academic performance in Uganda, finding no significant interrelation between high school grades and performance in Bachelor of Medicine and Bachelor of Surgery programmes. Notably, male students who joined university with lower grades than their female counterparts outperformed them by the end of their studies, possibly due to the unique challenges they faced during their academic journey.

An evaluation of the literature mentioned above reveals a limited understanding of the determinants of students' entry grades and the challenges faced by undergraduate students in Ugandan universities as they strive for academic excellence. Therefore, this study seeks to assess, first, the determinants of students' pre-entry grades to public universities and, second, the challenges that university students encounter during their studies in Uganda's public universities.

University students often contend with a myriad of challenges in their pursuit of academic dreams (Mutie, 2011; Kuo, 2011; Lee & Opiyo, 2011; Mporanayo & Opiyo, 2018; Yan & Wu, 2020). These challenges include financial difficulties, such as raising tuition fees (Mutie, 2011); racial and language barriers for international students (Kuo, 2011; Lee & Opio, 2011); difficulties faced by rural students adjusting to elite universities (Yan & Wu, 2020; Alghail & Mahfoodh, 2016); and balancing academics with co-curricular activities. Institutional

challenges, including inadequate career guidance, limited internet access, understocked libraries, insufficient facilities for disabled learners, scarce learning materials, and high student-teacher ratios, further complicate their academic experience (Mporanayo & Andala, 2018).

In Uganda, the establishment of public universities falls under the jurisdiction of the MoES, operating in accordance with regulations set by the NCHE and subject to parliamentary approval (The Universities and Other Tertiary Institutions Act, 2001, as amended in 2003 and 2006). These institutions primarily rely on public funding allocated through the National Budget to sustain their operations. The country currently boasts nine public universities, including Makerere University, Mbarara University of Science and Technology, Kyambogo University, Gulu University, Busitema University, Muni University, Soroti University of Science and Technology, Lira University, and Kabale University (The Republic of Uganda: Ministry of Education and Sports, 2024). This study was conducted at Makerere and Gulu Universities, two prominent institutions within Uganda's higher education landscape (Aciro et al., 2023).

Public universities in Uganda offer undergraduate degree programs through three primary entry schemes: direct, diploma, and mature age. Our research focuses on the direct entry scheme, which considers candidates who have completed the Uganda Advanced Certificate of Education (UACE) or A' Level and met the minimum admission requirement – typically at least two principal passes at A' Level (Wamala, 2013). Admission is highly competitive, characterised by stringent criteria and high cut-off points. However, entry grades for students admitted under the direct admissions scheme vary across years, study programs, and different admission schemes, including national merit, district quota, talented sports persons' scheme, disability scheme, and private sponsorship scheme. Moreover, admitted students frequently encounter significant challenges during their academic journey, stemming from both the intricacies of the admission process and the realities of campus life.

While the admission process for public universities in Uganda presents promising opportunities for prospective students, it is marked by fluctuating entry grades and formidable challenges (Mohamed, 2020; Lee & Opio, 2011). Although the direct entry scheme provides a pathway for eligible candidates, the dynamic nature of entry grades poses a considerable hurdle for applicants. The challenges faced by admitted students span a broad spectrum, encompassing difficulties associated with various entry schemes and broader issues related to campus life (Mporanayo & Andala, 2018). This study investigates these complexities, exploring the determinants of entry grades and examining the challenges encountered by students in Ugandan public universities, with the aim

of fostering a deeper understanding and facilitating targeted interventions to enhance the higher education experience. The chapter is structured into five sections: introduction, methodology, results, discussion, and conclusion.

2 Methodology

This study employed a mixed-methods research approach. The quantitative phase utilised a retrospective documentary analysis to get insights on entry grades and academic performance of students. The qualitative approach explored two key aspects: (1) the determinants of entry grades under direct admission to public universities in Uganda and (2) the challenges faced by admitted students during their studies. This methodological choice aligns with the recommendations of Creswell (2018) and Saunders and Bezzina (2015), who advocate for the combination of quantitative and qualitative methods to explore complex issues. Eyisi (2016) also supports this approach, emphasising its ability to achieve in-depth understanding through triangulation.

The study was conducted in Makerere University and Gulu University. Makerere University was selected due to its status as Uganda's first public university. At the same time, Gulu University was chosen to represent regional public universities, particularly as northern Uganda's first non-residential public university. Stratified sampling was employed to ensure diversity in academic programs, focusing on four critical programs in both universities: i.e., Bachelor of Medicine and Bachelor of Surgery, Bachelor of Science in Agriculture/Bachelor of Agriculture, Bachelor of Business Administration, and Bachelor of Development Studies.

The research population consisted of deans and heads of departments from selected faculties at Makerere University and Gulu University. These individuals were purposely chosen to represent different facets of Uganda's public university system.

Quantitative data on entry grades and academic performance were extracted from graduate records and databases at Makerere and Gulu Universities. Additionally, key informant interviews with seven deans and thirteen heads of departments provided insights into entry grades and the challenges students faced across various admission schemes.

To analyse quantitative data, cross tabulations and frequencies were used while for qualitative data, content analysis was applied to derive meaningful insights on determinants of entry grades and challenges students face during their studies.

Throughout the research process, ethical considerations were strictly adhered to. Ethical clearance from Gulu University Research and Ethics Committee (GUREC) and then from Uganda National Council for Science and Technology (UNCST) was obtained. All participants were informed about the study's purpose, and consent forms were provided to ensure voluntary and informed participation.

3 Results

3.1 *Entry Grades under the Direct Entry Admission Scheme*

The findings on entry grades of students admitted to the two public universities, as shown in Table 8.1, reveal that over half of the students had a weighted score[1] of 41 and above, indicating that the majority of admitted students performed exceptionally well at A' Level. Additionally, 29% of students had a weighted score from 31–40, while 16% had a weighted score between 11–30. These results underscore the importance of high grades as a critical determinant for enrollment in public universities.

3.2 *Entry Grades Based on a Programme of Study*

The findings on students' entry grades across different academic programs at Makerere and Gulu Universities under the direct entry admission scheme (Figure 8.1) indicate that the range of entry grades for science programs was generally narrower than that for humanities. This suggests that students admitted to the two humanities programmes had entry grades ranging from very low to very high. In contrast, students in the two science programs had grades that were more closely clustered. However, there was a notable difference in grade

TABLE 8.1 Entry grades of students admitted to Makerere and Gulu Universities in Uganda under the direct entry admission scheme

Student's entry grades (weighted score)	**Percentages**
11–20	2
21–30	14
31–40	29
41 and above	55
Total	100

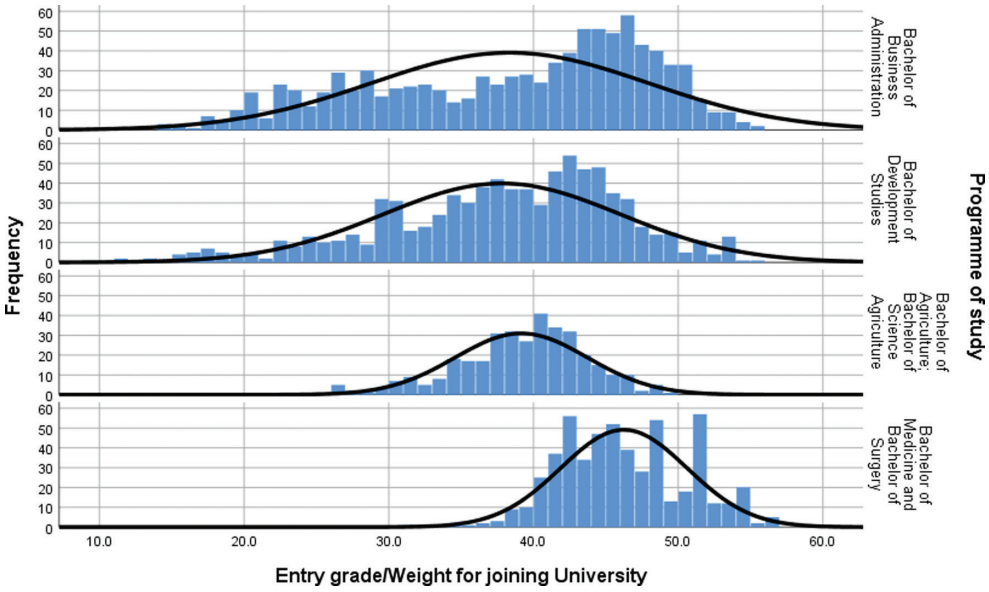


FIGURE 8.1 Entry grades of students admitted to Makerere and Gulu Universities under direct entry admission schemes by programme of study

levels between the two science programs: students admitted to the Bachelor of Medicine and Bachelor of Surgery programs had distinctly higher grades than those in the Bachelor of Science in Agriculture program. For the two humanities programs, both the range and levels of grades were almost identical. These findings confirm that Medicine is a highly sought-after field, attracting students with top grades.

3.3 *Determinants of Entry Grades in Public Universities in Uganda*

The investigation into the factors influencing entry grades for students under direct entry schemes at Ugandan public universities, particularly Makerere and Gulu Universities, uncovered a wide range of determinants shaping admission criteria. Insights from deans and heads of departments revealed a complex and nuanced understanding of these factors, highlighting the multifaceted nature of the admissions process. Participants emphasized the significant impact of various factors, as illustrated in Figure 8.2.

Figure 8.2 illustrates a comprehensive model detailing the determinants influencing the entry grades of students admitted to public universities in Uganda under direct entry admission schemes. At the heart of this model is the dynamic interaction between various factors shaping these entry grades, reflecting the nuanced nature of the admissions process.

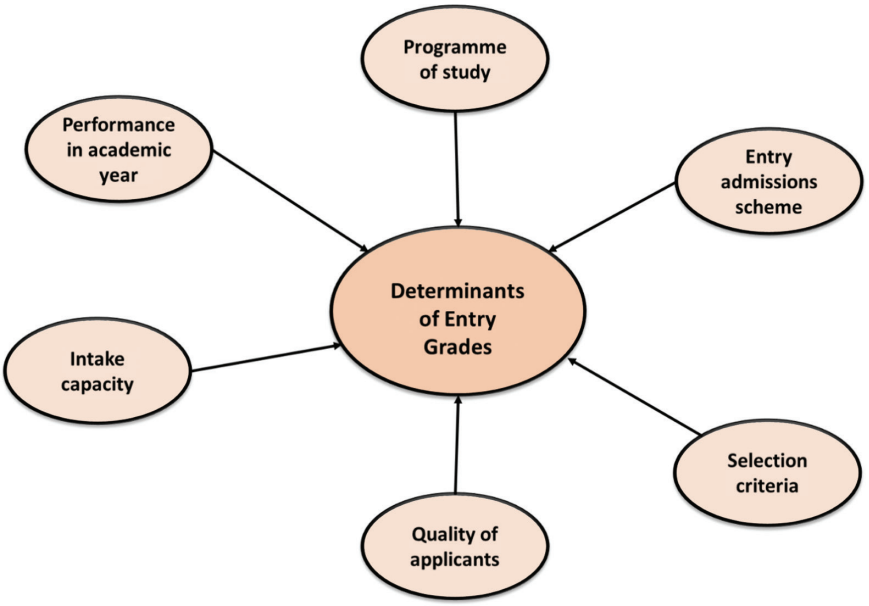


FIGURE 8.2 Model for determinants of entry grades of students admitted to public universities in Uganda under direct entry admission schemes

The primary determinant of entry grades identified in the study was the nationwide performance of A' Level students. Higher overall performance across the country correlated with elevated cut-off points,[2] while lower performance led to reduced cut-offs. This relationship between student performance and entry grades underscores the broader educational landscape's impact on university admissions. One participant highlighted this fluid nature of entry grade determination, stating; *the highest and lowest entry grades vary depending on the performance of students in the country in a particular academic year* (KII Number 3).

The programme of study also emerged as a critical factor influencing entry grades. High-demand programmes, such as the Bachelor of Medicine and Bachelor of Surgery, consistently required higher entry grades due to significant demand and competition. This finding highlights the intricate link between programme popularity and admission criteria. Additionally, entry grades varied based on the admission schemes, with students admitted under the national merit scheme typically presenting higher scores than those admitted through other pathways. This distinction emphasises the differential impact of various entry routes on admission standards, reflecting the diverse institutional landscape within Ugandan public universities. Overall, these

findings reveal the complex web of factors influencing entry grades, from student performance to programme demand and admission scheme specifics, providing valuable insights into the dynamics of university admissions in Uganda.

Deans and heads of departments shed further light on the relationship between A' Level performance and entry grades in Ugandan public universities. Participants noted that entry grades fluctuate based on the general performance of students nationwide in a given academic year. Higher national performance leads to higher cut-off points, reflecting increased competition for university slots, while lower performance results in lower cut-offs. One respondent also observed the rising trend in entry grades over time, remarking, 'roughly, these days, the entry grades have gone so high as compared to those days. Now a student should have 2 'A's' and a 'B' to join Bachelor of Development Studies on government sponsorship' (KII Number 17). This observation underscores the evolving nature of entry-grade criteria, mirroring broader trends in academic achievement and the growing competitiveness of university admissions.

The insights provided by deans and department heads also highlight the increasing stringency of entry-grade requirements in Ugandan public universities. Entry grades have steadily risen, reflecting a trend towards higher academic standards for admission. This upward trajectory underscores the growing competitiveness of university admissions, with stricter criteria ensuring the selection of top-performing students. The assertion that 'Now a student should have 2 'A's' and a 'B' to join Bachelor of Development Studies on government sponsorship' (KII Number 17) illustrates the heightened expectations placed on prospective university students, emphasising the increasingly competitive nature of higher education in Uganda.

Moreover, the informants emphasised the variability in entry grades across different academic programmes. Entry grades were found to be heavily influenced by the popularity and competitiveness of specific programmes, with high-demand fields like Medicine requiring significantly higher entry grades than others. Participant Number 2 highlighted this trend, noting, 'The highest grades in this faculty are those who score an 'A', 'B', and 'C' in their 'A' Level. We get the majority of students from those who failed to join the medicine course' (KII Number 2). Similarly, Participant Number 6 remarked on the consistently high entry grades for the Bachelor of Medicine and Bachelor of Surgery, stating, 'The cut-off points to qualify a student to join a course like Bachelor of Medicine and Bachelor of Surgery on either government or private sponsorship is always high compared to the other programs offered in this faculty' (KII Number 6).

These insights underscore the competitive nature of admissions to specific programmes, where only students with exceptional academic performance secure placement.

Additionally, the study revealed that entry grades for specific programmes could fluctuate based on factors such as the quality of the applicant pool and institutional capacity. Participant Number 8 elaborated on this variability, mentioning instances where the entry grades for Medicine fluctuated depending on the composition of the applicant pool and overall competitiveness in a given year. 'We have sometimes had the lowest depending on the cut-off points in a particular year', noted Participant Number 8, highlighting the fluidity of entry-grade requirements, influenced by factors beyond academic performance alone.

Deans and department heads also underscored the role of entry admissions schemes in shaping entry grades. Students admitted under the national merit scheme consistently exhibited the highest scores compared to those admitted through other avenues such as district quotas, talent-based admissions, or private sponsorship. As KII Number 9 explained,

> the cream that comes under national merit sponsorship always have the highest scores, for example, 20 or 19 or 18 points, but those who come via private scheme come with even 8 points provided they score two principal passes in essential subjects.

This observation highlights the significant variance in academic performance among students admitted under different schemes, emphasising the disparities in selection criteria across various entry pathways.

Furthermore, the mode of study emerged as another factor influencing entry grades, with different cut-off points established for day, weekend, and evening programmes. Participant Number 17 noted, 'The cut-off points vary between day and evening students. For day students, it can be 35 points, and for evening students, it comes down to 20 points to join this course of Bachelor of Science in Agriculture'. This discrepancy reflects universities' nuanced approach to admissions, tailoring criteria to accommodate the diverse needs of students enrolled in different modes of study.

Finally, the research highlighted the intricate selection criteria for various programmes, contingent on essential and relevant subjects. Informants stressed the role of the Joint Admissions Committee and individual university admission boards in setting these criteria. Participant Number 10 noted,

I must say that things have changed so much in this institution because the university selection system determines students' entry grades. However,

sometimes, the university tries to be lenient to those students who want to come on private sponsorship by lowering the cut-off points.

This insight reflects the balance between national standards and university-specific adjustments in admissions criteria.

Overall, the research findings underscore the complex interplay of factors influencing entry grades in Ugandan public universities. From the quality of the applicant pool to the programme's popularity, mode of study, and the selection criteria employed by universities, these factors collectively shape the dynamic landscape of university admissions in Uganda.

3.4 *Challenges Students under Direct Entry Schemes Encounter while at the University*

Interviews with deans and heads of departments reveal a range of challenges faced by students in Uganda's public universities, as shown in Table 8.2. These challenges, although varying by entry scheme, often present significant obstacles across different admission pathways. For instance, students admitted through the national merit and district quota schemes frequently experience disruptions due to strikes, pointing to a broader issue of campus unrest. Meanwhile, students admitted under the disability scheme confront unique difficulties, such as social isolation, limited mobility, and inadequate facilities that fail to meet their specific needs. The interviews highlight how these challenges severely impact students' academic progress, particularly for those dealing with disabilities that slow their learning pace and restrict access to essential resources.

Privately sponsored students face a different set of challenges, primarily revolving around financial constraints and the need to balance family, work, and academic responsibilities. The interviews emphasise the complexity of these issues, revealing how limited financial support strains students' ability to continue their studies while managing other obligations. Similarly, talented sports persons struggle to balance their athletic commitments with academic responsibilities, often resulting in time management difficulties and subsequent academic underperformance.

Beyond these scheme-specific challenges, all students encounter systemic issues such as a lack of career guidance, socio-economic difficulties, administrative inefficiencies, and technological barriers. These challenges manifest in various ways, including insufficient learning materials, limited internet access, high student-to-teacher ratios, and rigorous examination standards set by lecturers. Overall, the interview data highlight the multifaceted challenges facing students in Uganda's public universities and underscore the need for comprehensive support systems to address these obstacles and create a more conducive environment for student success.

TABLE 8.2 Challenges faced by students under the different entry admission schemes in public universities in Uganda

Challenges associated with the various entry schemes				General challenges
National merit and district quarter	**Disability scheme**	**Private scheme**	**Talented sports persons' scheme**	
Involvement is strikes	Students' social distance from them	Limited funding	Inability to balance the time between sports and academics	Lack of career guidance
Poor performance	Slow work pace	Responsibilities (family, work, and studies)		Lack of personal requirements
	Mobility problems		Poor performance	Administrative-related challenges relating to limited learning materials, limited internet, electricity load shedding, high student-teacher ratio, inadequate resources to run the university
	Sight and hearing challenges			
	Limited facilities to support the learning of students with disability			Lack of orientation for some students,
				Technological challenges
				Poverty
				Over-relaxing; lack of self-drive to study
				Setting challenging exams by lecturers

The challenges faced by students under various entry admissions schemes in public universities in Uganda, detailed in Table 8.2, reveal a complex landscape of obstacles within the educational system. Students admitted under the National Merit and District Quota schemes, for example, often encounter disruptions due to strikes, leading to academic underperformance. This suggests a link between campus unrest and diminished academic outcomes, reflecting interruptions to the learning environment. In contrast, students admitted under the Disability Scheme face distinct issues such as social isolation, mobility constraints, and insufficient facilities tailored to their needs. These challenges highlight the critical need for inclusive practices and accessible resources to support students with disabilities.

Privately sponsored students experience financial difficulties and the strain of balancing family, work, and academic responsibilities. This intersection of socio-economic factors and educational access underscores the necessity for targeted support mechanisms to alleviate financial pressures and enhance academic success. Similarly, talented sportspersons struggle to manage their time effectively between athletic and academic commitments, often leading to academic underperformance. This situation emphasises the need for holistic support systems to help students manage both their sports and academic responsibilities.

Across all entry schemes, students face a range of systemic challenges, including inadequate career guidance, administrative inefficiencies, technological barriers, and socio-economic hardships. These challenges manifest as limited access to learning materials, insufficient internet connectivity, high student-to-teacher ratios, and stringent examination standards. Addressing these systemic issues requires comprehensive interventions aimed at improving support structures, promoting inclusivity, and fostering a conducive learning environment.

Interview insights provide a vivid picture of the challenges encountered by students across different admission schemes. Participant 1 highlighted how strikes impact National Merit students, stating:

> The national merit students are faced with the problem of getting involved in strikes, which takes a lot of the time that they should have used to concentrate on their studies. They do this as a means of trying to get more money from the government.

They also observed that these students often become complacent, noting:

> National merit students also tend to relax during year one of their studies at the university. They think, after all, we excelled in 'A' Level'. Relaxing in

> year one causes them to perform poorly. Once the performance is poor in year one, they cannot improve so much in the last semesters of their studies since grading is based on Cumulative Grade Point Average.

Participant 14 discussed the unique challenges faced by students under the Disability Scheme, mentioning issues such as a lack of interpreters and physical limitations. They stated,

> We do not have interpreters for some deaf cases. These deaf students say they can hear lecturers when they are near, but, in most cases, when the lecturers or persons talking are far away, they cannot hear them. One disabled student had only one finger, and he used that one finger to hold the pen and write. This student was very bright but was brought down by this challenge in spite of more time given to him to accomplish his tasks.

This highlights the need for specialised support services for students with disabilities.

The financial struggles of privately sponsored students were also noted, with Participant 1 emphasising difficulties in securing tuition fees. These financial pressures can lead to missed exams, irregular attendance, and late registration. Participant 16 pointed out the detrimental effects of poverty, explaining that:

> The detrimental effects of poverty on academic performance underscore the disproportionate burden borne by students from economically disadvantaged backgrounds, particularly within the private sponsorship scheme.

Furthermore, Participant 12 discussed the impact of electricity load shedding and internet connectivity issues on student performance, noting, 'The lack of fuel for standby generators disrupted teaching and private studies'. It highlighted the challenges posed by internet connectivity issues, particularly with the introduction of e-learning programmes.

Administrative hurdles were also mentioned, with Participant 12 lamenting the inadequacy of library resources and secretarial services. Participant 16 added that 'smartphone addiction' diverts attention away from academic pursuits, and Participant 5 emphasised the difficulty some students face in balancing academic, work, and family commitments. These insights underscore the need for increased support services to address the diverse needs of students and facilitate their academic success.

4 Discussion

4.1 *Determinants of Entry Grades*

The discussion on the determinants of entry grades for public universities under direct entry admission schemes highlights the complexities of the selection process. The study reveals that several factors, including annual performance quality, the entry scheme, selection criteria, program of study, and intake capacity, influence entry grades. It is evident that the quality of A' Level performance directly impacts the cut-off points for admission each year, with higher national performance resulting in elevated cut-off points. This finding is consistent with previous research by Nunes et al. (2010), which noted a correlation between entry qualifications and pre-university performance. Furthermore, Nshemereirwe (2013) and Boliver and Powell (2022) underscore the significance of A' Level academic performance in university selection, focusing on its predictive value for academic success at the degree level.

The admission process aims to uphold principles of procedural fairness by consistently and transparently evaluating students' potential to succeed in university settings. However, this focus on high-performing students raises concerns about potentially neglecting candidates with weaker grades who might benefit from additional support to excel academically.

The study also reveals disparities in entry grades among different admission schemes, with those under the National Merit Scheme typically achieving higher entry grades due to intense competition. The research highlights the role of joint admissions committees and university admissions boards in determining entry grades through weighted scores based on essential subjects for specific programs. Aminudin et al. (2018) support this approach, noting that weighted scores help in selecting suitable candidates from a pool of applicants. Mercer and Puddey (2011) emphasise the need for ongoing evaluation and validation of selection criteria to align with evolving admission standards. Understanding admission criteria is crucial not only for admissions boards but also for university stakeholders, including deans, directors, and heads of departments, to ensure alignment with institutional objectives.

Additionally, the study points out that the program of study and intake capacity affect entry grades, with specific programs having distinct requirements. For example, science programs generally have higher entry grades compared to humanities programs due to varying demands across fields of study. This aligns with Kwadwo et al. (2023), who argue that science and mathematics subjects often have stricter grading standards compared to humanities.

However, entry-grade requirements can vary significantly within the broader categories of science and humanities (Adamuti-Trache & Sweet, 2014). Intake

capacity also influences entry grades, with higher capacities potentially leading to lower entry requirements. This dynamic is particularly evident in the allocation of government slots by joint admissions committees and the determination of private sponsorship slots by university admissions boards. Ensuring that admission processes remain transparent and equitable is essential, with decisions guided by the overarching goal of facilitating student success and academic excellence.

4.2 *Challenges Encountered by Students under Direct Entry Schemes*

Examining the challenges faced by undergraduate students admitted to public universities through direct entry admission schemes reveals a complex array of issues, encompassing both scheme-specific and broader systemic problems. While many challenges are linked to the specifics of various entry schemes, some issues transcend these schemes and affect all students, regardless of their mode of admission (Yan & Wu, 2020).

For example, students admitted under the National Merit and District Quota schemes often face disruptions due to involvement in strikes. In contrast, students admitted through Disability Schemes encounter unique difficulties, including slower work pace due to disabilities, mobility issues, and inadequate facilities for learning and assessment. These findings align with Lee (2014), who emphasised the need to address the specific challenges faced by students with disabilities, such as visual or physical impairments, which can significantly hinder their educational experience.

Similarly, students under the Talented Sports Persons scheme struggle to balance academic and sporting commitments, which can impede their academic progress. This issue contrasts with the argument by Garcia and Subia (2019), who found a positive correlation between academic performance and participation in school athletics. According to their research, higher academic performance often accompanies greater involvement in sports, suggesting that athletics can enhance academic outcomes through improved physical health and discipline.

Privately sponsored students frequently face financial constraints, which force them to manage multiple responsibilities, including familial and work obligations, to sustain their education. This financial strain often results in late registration, missed exams, delayed graduation, or even dropping out. Mitchell et al. (2019) highlight similar global concerns, documenting how rising tuition fees and reduced funding exacerbate educational inequalities between students from different socio-economic backgrounds.

The study also identifies several general challenges affecting all students, regardless of their entry scheme. These include a lack of career guidance, instances of over-relaxation, endemic poverty, and administrative issues such

as inadequate learning materials, poor internet connectivity, and electricity shortages. These challenges not only hinder academic progress but also contribute to a sense of disorientation among students who struggle to adapt to university life (Lee, 2014; Kuo, 2011). Addressing these pervasive issues requires comprehensive institutional support mechanisms to meet the diverse needs of students and foster an environment conducive to learning and personal development. Additionally, tackling broader systemic issues like tuition inflation and resource constraints is essential for ensuring equitable access to higher education and promoting student success.

5 Conclusion

In conclusion, this study provides valuable insights into the complexities surrounding entry grades for students entering public universities in Uganda. It highlights the multifaceted nature of determinants influencing entry grades, including academic performance, program of study, entry schemes, and selection criteria. For instance, the consistently high entry grades required for programs such as Bachelor of Medicine and Bachelor of Surgery underscore the competitive nature of these fields and the rigorous selection processes involved. Similarly, the consistently high scores achieved by students admitted under the National Merit Scheme reflect the intense competition associated with this entry route.

The study also reveals a range of challenges that students face throughout their university experience, which arise from both specific entry admission schemes and broader systemic issues. These findings emphasise the necessity for public universities to implement proactive measures that address the diverse needs of students and foster a supportive learning environment. Additionally, there is a call for increased involvement of department heads and key stakeholders in the admission process to ensure greater transparency and accountability. Addressing these challenges is crucial for enhancing student success and improving the overall quality of higher education in Uganda.

6 Limitations of the Study

While this study has provided valuable insights into the influence of entry grades on the academic performance of undergraduate students, determinants of students' entry grades and challenges encountered by students in public universities in Uganda; it is essential to acknowledge its limitations,

which may have affected the research process and the generalisation of the findings. One of the primary limitations of this study was the heavy reliance on secondary data compared to primary data. This reliance on pre-existing data sources, such as academic records and electronic databases, which may have constrained the depth of analysis and limited the ability to explore certain factors that could only be addressed through primary data collection. This limitation could have affected the comprehensiveness of the study. On the other hand, variability in primary data is yet another factor which might have contributed to limitation of the study. The use of primary data collected through interviews with deans and heads of departments introduced variability in responses. Respondents' personal knowledge, exposure, and convictions influenced the information they provided. This subjectivity in responses may have made data analysis more challenging. It could potentially affect the reliability of the qualitative findings.

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Notes

1 Weighted sources are cumulative marks candidates obtain after calcu.
2 Cut-off point is the minimum weighted score on admitting students for a particular programme of study. It is arrived at after admitting the last student for a programme.

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CHAPTER 9

Emotional Intelligence and Non-Academic Achievement

Helen Christine Waiswa Amongin, Peter Kakubeire Baguma and Joseph Oonyu

Abstract

Emotional intelligence (EI) is not a common concept in the Ugandan education system. Its relationship with non-academic achievement (NAA) has not been documented. This study explores the relationship between EI and NAA in selected Ugandan universities. Data included a qualitative sample of 75 upgrading Grade V teacher students from two Universities. Group interviews and an observation schedule for the students' samples were used. Results showed that EI positively influenced NAA among university upgrading (Grade V) teacher students. Findings showed that EI was very important regarding self-awareness, team spirit, group work, a healthy competitive spirit and collegial relations. In conclusion, high levels of EI are important in the 21st century, with research emphasising socio-emotional approaches and practices. Practical non-academic activities not only refresh the body but enhance positive interactions that are useful in the NAA for common purposes and goals in life. The study suggests that teachers need an all-round curriculum for training in EI for better non-academic achievement. Thus, knowledge and a high level of EI are useful for learning, teacher training, field activities and research.

Keywords

emotional intelligence – non-academic achievement – teacher training and education – distance learning

1 Introduction

Emotions pervade the whole psyche and are in close contact with cognitive processes, motivation, value systems and physical health (Malcik & Miklosikova, 2019). Research shows that emotional intelligence (EI) is found to be the most

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important intelligence (compared to intelligence quotient, social intelligence and artificial intelligence) that considers feelings, connectedness and knowledge that add value for success with other people (Maxwell, 2014).

According to Vyas (2017) the phrase 'protection from emotional powers' led to the perplexity of the understanding of the term 'emotional intelligence'. Emotional intelligence is thus, emotional mindfulness, the capacity to tackle emotions and apply them to assignments like reasoning and critical thinking, and the capacity to oversee emotions. Empathy, charm, self-awareness, controlling anger and anxieties, being persistent and optimistic in the face of setbacks, and smoothly interacting with others, were part of EI (Goleman, 2011). This shows that emotion (linked to both fear and pleasure) as the base of EI, was found in the part of the brain called the Amygdala (Latin, corpus amygdaloideum), an almond-shaped set of neurons located deep in the brain's medial temporal lobe (Hart et al., 2021).

Emotional intelligence (EI) is the most important intelligence that considers feelings, connectedness and knowledge that adds value for success with other people (Maxwell, 2014). EI was needed for all people but especially in adult life, in the 'make-or-break' challenges of life. EI was the intersection of technical knowledge and the triumph of the heart over the head, a combination of nature and nurture. It was linked to both fear and pleasure.

Models of Emotional intelligence have gone through phases: Salovey and Mayer (1990) first introduced the term 'Emotional Intelligence' defined as the ability to monitor one's own and others' feelings and emotions, to discriminate and to use this information to guide one's thinking and actions (Gottman, 1997). Another model placed EI in the context of emotional and social competencies, defining EI as an array of non-cognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures Bar-On, 1997 (Gottman, 1997). EI is also a learned behaviour.

1.1 *Emotional Intelligence in Higher Education*

Higher education is facing great challenges in the twenty-first century (Sadeghi, 2019). Some of these challenges result from a growing demand for pursuing higher education by working professionals across the globe (India & Narashiman, 2018), but also for university upgrading (Grade V) teachers in Uganda (Amongin et al., 2023). As a solution to some of these challenges, Distance Learning programmes for university upgrading (Grade V) teachers in Uganda have been initiated offering students expanded choices in where, when, how, and from whom they learn; a reality making education accessible to ever larger numbers of persons (Sadeghi, 2019).

Whereas co-curricular activities are part of the school calendar as non-academic activities, observation shows that not all schools participate, nor do all teachers participate in them. In most cases, activities like clubs and projects are usually neglected in favour of games, sports and athletics. In this study achievement means success in non-academic factors for example, co/extra extracurricular activities and other non-academic activities such as kitchen gardening, and small business enterprises among others. Achievement goals are rooted in personal dispositions and contextual features where individuals adapt to changing environments.

To get a deeper insight into EI and non-academic activities as co-curricular activities among university upgrading (Grade V) teachers, a study of students from Makerere University (government), Distance Education and Lifelong Learning, and Distance Education students from Uganda Christian University (private), Mukono was established (Amongin et al., 2023).

At the Department of Distance Education and Life-long Learning Makerere, students' academic achievement over the past five years has been positively progressive. Still, the state of EI has not been documented.

Having had some experience in teaching, the university upgrading (Grade V) teachers are also expected (B. Ezati, personal communication, 2012) to be involved in other school and community activities (non-academic) apart from teaching as they are not assessed through a school practice internship. The study thus sought to explore EI and non-academic achievement among university upgrading (Grade V) teacher students using a sample of Makerere University Distance Education and Lifelong students, and Distance Education students from Uganda Christian University, Mukono.

1.2 *Problem Statement*

Non-academic activities are by policy part of the educational curriculum. The Ministry of Education has an arm of Sports attached to it. Students at all levels of the educational system are thus required to be involved in co-curricular activities. Whereas the report of the Visitation Committee to Public Universities (Golola, 2007) suggested that teacher students were generally performing reasonably well academically (Achievement), the report was silent about EI and non-academic achievement. Given that EI is responsible for 80% of the success in the daily lives of human interaction, it was envisaged that EI would positively contribute to the non-academic achievement of Grade V teacher students. Unfortunately, Teacher Education programmes in Uganda do not stipulate EI as a vital and critical issue, even though educational psychology as a subject is part of the Teacher Education curriculum. More so, EI, about non-academic factors, was not fully addressed in the curriculum and practice of the educational

system. EI is needed in the daily interaction of all stakeholders involved in the lives of the university upgrading Grade V teacher students. However, EI and how it influences non-academic achievement of university upgrading teacher students (Grade V) had not been investigated nor documented. Sports activities like Skiing or snowboarding generate a range of positive emotions such as fun, excitement, relaxation, and a sense of freedom (Mirehie & Gibson, 2020). Narratives about challenging oneself, trying to ski more difficult slopes, and developing skills were associated with a sense of achievement.

These kinds of narratives are not documented in Uganda. In addition, an investigation on whether the teacher students knew their emotions, knew how to use the emotions to facilitate thinking, understood or knew how to manage emotions, and knew how to use problem-solving styles which manifested a high level of emotional intelligence, to achieve academically and non-academically (Makerere University, 2013) was needed. Therefore, this study explores the relationship between EI and NAA in higher education in Uganda as a factor in the contribution of EI in the educational system given the dynamic and changing global world. The study thus investigates the relationship between Emotional Intelligence and non-achievement of university upgrading (Grade V) teacher students at College of Education, Makerere University, Faculty of Education and Uganda Christian University, Mukono.

2 Literature Review

2.1 *Emotional Intelligence and Non-Academic Achievement*

Emotional Intelligence and Non-academic Achievement Scholarship in non-academic activities are very divergent in what is considered non-academic. Dang and Nguyen (2021) investigated attitude, perceived behaviour control, clarity, consistency, credibility, attitude and kindness regarding extracurricular activities (ECAS) among the non-academic activities expected among children. Students needed to be educated about the advantages of extracurricular activities, and schools needed to take this responsibility. Ideal non-academic criteria have not yet been found (Žuljević & Buljan, 2022). The research results showed that students' gender, students' year in school, and whether students had a part-time job played moderating roles in the correlation between attitude and subjective norms regarding ECAS to the intention to join ECAS. Ideal non-academic criteria have not yet been found (Žuljević & Buljan, 2022). Sheridan et al. (2022) have linked non-academic attributes to teacher quality, student learning outcomes, teacher retention and career satisfaction and success. Non-academic attributes deemed important for teaching include empathy,

responsiveness, organisation and resilience, resourcefulness, autonomy, communication skills, motivation and commitment to teaching, problem-solving and critical thinking abilities.

Skiing or snowboarding and the mountain environment appeared to generate a range of positive emotions such as fun, excitement, relaxation, and a sense of freedom (Mirehie & Gibson, 2020). Women's participation in snow sports appears to be linked to well-being and as such we propose an elaborative positive emotion, engagement, relationships, meaning, and accomplishment (PERMA). PERMA framework characterises domains that include positive emotions, (Mirehie & Gibson, 2020). Snow sports, cycling, golf, and tennis tend to lack diversity, not only in terms of gender but race and class. Dance as a non-academic activity, was understood as a relevant element in the development of the different aspects of emotional intelligence (San-Juan-Ferrer & Hípola, 2020). Dance activity is presented herein as a fundamental component for the development of non-verbal language, in which the expression of emotions through different body and gestural movements is essential for the understanding and emotional development, including the identification of the emotions of others (San-Juan-Ferrer & Hípola, 2020). The studies included in this review considered dance as an increasing principle of the different emotional skills studied from the numerous points of view concerning the EI construct. Self-knowledge, self-control, empathy, concentration, the development of a healthy ego and personality, self-confidence, self-esteem, emotional and social competence, self-efficacy, emotional maturity, optimism, efficiency in interpersonal relationships, motivation and many other traits related to the emotional behaviour of the human being are developed through dance. Individuals who practise dance present higher levels of emotional development when compared to individuals who do not practise this type of artistic-expressive physical activity (San-Juan-Ferrer & Hípola, 2020).

3 Theoretical Framework

In psychology, self-determination is an important concept that refers to people's ability to make choices and manage their own lives. The theory suggests that people can become self-determined when their needs for competence, connection, and autonomy are fulfilled (Cherry, 2019). They have to be self-determined to perform and achieve as the supervision is not formal. The contextual influence of class subjects, particularly non-academic subjects such as music and art, could be notable (Howard et al., 2021). The environment and individual differences also need to be factored in.

Rivers et al. (2012) provide some understanding of the EI theory that delineates four relatively distinct emotion abilities: perceiving, using, understanding, and managing emotion representing what was referred to as the Four Branch Ability Model of EI (Mayer et al., 2016). The model is different from the idea that EI is a diverse group of socio-emotional traits and abilities (Bar-On & Parker, 2000; Goleman, 1998; Siegling et al., 2015; Wong et al., 2004). The ability model of EI specified that the four abilities constituting EI have developmental trajectories, such that emotion skills within each ability area evolved from basic to more complex (Mayer et al., 2016). The EI skill areas included regulating emotions giving the ability to feel the full range of positive and negative emotions genuinely, sharing those emotions with others and incorporating coping strategies effectively when faced with life's challenges (Mayer et al., 2016).

4 Methodology

A qualitative research design was used for the study. The data had a transformative aspect, as the study sought to transform how daily business was conducted in the educational and teacher training system and was triangulated to create a deeper understanding (Trilar et al., 2019) and accuracy (Denzin & Lincoln, 2017) of non-academic achievement.

The purposively sampled respondents were stratified according to years and subject speciality using the snowball method. Fifty Teacher Students of Years 1 and 2 from Makerere University and 25 of similar years from UCU were interviewed (75 in all) meeting Flynn & Korcuska's (2017) suggestion of no fewer than 60 and no more than 150 subjects. These were put into 7 groups.

Table 9.1 shows the sample that was used for the group interviews (teacher-students) and in-depth interviews (10 lecturers).

TABLE 9.1 Sample distribution

University	Men	Women	Lecturers
Makerere	39	12	07
Uganda Christian University Mukono	11	13	03
Total	50	25	10

SOURCE: ADAPTED FROM AMONGIN ET AL. (2023, P. 3)

A researcher-formulated tool and an observation schedule were used to obtain data which was analysed both manually and using NVivo software to obtain themes and memos. Seven Professors and Senior Lecturers at Makerere University vetted the instrument. Most of the items were found to be appropriate for the study.

Qualitative data was described, interpreted and explained. The data were subjected to a process of data reduction, data display, and data conclusion drawing and verification using NVivo 12 Trial software. A few themes were obtained. Trustworthiness of data procedures and domain items included data saturation, triangulation, thick and rich descriptions, prolonged engagement with data and reflexivity.

4.1 *Ethical Considerations*

The group interviews and in-depth interview schedule were tested and modified using NVivo 12. Prior permission and approval were obtained from the CHUSS Research and Ethical Committee and the Uganda National Council of Higher Education before collecting data. Consent was sought from the two universities and from the participants too. One interviewer was trained in locating, identifying, contacting, greeting, qualifying, interrogating, recording and terminating the interviews. Permission was obtained from the Heads of schools where observation of non-academic activities was done. Debriefing was done during and after the instrument was tested and administered.

5 Results

5.1 *Demographic Information of Participants*

From Table 9.2 demographic information indicates that the married teacher students showed more maturity and were more realistic and practical when it came to aspects of emotional intelligence (EI). The ages of the respondents ranged from 25 years to 48 years of age. The older the respondents the more realistic and mature they were about their EI. Table 9.2 also shows two major categories of training background of the participants from Primary teacher education and Secondary teacher education backgrounds.

5.2 *University Upgrading (Grade V) Teacher Students' Perceptions of Emotional Intelligence?*

In a Cloud Map, the word 'emotions' had the highest frequency of use by the participants. In the second rating the words 'relations', 'group', 'help', and

TABLE 9.2 Demographic information for the qualitative sample

Group	Age	Training level	Year of study	Marital status	Gender
Agriculture	25–40	Secondary school teacher	Year 2	Married = 9 Single = 8	Male = 13 Female = 4
IPSS	29–43	Primary school teacher	Year 1	Married = 6 Single = 0	Male = 3 Female = 3
Arts	26–43	Secondary school teacher	Year 2	Married = 5 Single = 3	Male = 6 Female = 2
UCU Year 2	29–48	Primary school teacher	Year 2	Married = 13 Single = 1	Male = 8 Female = 6
Business Education	25–40	Secondary school teacher	Year 1	Married = 8 Single = 3	Male = 9 Female = 2
Science	25–40	Secondary school teacher	Year 2	Married = 4 Single = 5	Male = 8 Female = 1
UCU Year 1	26–43	Primary school teacher	Year 1	Married = 10 Single = 0	Male = 3 Female = 7

SOURCE: ADAPTED FROM AMONGIN ET AL. (2024, P. 6)

'person', were key and in the third the words 'friend', 'people', interpersonal' and 'control' were significant. This meant that people, persons and groups displayed emotions in their relationships.

Table 9.3 shows the Grade V university upgrading teacher students' perceptions of emotional intelligence in tabular form but Figure 9.3 shows this in percentage ranking. The Participants were captivated by the term EI (1.5%).

From Table 9.3, the connection of emotion and intelligence was not familiar to the participants that were grouped as IPSS (Integrated Primary School Science), ARTS, Science, Business Education, Agriculture -Makerere University; and UCU Year 1 and 2. Some Participants equated intelligence with emotion and someone's reactions towards certain circumstances. Emotion was equated with feelings, that is, how someone reacts towards any situation or circumstance that comes their way. Intelligence was then the way one judged somebody on the way they reacted to circumstances that came their way. For example, if in a classroom situation, someone abused another person, how will that person react? Does he react by crying or does he retaliate by fighting?

This would show the emotions and the level of emotional intelligence of that person (Figure 9.1). Intelligence refers to somebody's mental ability; emotions

TABLE 9.3 Grade V University upgrading teacher students' perceptions of emotional intelligence

	Male	Female
Emotional intelligence	Ability to respond positively to other people's emotions (negative or positive)	Ability to control emotions and overcome them
	Self-control	Ability to control temper
	Cognitive ability to understand feelings	Using positive judgement
	Feelings	Hot temper
	Being sensitive in a conflict	Avoid negative ways of resolving conflict, e.g. fighting and violence
	Management of especially negative feelings – one's and others	Not using anger
	How one intelligently responds to given circumstances	Ability to control self
	Intelligence can mean emotion – how someone reacts to certain circumstances	
	Ability to reason out situations	
	Common sense	
	Brain or mental perception of things	
	Not a very clear connection between emotion and intelligence	
	Awareness of one's and other's emotions	
	Awareness of one's and other people's weaknesses and strengths	
	Thought patterns	

SOURCE: ADAPTED FROM AMONGIN ET AL. (2023, PP. 137–138)

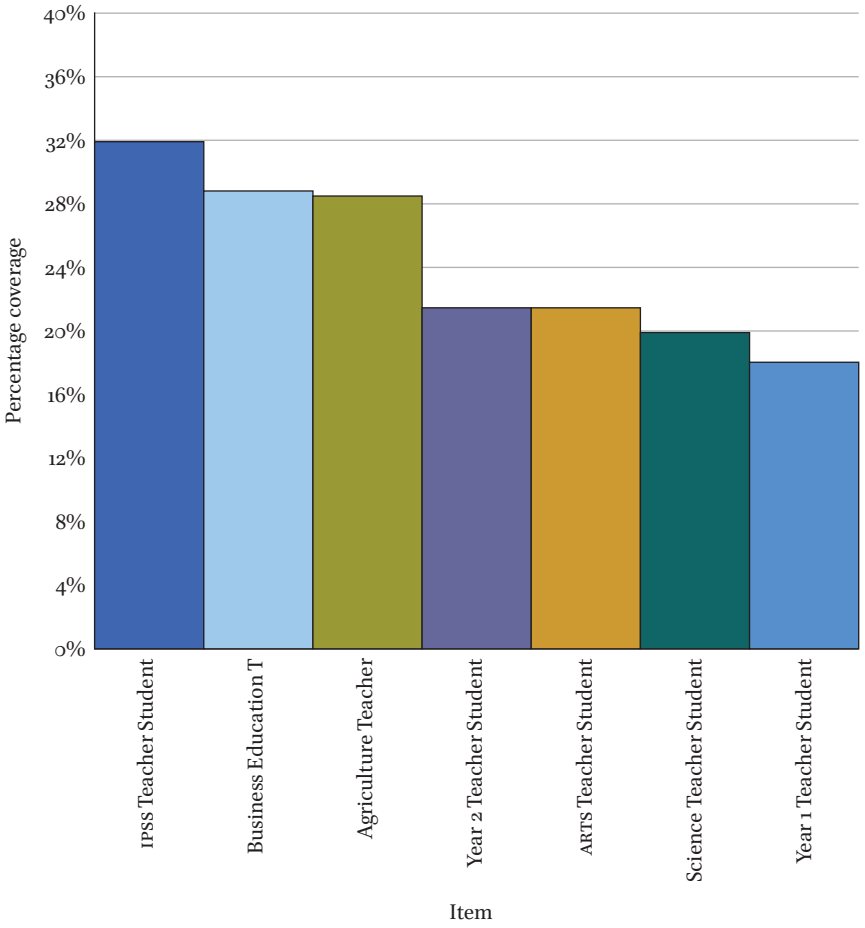


FIGURE 9.1 Emotional intelligence coded by item, and educational programs (Source: Amongin et al., 2023, p. 161; NVivo 9. Copyright 2011 QSR International Pty Ltd. ABN 47 006 357 213. Reprinted with permission)

are somebody's feelings in all aspects of life – physical and mental. The two words (emotional and intelligence) together contribute to somebody's mental ability. 'Emotional' and 'intelligence' were construed as a response towards reasoning. For most of the participants, EI was a new concept. They understood emotion and intelligence when separated, but not as a combination of emotional intelligence. Emotion was conceived negatively as anger, blackmail, and so on, but not as happiness or any positive emotion. This perception needed to be corrected by all the stakeholders in the Teacher Students' lives.

Emotions or emotional intelligence deals with the mind and feelings. Intelligence means somebody's level of reasoning, mental ability and analysis of situations. Some participants were not clear about the difference between

emotional intelligence and cognitive intelligence. The two were being used interchangeably (ARTS). Furthermore, emotional intelligence means someone's ability to behave appropriately without allowing his emotions to overpower him and overpower his normal understanding. The act of counselling the student in those circumstances would be a sign of a high level of EI. Emotional intelligence also meant that one was sensitive to those around them. This meant that the teacher students' self-control, positive reactions under stress, and ability to positively handle the offending person were signs of EI (Agriculture).

An emotionally intelligent person would respond positively when confronted by a negative situation and not resort to abusing the person. 'Of course, when you fight and you win you feel you have achieved something. It is a negative achievement'. Positive and negative reactions constituted emotions. So being wise was a sign of EI (Business Education). An emotionally intelligent person has the ability to control their emotions 'because now if you are confronted by a certain situation, how do you manage your emotions'; be conscious of one's emotions and others' emotions. Thus, self-control; management of emotions; self-awareness and awareness of other people's emotions; and ability to deal with one's and others' feelings constituted EI (IPSS).

The Science group (Year 2 Makerere University) had the following perceptions of emotional intelligence: emotions were some of the things which might affect one's thinking; internal feelings could affect somebody's thinking and make one not reason well or perform well in class. Managing negative feelings needs emotional intelligence. Thus, emotions deal with situations and different stimuli with possible decision-making. This group focused on the ability to deal with one's and others' emotions; management of negative emotions; knowledge or awareness of emotions; and thinking that emotions negatively affect cognition and decision-making (Science).

Uganda Christian University, Mukono (Year 1) teacher students thought that EI was manifested through the ability to control one's emotions and the ability to overcome emotions or how one could control his/her emotions. Thus, self-control and management of emotions were considered concepts of emotional intelligence. Similarly, Uganda Christian University, Mukono (Year 2) teacher students thought that EI was using one's common sense; how things were perceived and understood using the brain; the ability to control temperament in case one was emotionally driven negatively; and the ability to be judgmental without using emotions of anger. This group upheld common sense; cognitive ability; self-control; and avoiding the use of anger in decision-making as signs of EI. Thus, qualitative data showed that the majority of the Participants thought that EI was the understanding and management of feelings. Findings from lecturers tallied with those of the students.

5.3 *Non-Academic Activities in Which University Teacher Students (Grade v) Are Involved*

Figure 9.2 shows the activities all the groups underwent. Among the games and sports, football was the most outstanding. Among the clubs, debating stood out and among the projects, kitchen gardening was the most outstanding. The Year 2 UCU teacher students reported outstanding non-academic achievement.

Table 9.4 shows the frequencies of the various non-academic activities (self-reports). The table has been generated from field data (Amongin et al., 2023).

Table 9.4 shows the cross-tabulation of the various non-academic activities and their frequencies. *Games and Sports:* Football 33; Running 20; and Netball 13 in that order among others. The activities that the majority of participants had facilities, were more available and were more traditional and familiar.

A Word Cloud (Amongin et al., 2024, p. 10) confirms that football, debating and kitchen gardening stood out among the various categories of non-academic activities.

Among the *Clubs* debating, scripture union and music came top. Among the *Projects* (Table 9.4) Kitchen Gardening 29; Internet Café 08; and Soap-Making 04 were outstanding. Some projects were related to the formal subjects the participants did, for example Agriculture. Others were for livelihood

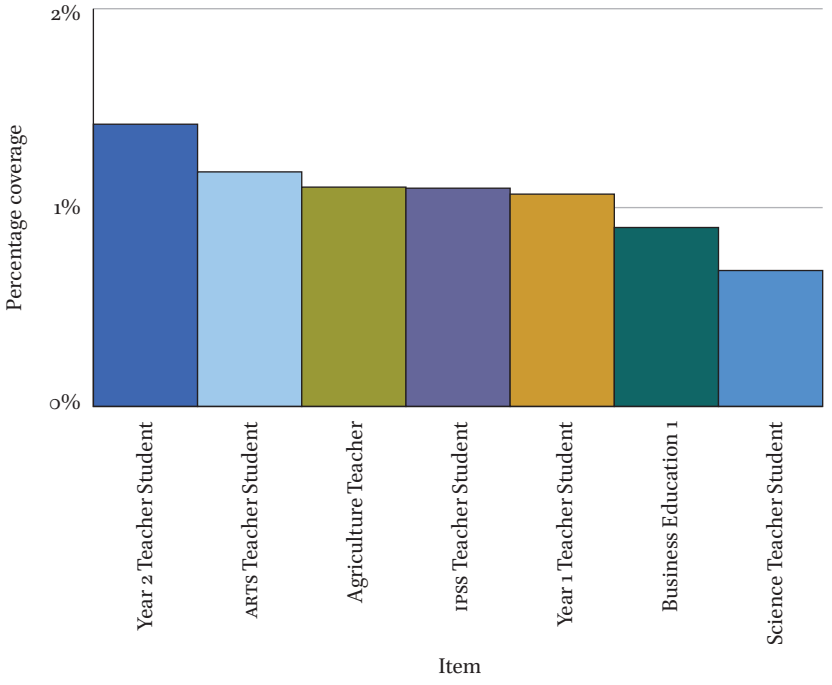


FIGURE 9.2 Non-academic achievement (from Amongin et al., 2024, p. 9)

TABLE 9.4 Non-academic activities and their frequencies as performed by participants

Games	Sports	Clubs	Creative arts	Farming	Commercial activities
Running-20	Football-33	Debating-30	Music-15	Kitchen Gardening-29	Internet Café-8
Jumps-9	Netball- 13	Scripture Union-21	Drama-10	Farming-2	Soap-making-4
Shot put-3	Hand ball-1	Mathematics-7	Dance-4	Rearing animals-1	Crafts-3
Drafts-2		Health-5		Vegetable gardening-1	Barber shop-3
Chess-2		Rotary-3 Geography-3		Agriculture-1	Knitting-2 Hair dressing-1 Second hand clothes-1 Mobile Money Agent-1 School canteen-1 Saving scheme-1 "Boda-Boda" (motorcycle) Business-1 Fine Art-1
Total-36	**47**	**69**	**29**	**34**	**27**

SOURCE: ADAPTED FROM AMONGIN ET AL. (2024, P. 10)

sustenance, for example, keeping poultry. Most of the non-academic activities were used to supplement the participants' salaries and take care of families. All these involved EI.

5.4 *University Upgrading (Grade V) Teacher Students Performance and Achievements in Non-Academic Activities*

IPSS Participants rated their project a success just by its existence and thriving. Profits were a sign of success. The not-so-successful aspects included the challenge of not having enough time and the strain of taking care of the birds.

Table 9.5 illustrates the ratings participants made of their level of success in their non-academic activities on a scale of 1 to 10, where 1 is the lowest and 10 is the highest rating.

TABLE 9.5 Level of success in non-academic activity according to Groups. The *stands for number of participants at a given digit

SCORE →	1	2	3	4	5	6	7	8	9	10	TOTAL
GROUP ↓											
ARTS	**	*	*		**	*	*				08
AGRIC				*	*	****	***	***	*		13
BUS.EDU	*	*	*	***	***		*	*			11
SCIE					***	*	*	**	*		08
UCU 1		*	**	***	*	*	*		*		10
UCU 2						*	*****	*****	***		14

SOURCE: ADAPTED FROM AMONGIN ET AL. (2024, P. 11)

Most of the Participants ranked themselves between 5 and 10 for reasons that the activity was flourishing; for example, from five chickens that lay eggs a participant now had 25 and was getting eggs and money constantly. Another liquid soap was being supplied around and bringing in profit that enabled the participant to renovate his house. One other's cabbage brought in more than 100% profit. One participant had his school winning the football competitions and Coca-Cola Company supported the school; ability to participate in the activities; commitment; self-motivation; personal availability; making time for the activities; good and positive results; and positive responses from other participants in the activity. Yet others could express themselves in debates; talent development in music dance and drama; support from the Head teacher and Non- Governmental Organisations around the school; good health; the ability to read and understand the tasks; and the ability to be independent (AGRICULTURE, ARTS, Business Education, Science, UCU Year 1 and 2).

Reasons for not being successful in the projects included land being used for kitchen gardening neighbouring the school community; land wrangles; goats and animals around destroying the crops. For football activity one participant had had a surgical operation on the leg; limited time; lack of funding; lack of commitment; no involvement in the activities; age as some had grown older; lack of facilities; expensive costumes for dance and drama; negative attitude; too high enrolment of their students; and verbal harassment from the head teacher.

Overall, 39 Participants rated themselves as being more successful in their non-academic activities while 27 rated themselves as not so successful in the

same or similar activities, giving a total of 66 respondents out of 75 that were purposively sampled. Nine participants did not have non-academic activities. EI should be included in the Teacher Training institutions and be taught right from kindergarten through to University level.

5.5 *Findings from the Observation of Some Non-Academic Activities in the Schools*

Two secondary schools were visited for observation of some of the non-academic activities. In music, dance and drama (MDD) the schools were very well organised and orderly. In both schools, there was a burst of talent that was displayed (Figure 9.3). The EI aspects were manifested through team spirit and cooperation. The school staff were united in the training, mobilisation and desire to uphold the values and cultures of the school. In one of the schools, the cultural fashion show revealed that the schools did not only sustain EI within the school but even with the community.

The other school had a cultural dance by one of the refugee communities near the school. Unity and hard work were exhibited through the commitment that exuded from the teachers, the non-teaching staff, the students, the parents and the general community that gathered to cheer, encourage and praise the participants in the events of the days, all of which manifested EI.

One school had kitchen gardens in their various stages of development. Some were fresh with new plants, others were on the verge of being harvested and some had overgrown with weeds, the crops having been harvested (Figure 9.4).



FIGURE 9.3 Sudanese dance, School A
PHOTOGRAPH: HELEN AMONGIN



FIGURE 9.4 Kitchen gardening, School A
PHOTOGRAPH: HELEN AMONGIN

There was commitment and eagerness to participate in these activities among the staff as each one wanted to supplement their income using these projects. Thus, EI was very critical in the process of sharing this land. The newer teachers had to have patience and good negotiating skills to acquire a strip of land to cultivate some crops. Some of the crops grown included green vegetables and sweet potatoes. The chicken was reared by the older staff members and the head teacher. Rabbits were kept by the school in general and were under the supervision of the Agriculture teachers (Figure 9.5). There were plans to start a piggery project.



FIGURE 9.5 Project of keeping rabbits, School A
PHOTOGRAPH: HELEN AMONGIN



FIGURE 9.6 Girls' football competition. The referee is in the middle of the pitch and the other staff is at the far end, near trees; School A
PHOTOGRAPH: HELEN AMONGIN

One of the schools had girls' inter-house football competitions. A high level of cooperation, hard work and organisation were exhibited as the girls got ready for the games, during the games and after the games. EI was manifested in and through all the interactions, as shown in Figure 9.6.

6 Discussion

It is worth noting here that although data were not collected in northern Uganda, emotional intelligence has special importance as the civil war (see e.g. chapter 3) has left people in a particularly vulnerable state (Amone-P'Olak, 2020; Rockmore, 2020; Marshak et al., 2019).

The level and application of EI were very important in non-academic achievement. EI helped with problem-solving, conflict resolution, good decision-making and teamwork. These findings support the fact that the area of non-academic activities is very divergent from what is considered non-academic (Dang & Nguyen, 2021). Ideal non-academic criteria had not yet been found just like the case in the current study (Žuljević & Buljan, 2022).

The study found that participants found both satisfaction and challenges with their projects, despite their age or gender. The current study thus, focused on the relationship between emotional intelligence and non-academic projects such as kitchen gardening and poultry keeping. Findings support Sheridan who discovered that research evidence had linked non-academic attributes to

teacher quality, student learning outcomes, teacher retention and career satisfaction and success (Sheridan et al., 2022). The study found that sports and games like football were most popular among the male participants while netball was popular among the female participants supporting Mirehie & Gibson's (2020) findings.

Good decision-making such as deciding to go to the gym and practice every day for personal health and to improve on games and sports manifested a level of EI. The ability to consult others and delegate responsibility showed signs of EI. Furthermore, through working at all levels of the ecosystem non-academic activities portrayed different levels of achievement and enhanced EI supporting findings by Simmons (2019) and Al-Qadri & Zhao (2021).

Dance as a non-academic activity, was understood as a relevant element in the development of the different aspects of emotional intelligence such as self-knowledge, self-control, adaptability empathy, the development of a healthy ego and personality, emotional and social competence, emotional maturity, optimism, efficiency in interpersonal relationships and motivation, supporting findings by San-Juan-Ferrer and Hípola (2020).

It was possible to increase emotional self-efficacy and levels of emotional intelligence. This was particularly important for undergraduate teacher students, especially with regards to employability and staying at the job. The older the person the higher their EI would be. This is in tandem with the findings that it is necessary to start teaching EI from kindergarten or infancy upwards.

The present study observed that EI was exhibited in the way the teachers and their students in secondary schools organised the music, dance and drama (MDD), and games and sports inter-house competition activities. There was a high level of cooperation, mobilisation and unity to pull the activities through. These findings support Brymer and Schweitzer (2017). EI had a positive relationship with non-academic achievement. Furthermore, the findings support the relevance of the two theories of Self-Determination and the Four Branch Ability Model of EI (Mayer et al., 2016).

7 Conclusion

The study set out to explore the relationship between EI and NAA and found that EI has a positive influence on NAA. Emotional intelligence was thought to be that ability that helped in problem-solving because in most cases when relating with people, misunderstandings could arise necessitating good decision-making abilities. It also enabled one to consult and arrive at appropriate conclusions instead of sustaining biases. Thus, to a great extent, the participants had a good understanding of EI.

The three categories of non-academic activities: games and sports, clubs, and projects manifested the nature of EI among the participants and manifested the positive influence of EI on those activities. The negative influence was minimal. Participants needed non-academic activities as part of the curriculum. Non-academic activities transferred skills easily. The socio-emotional nature of EI led to home and family work cohesion that enabled better goal achievement. Attributes and values like problem-solving, good decision-making abilities, patience, tolerance and resilience were enabled by EI. Self-awareness, ability to generate emotions, emotional knowledge, emotional management, awareness of positive and negative feelings, and expression of both positive and negative feelings, were displayed through the NAA. Thus, EI positively influenced NAA including Games and Sports, Clubs and Projects.

Emotional intelligence is very useful in the 21st century with educational research stressing collaborative approaches. Outstanding activities with games and sports such as football and running not only refresh the body but enhance positive interactions that are facilitated by a high level of EI. In all the arrangements, organisation and display of talent, gifts and NAA, EI was visible. The cooperation and ambience showed the presence of EI. A healthy competitive spirit was manifested because of EI. EI enabled high-quality achievement in NAA. From the demographic data, the older married participants demonstrated maturity and a higher level of EI in their non-academic activities. The females too manifested a better relationship between EI and NAA in gardening, dance and football inter-house competitions. Participants proposed that EI should be formally taught in higher institutions of learning including universities. Non-academic activities should be included on the timetable of higher education institutions and universities to ease the stress of having to look for special times and venues for these activities, particularly given the challenges of Distance and Life-long learning.

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CHAPTER 10

Co-Curricular Activities and Students Discipline in Higher Institutions of Learning in Gulu City

John Bismarck Okumu

Abstract

Co-curricular activities are essential in learning processes because they allow students to gain experience and apply what they have learned in the schools, including acquisition of required discipline. The study used a mixed methods approach and Case study design. Data was collected from two higher institutions of learning and analysed using Statistical Package of Social Science. Qualitative data was analysed using thematic analysis. The findings revealed that co-curricular activities play a crucial role in fostering discipline among the students in higher institutions of learning. There is a very strong relationship between participation in co-curricular activities and students' discipline. In conclusion, the study highlights the positive impact of co-curricular activities on students' discipline. Students who actively engage in these co-curricular activities develop important skills and attitudes that contribute to their overall discipline. It is recommended that institutions of higher learning should provide co-curricular activities that have influence on students' discipline. Teachers and administrators should actively promote and encourage student participation in co-curricular activities.

Keywords

co-curricular activities – students' discipline – higher institutions of learning

1 Introduction

The responsibility of education worldwide is to bring change in students' behaviour and personality in a more desirable form. The Co-Curricular Activities (CCA) are also recognized as a source of enrichment and vitalization of the school curriculum, mainly through the cultivation of CCA, which are no longer looked upon as extras but as an integral part of the school programs (Singh, 2017). CCA are an essential part of a well-rounded education. Ensuring quality

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education itself is a part of Sustainable Development Goals (SDGs) Goal-4, and a means for achieving sustainable development as a whole. CCA are, therefore, an important facet of education as a whole and participation in such activities provides students with opportunity for improvement of discipline (Karamat et al., 2024). These activities are generally conducted outside of the class and may or may not have a direct relationship with the core curriculum. Such activities include; games and sports, clubs and societies and other hobbies designed to help the learner adjust socially and physically. Social adjustment makes students consider their colleagues' behaviours and become positively or negatively disciplined depending on the context of socialisation (Acquah & Anti Partey, 2014, see also Chapter 9, this volume).

Ahmad et al. (2020) argued that students who get involved in CCA learned teamwork, administration qualities, discipline, self-confidence, time management, persistence in extreme circumstances, responsibility towards prearranged tasks, and the development of positive actions. This makes the students responsible for their discipline and conduct themselves positively. CCA were shown in the beginning with many seeing it simply as a fact that would pass and quickly fade away. Eventually people including educators began to see benefits of CCA but it took a while to adhere to them (Singh, 2017). Non-Academic Activities (NAA) were viewed as being primarily recreational and therefore were discerned from academic achievement without any disciplinary effect and were consequently discouraged.

Lyoba and Mwila (2022) argue that CCA enables students in Higher Institutions of learning (HIL) to apply learnt skills in a real-world context. They have become well integrated into the daily life of the schools. It allows learners to develop self-discipline among themselves. Involvement in CCA has led to students' self-discipline and personal cleanliness.

Through CCA, students are also able to fulfil their personal goals and improve on their general skills needed in everyday life. Mishra & Aithal (2023) posit that co-curricular activities may enhance students' problem-solving, analytical and Critical Thinking Skills (CTS) through cooperative activities and hands-on experiences which influence development of discipline, social skills, and high school completion. Furthermore, participation in CCA teaches students about long term commitments and a sense of responsibility to perform given tasks correctly (Banging & Idris, 2017).

Co-curricular activities are defined as activities performed in schools for the purpose of strengthening students' learning either inside or outside the classroom and for developing learner's personality. CCA promotes the growth of diverse mental and personality dimensions, including intellectual, emotional,

social, moral and artistic development. These activities include disciplines that are not part of the usual academic curriculum but are beneficial for an individual's overall development. Through CCA, students will gain extra skills in life such as communication skills, critical thinking and problem-solving skills, team working skills, leadership skills and other skills which will help them in career prospects (Siddiky, 2019). The HIL provides a logical and convenient platform for students to experience these skills through CCA. It demonstrates how to cultivate discipline, commitment, and self-discipline, tenacity, self-control, and a healthy regard for the school environment.

Goldstein (2024) defines discipline as the practice of training oneself or others to follow a set of rules, principles, or guidelines in order to achieve a desired outcome. It involves the development of self-control, the ability to stay focused and committed, and the willingness to make sacrifices or delay gratification in pursuit of a long-term goal. Discipline is often associated with self-discipline, which refers to the ability to regulate one's thoughts, emotions, and behaviours in a way that is consistent with one's goals and values. Self-discipline involves setting clear priorities, managing time effectively, and maintaining a strong sense of motivation and commitment. In essence, discipline is about cultivating the habits and behaviours that support our goals and values and making a conscious effort to stay on track even when it's difficult or uncomfortable. It requires effort, commitment, and perseverance, but it can be a powerful tool for personal growth and achievement. Discipline involves training, especially of the mind and character, to produce self-control habits of obedience, and as a result to set rules for conduct and methods by which training may be given.

In African countries, CCA were introduced in the curriculum for more than one purpose such as to increase academic performance, influencing students' discipline and others. This is where most African countries put more efforts on discipline so as to strengthen the education system. In this region, the education system also should emphasise students' discipline in view of having effective behaviour that students must have in order to fulfil the school rules and regulations (Ahmad, 2014). Adaptability, self-assurance, communication, teamwork, imagination, leadership, and organization are a few of the abilities that modern educators must possess (Okumu & Opio, 2023, p. 435) and these are acquired through CCA in Higher Institutions of Learning.

In Uganda, school life was characterised by learners' active participation in sports, music and drama, among others, during breaks or organised periods of the day, week or term (Asaba, 2015). Before the introduction of formal education, boys would go wrestling as a means of spending their leisure time, and this was one way of practising CCA in Uganda.

2 Theoretical Background

This study was guided by Social Learning Theory (SLT) derived by Albert Bandura in 1960. Albert Bandura is considered the father of SLT. In the 1960's he conducted a now famous experiment called the Bobo doll experiment that led to his official writings from 1961–1963 (Alvarez, 2020). Albert Bandura's SLT suggests that people learn new behaviours by observing and imitating others. The theory emphasises the importance of observational learning, where individuals acquire knowledge, skills, attitudes, and beliefs by watching the actions of others and the consequences that follow, leading to the modelling and adoption of observed behaviours. The most important element of the experiment was seeing how children behaved after seeing the adult get rewarded, punished, or no consequence for physically abusing the Bobo doll. This learning can be acted on, a learner sees others politely ask for a treat and get one skill and act on. In the same way, a learner sees a friend involved in CCA, picking a lock and they learn something new which changes their behaviour leading to improved discipline. Especially when it comes to aggressive behaviour, SLT plays a big role in how all people and especially learners learn. SLT, emphasises the importance of observing, modelling, and imitating the behaviours, attitudes, and emotional reactions of others (McLeod, 2024). The students get involved in CCA and master the skills, enjoy their consequences and improve their discipline. SLT suggests that social modelling and good behaviour are powerful classroom tools. The SLT is relevant to the study in that it significantly impacts our understanding of human behaviour and has informed fields such as education. It influences learners' aggressive behaviour by observing, modelling and imitating the behaviour, attitudes and emotional reactions. Through physical interactions during co-curricular activities in schools, students observe different behaviours and become disciplined. The SLT implies therefore that learners who participate in CCA learn from the trainers and teachers through observation since the trainers and teachers are role models of learning. Consequently, they imitate the behaviours of the role model and act like them. Bandura noted that behaviours from role models that have favourable outcomes are more likely to be copied/imitated easily than behaviours with unfavourable outcomes. Discipline is therefore favourable outcomes implying that these learners are likely to be more disciplined than those that don't participate in co-curricular activities.

3 Statement of the Problem

Worldwide, co-curricular activities were introduced in normal education institutions for more than one purpose such as increasing academic performance

as well as influencing students' discipline, where most African countries put more efforts on discipline so as to strengthen the education system. In the Ugandan education system, the issue of student discipline is very crucial. And HIL also emphasises students' discipline in view of having effective behavior that students must have in order to fulfill the school rules and regulations due to Turyamureeba and Kaizire (2023). This can enhance students' discipline leading to the quality of education in Uganda. Co-curricular activities play a crucial role, not only in improving academic performance but also improving students' discipline by building character (Odama, 2023). Participating in co-curricular activities (CCA) have positive effects, such as students, improve the rate of school completion as well as students' social values developed when they are well involved in various activities such as arts, music, drama, club and debate, sports and games, dance and religious activities (Bonaventure & Claire, 2020).

Creating a culture that promotes excellent behaviour requires a clear vision of what good behaviour looks like (Department of Education, 2022). This could make them to conduct themselves well in whatever they do. Many secondary school students in Uganda participate in co-curricular activities but misconduct themselves during co-curricular activity competitions; especially when they lose in the competitions, they could beat their colleagues and neighbouring villagers after. These acts revealed a lot of indiscipline portrayed among secondary school students especially during competition in Co-curricular activities (Kabakyenga & Ahumuza, 2023). The students often get engaged in antisocial behaviours such as strikes, stealing, fighting, bullying, drinking and some have become street kids as well (Turanovic & Siennic, 2022; Ndehi, Ndung'u, & Nyagah, 2023), yet students' engagement in co-curricular activities is expected to bring about discipline. It is not known whether co-curricular activities have any influence on students' discipline in HIL. This is what has prompted the researcher to investigate the influence of Co-curricular activities on students in Higher Institutions of Learning in Gulu City by i. Assessing the level of students' discipline, ii. Determining the level of students' participations in co-curricular activities, and iii. exploring the influence of different Co-curricular activities on students' discipline.

4 Literature Review

The study focused on the influence of Co-curricular activities and students' discipline in HIL. This section looked at what other researchers have investigated in line with CCA and students' discipline to find the gaps in their study that need to be fulfilled.

4.1 *The Students' Discipline in Higher Institutions of Learning*

Discipline in the HIL is a study conducted within the context of an adult learning environment to analyse the impact of behaviour on safety, performance and goals, which aligns to wider noted controversies in working cultures (Patel & Cheng, 2021). Discipline originates from the Latin word *disciplina* meaning "instruction given, teaching, learning, knowledge" and from the Latin *discipulus* meaning "pupil" (Online Etymology Dictionary, 2020). Although its definition varies depending on the context, in the abstract form, discipline is often described as the practice of making people obey rules or standards of behaviour (Collins Dictionary, 2020).

Discovering the impact of discipline/lack of discipline in the HIL provides a basis for how behaviour impacts on goals within this context. The absence of value-based attributes has detrimental effects on the safety and quality of students Patel and Cheng (2021), however, in the context of the HIL, absence of these attributes could create conditions whereby learning; the ultimate objective, may be impacted upon thereby preventing interactive learning pedagogies from being fully effective. Discipline in a HIL can be achieved by a collective responsibility in the management of the activities of the Institutions (Rowne, 2015).

Way (2016) made a direct link between discipline and safety and claimed that discipline that allows rules and regulations produces safe, orderly and generally conducive learning environments. Lopes and Oliveira (2017) added that teachers who focus on the engagement of students in CCA consequently prevent misbehaviours from occurring.

Although students are usually the source of lack of discipline due to underlying problems, they are not the only source. There are other sources that cause students to be indisciplined too (Debreli, Ishanova, & Sheppard, 2019). Discipline is synchronous to the actions taken by the lecturers to end lack of discipline and restore order in HIL. Lopes and Oliveira (2017) stipulated that discipline is as much reliant on the characteristics, clarity, and conduct of the lecturers, as the comprehension of students within the institutions. Discipline is the self-control that is gained by requiring that rules or orders be obeyed, and the ability to keep working at something that is difficult. Disciplinarians believe that such self-control is of the utmost importance and enforce a set of rules that aim to develop such behaviour. Teaching students to take responsibility for their study routine fosters independence and self-discipline which promotes self-reliance in life after completion of their studies.

4.2 *Level of Students' Participation in Different Co-Curricular Activities*

Muamat (2016) found that students' involvement in CCA was inconsistent throughout the year and focused only on programs or competitions. CCA are

not part of the academic curriculum but are acknowledged by HIL as an essential part of the life of the students.

According to Yahya, Kutty, and Hadi (2019) the student's engagement in CCA was at a moderate-to-high level, they continued to report that there was a lack of effort in ensuring that all students were fully engaged in CCA. It is possible that not all the institutions of learning have interests in CCAs and do not encourage their students to be actively involved in the activities.

Bonaventure and Claire (2020) revealed that students who are in HIL automatically get opportunities of participating in school based CCA. These activities mostly develop students' discipline where students have freedom to participate in any which they prefer. The learning institution should encourage students to get involved in the CCA as part of the school programme. The activities have many benefits that can be tapped by students in the process of learning. Patel and Cheng (2021) revealed that co-curricular activities support productive learning and development for all young people in HIL. Yahya et al. (2019) pointed out that students who engaged in CCA were able to manage their time, became more disciplined and further shaped a disciplinary personality within the individual. This is an indication that during the time when students are engaged in CCA, they have different experiences, interact with different groups of students and adopt different behaviours. However, Allen et al. (2015) reported that students who did not engage in any CCA were affecting their level of personalities. This showed that participation in CCA has a greater chance of changing their behaviour.

4.3 *The Influence of Different Co-Curricular Activities on Students' Discipline*

Schools need to conduct CCA that focus on the development of the individual's potential in terms of improving personality, discipline, well-being and communication skills. Students who engaged in CCA were able to manage their time, became more disciplined and further shaped a disciplinary personality within the individual. Mishra and Aithal (2023) argued that behaviour disorders and discipline among students can be improved through curricular and CCA. Participation in CCA helps in character development and social development in students of HIL (Karamat et al., 2024).

The diverse range of activities offered in Co-Curricular Programme (CCP) allows students to explore their interests and develop their talents, leading to the maximum level of potential. Engagement in physical activity is also recognized to contribute a range of positive outcomes, specifically physical and mental health, social well-being (Othoo & Omondi, 2022). All these influence students' interest to participate in CCA in schools. Bonaventure and Claire

(2020) revealed that CCA can enhance students' discipline leading to the quality behaviour in HIL in sub-Saharan African countries. This is crucial as it could directly improve an individual's personality, which will further influence discipline. Thus, it can be concluded that there is a link between CCA and students' Discipline in HIL.

5 Methodology

This chapter gives details of the methodology which has been used in the current study. This includes details about target population, sampling procedure, research instrument and data analysis. The present research has been carried out to study the CCA and students' discipline in HIL in Gulu City

5.1 *Research Approach*

The research study used a mixed methods approach, more specifically an exploratory approach. Mixed method is a research approach whereby researchers collect and analyse both qualitative and quantitative data within the same study. Mixed methods require a purposeful mixing of methods in data collection analysis and interpretation of the evidence. In this type of approach, both qualitative and quantitative data are simultaneously collected, analysed and interpreted. There is no clear-cut procedure for conducting a study using mixed methods. However, you can conduct mixed methods research by the following. The first step is to determine whether a mixed methods research approach is appropriate for answering your questions and offer the best kind of evidence you need for your research study. Further, is it to use the results from one data type to corroborate, expand, develop, or complement the other?

Mixed methods address different types of questions, collect different kinds of data and deliver different kinds of answers. Each set of methods has its own inherent strengths and weaknesses, and each offers a particular approach to address specific types of research questions (and agendas). The research instruments used were questionnaires and interview guide. According to Pritha Bhandari (2023), this can enhance the validity and reliability of the data and their interpretation to gain a comprehensive understanding of the subject matter. For quantitative data, a questionnaire survey was designed and administered to the lecturers and students. Qualitative data, interview guide was designed, and in-depth interviews were conducted with higher institution administrators to gain insights into their experiences with Co-curricular activities and their perceptions of how it influences students' discipline.

5.2 *Research Design*

An exploratory Case study design is a study that involves researching a specific topic to the point where thorough, detailed, and complete understanding occurs. The exploratory case study is used to explore presumed causal links that are too complex for a survey or experiment (Yin, 2014). Data was collected first to allow in-depth exploration of specific phenomena within a real-life context, while looking for patterns in the data and coming up with a model within which to view the data (Singh & Masuku, 2014). The design is appropriate for understanding the relationship between CCA and student discipline in HIL in Gulu City.

The research was conducted in two HILs in Gulu City. The area was selected because secondary school students who are being prepared for Higher Institutions of Learning get involved in co-curricular activities but also because many are involved in conflicts once they are free. The study is to explore the behaviour of these students in HIL and how this may be affected by CAA.

The researcher used probability and non-probability sampling (Elliot, 2020). The researcher conducted the study in two (02) HILs. The target population was ten (10) Administrators, twenty (20) Lectures and thirty (30) Students from HIL. These make a total of 52 respondents.

The researcher used judgmental sampling technique on school administrators; this was done because they are targeted to have specific attributes, smaller sample size and homogenous population that can pore over all data (Palinkas et al., 2015). Although the samples for qualitative inquiry are generally assumed to be selected purposively to yield cases that are "information rich" (Patton, 2002), there are no clear guidelines for conducting purposive sampling in mixed methods implementation studies, particularly when studies have more than one specific objective.

The second sampling technique used was simple random sampling. This is recognized as a reliable method of obtaining information where every single member of a population is chosen randomly, merely by chance. Each member has the same probability of being chosen to be part of a sample (Thomas, 2023).

Prior to the main study, a pilot test was conducted on two administrators, 10 teachers, and 20 students. The purpose of the pilot test was to check the reliability and validity of the instrument. Hence, the reliability of the items, which was calculated using the Cronbach alpha, was found to be 0.77. To ensure face validity, the instruments were checked by three experts who were authorities in the study area.

5.3 *Data Analysis*

Data analysis is the process of systematically collecting, cleaning, transforming, describing, modelling and interpreting collected data generally employing

statistical techniques. Data analysis is an important part of both scientific and business research (Eldridge, 2024). The information collected was edited, collated to eliminate errors and coded for analysis. Data was analysed using qualitative and quantitative methods. Quantitative data was analysed using Statistical software Statistical Package of Social Scientists, (SPSS) version 20. This package was used to enter and to analyse the data to identify patterns, correlations and trends between CCA and student discipline in HIL (Rahman & Muktadir, 2021). Qualitative data was analysed using thematic analysis to identify common themes and perspectives from the interviews and focus group discussion on Co-curricular activities and student discipline in HIL (Lochmiller, 2021). Data was triangulated to compare and contrast the findings from quantitative and qualitative data to ensure convergence and validate results. Triangulation of data from different sources was applied to strengthen the validity and reliability of the research results.

5.4 *Ethical Considerations*

The researcher used the following sets of principles to guide the research designs and practices in order to protect the rights of research participants, enhance research validity and maintain scientific integrity. *Voluntary participation*: Voluntary participation is individual willingness to choose to take part in research studies without any coercion or pressure. It is based on informed consent. The researcher provided adequate information about Co-curricular activities and students' discipline to allow participants to make decisions on whether or not to participate. *Confidentiality*: This is the condition in which the researcher knows the identity of a research subject but takes steps to protect that identity from being discovered by others. The researcher-maintained confidentiality by keeping the identity of the human subjects. The researcher protected the information privately by using password protected files, and encryption when sending information. The other information was stored in a drawer kept under key and lock. *Anonymity*: The researcher prepared consent forms and distributed them to the participants to sign as he went to collect data. *Communication Results*: This is the responsibility and ethical dissemination of research findings. The researcher ensured the validity, timeliness and accessibility of new knowledge which adhered to ethical principles.

5.5 *Limitations and Delimitations*

Time limited the number of respondents at each site in order to meet the set deadline. Hence the study was conducted in only two HILS in Gulu City and drew a total sample of 52 respondents, these findings of the study may not be generalised to all HILS countrywide. The questionnaire design limited the opportunity to ask further questions related to CCA and students' discipline in

higher institutions of learning. Future research may wish to employ semi-structured interviews that allow the retrieval of deeper understanding. This study was limited to investigating the influence of CCA and students' discipline in a case study of HIL in Gulu City and did not consider the extent of CCA in other areas in addition to failing to quantify the students' discipline in these institutions.

6 Findings

This section gives the analysis of the study which is the most important part of the study. The study focuses on CCA and students' discipline: A case study of HIL in Gulu City. The code given for participants interviewed was (Administrations in Institutions of Learning (AIL)).

6.1 *Students' Discipline*

The results of the descriptive analysis on students' discipline in higher institutions are provided in Figure 10.1.

Respondents were asked about the level of students' discipline in institutions of higher learning. The results indicate larger frequency (30 out of 42) of the respondents agreed and (6 out of 42) strongly agreed that the level of students' discipline is high as indicated in Figure 10.1. Participants were asked to state the level of students' discipline in institutions of higher learning; this

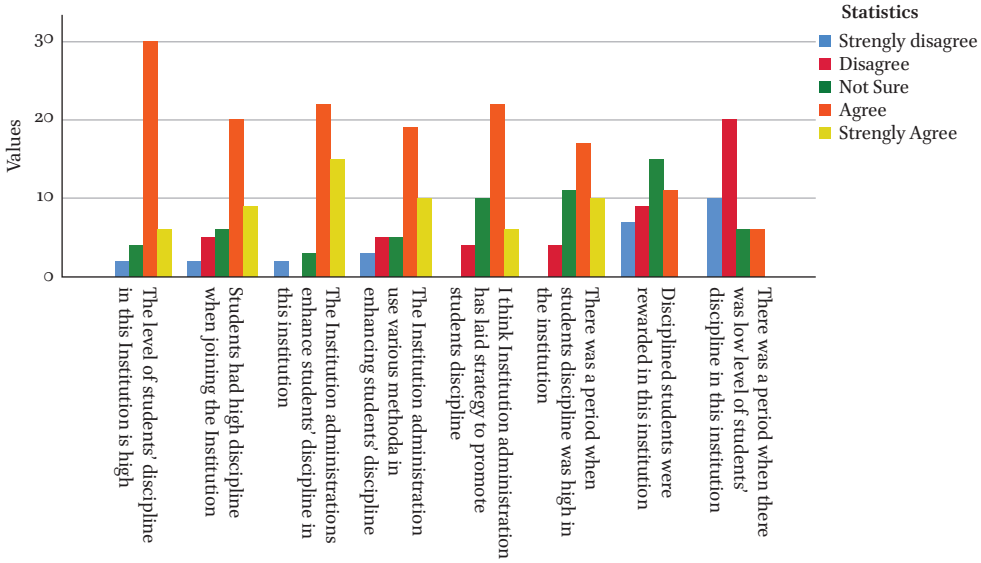


FIGURE 10.1 Showing students' discipline in the institutions of higher learning

was to explore students' conduct in these institutions. The participants AIL 3, 5, 6, 9 responded that "I think students' discipline is moderate – high in this institution, it is between 50%-75%".

The respondents were asked whether students had high discipline while joining the institutions. The results showed that 20 out of 42 respondents agreed while 9 out of 42 strongly agreed and 6 out of 42 were not sure. Participants were asked to state students' discipline when joining the institutions. The participants responded AIL 1, 6, 7 & 8 that "Students' discipline was low when they were joining the institution of higher learning".

The findings in Figure 10.1 showed that 22 out of 42 agreed and 15 out of 42 strongly agreed that the administrations play a significant role in enhancing students' discipline in these institutions, hence the students' discipline is good. Participants reported that institutions administrations (AIL 2, 3, 8 & 9) play a significant role in enhancing students' discipline in the institutions "By introducing institution rules and regulations booklets, activating different clubs and societies and strengthening student leadership having a periodic talk with students on student discipline".

Given that the majority of respondents agreed with the issues, as indicated on the Figure 10.1, the degree of student discipline is good. This implies that the institution's administration plays a significant role in enhancing students' discipline in these institutions, hence the students' discipline is good.

The heights of the bar graph indicate that a high percentage of respondents agreed with the items selected. It was found that the majority of respondents (21 out of 42 and 15 out of 42) highly agree and strongly agree that these institutions offer a variety of CCA. There were few respondents who strongly disagreed (2 out of 42) on all of the different categories of Co-curricular activities available in HIL. The link between different co-curricular activities in the institutions is strengthened by responses by AIL 1, 3, 5, 7 & 10, indicating that "There are various co-curricular activities that students in institutions of higher learning participate in, these include; football, adaptive sports, netball, music dance and drama, clubs and societies, debates".

The findings from respondents on the bar graph in Figure 10.2 indicated that 20 out of 42 respondents agreed, while 11 out of 42 respondents strongly agreed that students often participate in these CCA in HIL. These were expressed by the participants AIL8 & 5 who responded that, "I understand students participate in CCA once a year, for some it is regularly, for others like clubs and societies every semester".

The findings indicate that 18 out of 42 respondents agreed while 8 out of 42 strongly agreed, and 6 out of 42 disagreed that there are some CCA which are well implemented and please the students who are involved in these institutions. However, several participants (AIL 3, 4 and 9) pointed out that "Co-curricular

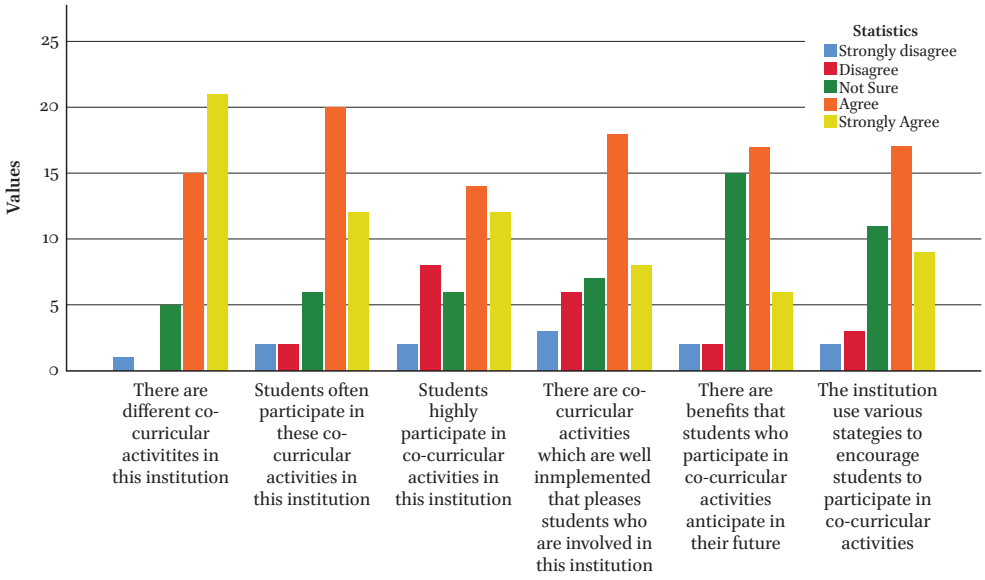


FIGURE 10.2 Level of students' participations in different co-curricular activities in this institution

activities which are well implemented and that please students who are involved are adaptive sport, football, music dance and drama, clubs and societies".

A high proportion of respondents in the study (17 out of 42 and 6 out of 42) agreed and strongly agreed that there are benefits that students who participate in CCA anticipate in their future, while 15 out of 42 were not sure whether the students who participate in CCA anticipate benefits in their future. At the same time, a high proportion of participants (AIL 1, 2, 7, 6 & 8) rationalised their confidence to participate by claiming that "We want to be international and national participants who are more disciplined members of society as a result of participating in co-curricular activities".

This implies that there are a variety of CCA in the HILS, and that students actively participate in these co-curricular activities in these institutions and there are significant benefits of these CCA to students.

As can be seen from the graph in Figure 10.3 (30 out of 42) respondents agreed with the statements that students are interested in participating in CCA in these institutions. Out of 42, 5 strongly agreed and 5 were not sure; the modest proportion of respondents who strongly disagreed with these issues is indicated by 2 out of 42. The participants (AIL 6, 2 & 10) responded that "Students have interest in participating in CCA as they gain prestige and build social capital, kills stress and boredom, helps develop the mind and concentrate in class".

Findings from the study indicated that 24 out of 42 and 7 out of 42 respondents agreed and strongly agreed that participating in CCA has an influence on students' discipline. This was followed by 8 out of 42 respondents who

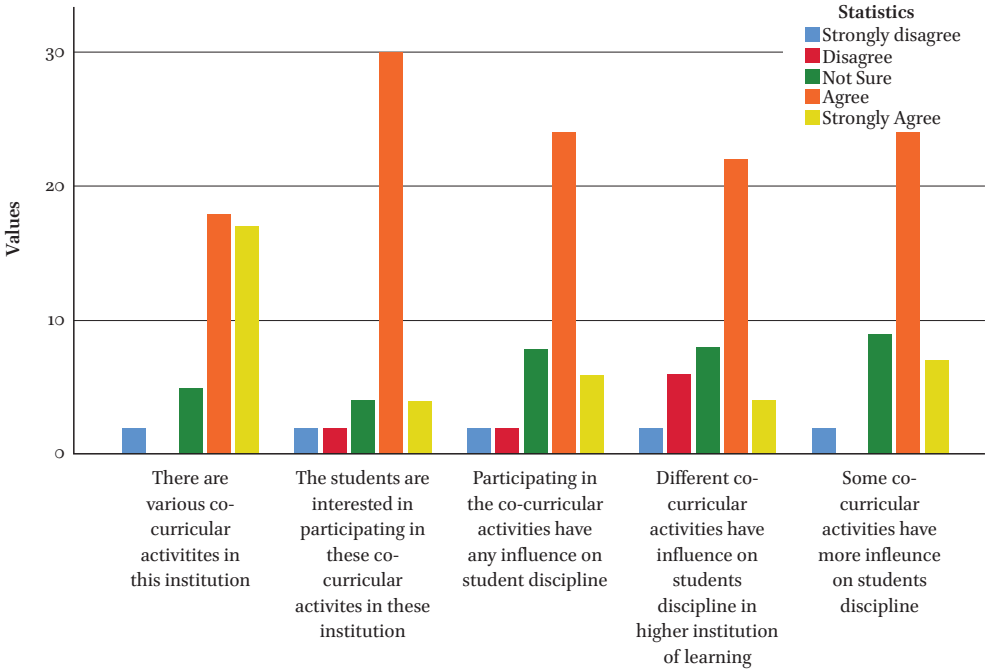


FIGURE 10.3 Influence of different co-curricular activities on students' discipline

reported that they are not sure whether participating in CCA has an influence on students' discipline. However, several participants (AIL 4, 5, 10 & 8) pointed out that "Participation in CCA influences students' discipline as it protects them from idleness and disorders".

From the study findings 25 out of 42 and 8 out of 42 agreed and strongly agreed that some co-curricular activities have more influence on students' discipline; of these 9 out of 42 were not sure whether some co-curricular activities have more influence on students' discipline. These were expressed by participants (AIL 1, 3, 7, 9 & 10) at all levels as, "I understand that football, netball, adaptive sports, music dance and drama, clubs and societies are co-curricular activities that have influence on students' discipline in the institutions of higher learning".

This implies that participation in different CCA in HILS in Gulu City has impacts on students' discipline as they get engaged and have different experiences from their peers. Based on the analysis of the different responses, we conclude that CCA influences the level of students' discipline in the HIL.

6.2 *Relationship between Students' Discipline and Participation in Co-Curricular Activities in Higher Institutions of Learning*

To determine the relationship between a student's discipline and participation in co-curricular activities, we use Pearson correlation analysis.

TABLE 10.1 Correlation analysis between students' discipline and participation in co-curricular activities

		Discipline	Co-curricular activities
Discipline	Correlation coefficient (r)	1	0.983
	Sig. (2-tailed)		0.000
	N	42	42
Co-curricular activities	Correlation coefficient (r)	0.983	1
	Sig. (2-tailed)	0.000	
	N	42	42

Note: Correlation is significant at the 0.01 level (2-tailed).

TABLE 10.2 Interpretation of magnitude of correlation coefficient

Correlation coefficient	Comment
0.00–0.19	Very low
0.20–0.39	Low
0.40–0.59	Moderate
0.60–0.79	High
0.80–1.00	Very high

There is a statistically significant relationship ($r = 0.983$, $p = 0.000 < 0.01$) between students' discipline and participation in CCA as depicted in Table 10.1. Using Table 10.2, it means that there is very high relationship between the participation in co-curricular activities and students' discipline in HIL since the correlation coefficient $r = 0.983$ falls in the range 0.80 – 1.00. This very high value of r implies that participation in co-curricular activities highly affects students' discipline. In other words, students' participation in curricular activities increases by 98.3% for every unit increase in students' discipline.

7 Discussion

CCA are helpful in development of students' mind and personality-related skills that include intellect, emotions, social, moral, and aesthetics. These make CCA important in discipline building. The major objective of the study was to examine the influence of CCA on students' discipline in HIL. The study

found that students' have moderate-high discipline in HIL. The results of the study are in line with the findings of studies conducted by Hasifa (2021) who posit that the school's morale could be high or low depending on the tone of discipline of that school. Discipline in an HIL can be achieved by a collective responsibility in the management of the institution.

In examining whether students had high discipline while joining the institutions, the study found that the majority of respondents agreed to the idea compared to a few of the respondents who disagreed while some respondents remained unsure. The findings were consistent with the findings of previous scholars. For example, Salgong et al. (2016) who revealed that student discipline has been a problem of ongoing interest for scholars, school administrators, and policy makers for a long time. The students come from high schools with different behaviour and reserve their behaviour while joining institutions of higher learning. Study revealed that the administrations play a significant role in enhancing students' discipline in these institutions, hence the students' discipline is good. The results of the study are in line with the findings of studies conducted by Odama et al. (this volume) and Nekesa (2018) which revealed that the school administration is holding regular meetings with the student council on discipline issues. The student leaders should not interfere with the disciplinary process after forwarding a disciplinary issue to the Institutions administrations. Institution's administrations introduce institution rules and regulations booklets, activate different clubs and societies and strengthen student leadership having a periodic talk with students on student discipline, thus making student discipline good.

It was found that the majority of respondents highly agreed that institutions of higher learning offer varieties of CCA. This finding is consistent with the reports of Rathore, Chaudhry & Azad (2018) that co-curricular activities such as singing, dancing, gardening, mass drill, community work, and games are expected to play significant roles in reinforcing the overall development of students in schools. CCA can provide students with direction to engage in meaningful activities. Following this engagement, it is hoped that the skills learned through these activities can cultivate a healthy lifestyle after school years (Nghia, 2017).

The findings from respondents indicated that the majority of the respondents agreed that participation in different co-curricular activities in institutions of higher learning has impacts on students' discipline as they get engaged and have different experiences from their peers. The result of the present study is similar to the results of a study conducted by (Athar et al., 2023) who found that by participating in CCA students learn about the values in ethics and discipline, students develop and enhance their cognitive skills. Ashfaq (2021) argued that CCA influences the personality of the students; they become more

loyal, punctual, and active. This shows that co-curricular activities are important in shaping students' discipline. The findings indicate that there is a very high relationship between CCA and students' discipline. The findings were consistent with the findings of previous scholars. For example, Bonaventure and Claire (2020). CCA are an integral part in the learning process since they influence students' discipline and reduce time wastage of students in doing immoral actions. This is an indication that CCA occupies students, and they do not have time to misbehave.

8 Conclusion

Based on the study findings it can be concluded that most of the respondents agreed that students' discipline in HIL is good as they follow rules and regulations provided by Institution's administration, hold assemblies and guide the students on discipline. The findings also show that most of the respondents agreed that there are various CCA that students in HIL participate in; these include football, adaptive sports, netball, music dance and drama, clubs and societies, debates. The students who play different games are guided by general rules of the games thus improving their discipline. CCA increased the confidence level of the students. By participating in co-curricular activities students become more socially interactive. Students become more motivated through CCA. There is a very high relationship between the participation in co-curricular activities and students' discipline in HIL. CCA influences the level of students' discipline in the HIL. The study confirms that engagement in CCA significantly boosts students' discipline in HIL in Gulu City.

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PART 4

Innovation in Teaching and Learning: IT, Participatory Practices, and Employability

CHAPTER 11

Advances toward Digital Learning

A Scoping Review of Research and Practices from East Africa

Ann Bygholm, Lone Dirckinck-Holmfeld and Geoffrey Olok Tabo

Abstract

The aim of this scoping review is to identify the extent and nature of the use of digital technologies and new pedagogies In East African higher education. That is, which technologies are in use, how are they used and how is the relation between student-centred pedagogies and digital technologies described and accounted for. The review covers the period from 2009 to 2024. Three main areas appeared from the analysis: professional development, supporting the digital learning process, and community learning. Within professional development emphasis is on context specific approaches and institutional support; the papers on supporting the digital learning process stress the importance of addressing technological barriers, enhancing resource sharing and adapting pedagogical strategies to improve educational practice, and papers from the community learning category illustrate innovative approaches to education and community engagement. The analysis also revealed that the use of mobile phones and Moodle is widespread, that the main use is for sharing of content such as course outlines, slides and readings, and that there is a general agreement that use of digital technologies promote collaboration, self-regulated and student-centred learning. Cross-cutting challenges were identified, and implications of our findings for practice and policies are discussed.

Keywords

transforming education – scoping review – higher education – student-centred pedagogies – digital learning

1 Introduction

It is generally acknowledged that education is an important factor in fostering innovation and economic growth, also in Africa. But the role of higher education in this process has been disputed. Previously, in the 1980s and 1990s, it

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was assumed that educational efforts should focus on primary education and partly also secondary education, as the return rate from these investments was assumed to be much better than from higher education. The reason for these assumptions and the related decline in funding to higher education from The World Bank and other important economic actors is explained by e.g., Hayward and Ncayiyana (2014) and Bloom et al. (2014). However, in the beginning of the 21st century, a more balanced view on the role of higher education gained foothold, and higher education is now accepted as central for economic growth as well as for political and social development, also by funding institutions.

Bloom et al.'s (2006) analysis of the impact of higher education in Sub-Saharan Africa led them to conclude that expanding higher education 'may be important in promoting faster technological catch-up and improving a country's ability to maximise its economic output' (p. 36). A similar conclusion is made in Bloom et al. (2014) and Gyimah-Brempong et al. (2006), based on data (from 1960–2000) from 34 African countries, arguing that especially higher education 'has a relatively large and statistically significant effect on the growth rate of per capita income' (p. 525). Bloom et al. (2006) mention that the many differences between the countries involved in the study e.g., in policy environment, should be considered and that these differences may affect economic growth. Also, it is noted by Gyimah-Brempong et al. (2006) that the estimates do not account for e.g., 'growth loss' due to emigration of highly educated Africans, and many other obstacles in achieving the said effect.

Focusing more specifically on East Africa, the East African Community Vision 2050 and the East African Development Strategy 2021/22–2025/26 also emphasise education, in general, as a key enabler for development. The Vision 2050 paper outlines the overall ambition 'for the region to enhance transformation for growth and development and move the community to higher income cohort and subsequently achieving an upper middle-income status', (p. 12) and points to the need for development in all areas of society (infrastructure, energy and IT, industrialization, agricultural and rural development). This calls for a well-educated and healthy population in the region. As for education the focus of Vision 2050 will be particularly on improving access to and completion rates at higher levels (p. 95). Furthermore, a University of the Future is outlined where the university's traditional tasks, teaching, research, and community service remain but the content changes. Thus, for example it is anticipated within teaching that the focus will change from teacher centred to student centred approaches, within research that the aim of finding practical solution to problems in the local communities will gain prominence, and within community service that universities work closely with the surrounding society to produce graduates that fulfil the need of the private sector, government, local

communities etc. Also, information technology plays an important role in the University of the Future e.g. (Vision 2050, Annex 3, p. 136).

The East African development strategy (2021/22–2025/26) identifies more specific objectives to be achieved in the five-year period. Objectives that are in alignment with both the Vision 2050 paper and the individual participating states' own vision statements. And again, the need for investment and reforms around human capital, including education, training, and health, is underlined as important. It is stated that, despite positive trends, the region is characterised by several challenges such as high poverty rates and unemployment, and that the labour force on the one hand will need further skills to be turned into a productive resource, and that the employment base on the other hand is too narrow to absorb the existing labour force. In the strategy paper from 2016/17–2020/21 the specific interventions regarding education included establishing a system for quality insurance and harmonisation of educational systems in East Africa, support of regional Centres of Excellence, and the introduction of e-learning. The newest strategy paper adds emphasis on the need for linking higher education with industry and remodelling the curricula to create critical and creative thinkers to fit in an ICT intensive society (EAC, 2021, p. 107).

As for more specific initiatives and intervention in higher education this is taken care of by the Inter-University Council of East Africa (IUCEA), who also have published strategic plans since 2006, the latest is covering the period 2021/22–2025/26. IUCEA has existed in some form since the first independent universities were established in 1970 in Uganda, Tanzania, and Kenya. The collaboration was more formally confirmed as responsible for coordinating higher education in 2002, and in 2007 Burundi and Rwanda joined IUCEA, later South Sudan also became a member. The aim of IUCEA is to facilitate higher learning institutions in EAC to reach a transformative, inclusive and equitable quality education for all. It is stated that

> Focusing on digitization of learning and teaching, research and innovation and community engagement in higher learning institutions will lead to economic integration and private sector development, tallying with the need of a growing community. (IUCEA, 2021, p. VII)

Six objectives are formulated, including establishing university leadership training programmes, establishing regional information hubs for integrated higher education, and advocating for a digital learning infrastructure to enhance quality and innovation of instruction in higher learning institutions. Several challenges for higher education in East Africa are identified e.g., the exponential growth in enrolment without a corresponding growth in

funding with the danger of lower quality as a result, low quantity and quality of research and research not translated into innovation, and a general weak connection between academic, public sector, private sector, and civil society (IUCEA, 2021, pp. VIII–IX).

Overall, ambitions for higher education in East Africa are high, vision and strategies are formulated, systems to support the strategies are maturing, and challenges are numerous. Universities are slowly moving to adopt new pedagogies such as PBL, digital learning, hybrid learning, student centred learning, blended learning, and participatory approaches in the strive to improve quality to respond to the many challenges experienced by the East African universities, i.e. the growing number of students, poor infrastructure and facilities, lack of funding, and employability. There are, however, limited studies synthesising practice and experiences in implementing these pedagogical changes. In this paper we review the literature on how East African universities cope with these challenges, how they experiment with the use of technology, student centred pedagogies, and the organisation of educational activities.

2 Methods and Material

The review was carried out as a scoping review. Arksey and O'Malley (2005), who published the first methodological guide for scoping reviews, points to four different reasons for conducting a scoping review instead of a systematic literature review. The first one being to examine the extent, range and nature of a research activity, not to describe the findings in any detail but more to map the field and visualise the range of material that might be available. The second reason is to do a scoping review as a pre-study to a systematic review, and the third is to summarise and disseminate research findings to e.g. policy makers and practitioners. Finally, the fourth reason is to identify research gaps in existing literature. Peters et al. (2020) in an updated methodological guide for conducting scoping reviews, mentions along the same line six points: (1) as a precursor to a systematic review; (2) to identify the types of evidence available in a given field; (3) to identify and analyse knowledge gaps; (4) to clarify key concepts and definitions in the literature; (5) to examine how research is conducted on a certain topic or field; (6) to identify key characteristics or factors related to a concept (Peters et al., 2020, p. 2122). In our review we focus on how institutions within higher education in East Africa experiment with pedagogical innovation with digital technology, that is we want to examine the extent, range and nature of research within this area, how research is conducted, and how this in turn can inform policy and practice.

The review consists of two searches, using the same search terms and databases, one covering the period from 2009 to 2017 and another from 2018 to March 2024. Together the searches represent both the period before and after the Covid-19 pandemic. Thus, it is interesting to explore how the pandemic affected pedagogical innovation with technology. The databases used were ProQuest and EBSCOhost both representing collections of databases, together covering a very broad field of research output. The search in the databases were performed using strings of Problem-based Learning OR project-based learning OR blended learning OR e-learning OR mobile learning AND Participatory methods (OR variation hereof), AND Innovation (OR variation hereof) AND East Africa (OR the individual countries), AND Higher education (or variation hereof). The first search gave 132 results (ProQuest 95, EBSCOhost 37), and the second search 154 results (ProQuest 118, EBSCOhost 36). Going through abstracts removing papers from the health care area, papers focusing only on South Africa, papers not addressing higher education, not addressing pedagogical experiments, and redundant papers, 68 papers were examined more closely in the first search and 80 in the second search. Finally, 30 papers were included in the review (12 from the first search and 18 from the second).

All papers examine the use of digital learning in educational activities in East Africa, and all papers include some form of empirical studies. 13 papers are based on empirical data from Tanzania, 7 from Uganda, 6 from Kenya, 4 papers are based on data from Kenya and countries outside East Africa. The data presented in the papers were collected in a variety of ways including interviews, observation, workshops, experiments, scenarios, questionnaires, randomised studies, anecdotes (backed up by research diaries, project reports, meeting minutes etc.) and log data. The amount of data also varies widely.

3 Findings

Going through the papers we identified three main areas addressed in the papers related to pedagogical innovation and use of digital learning. The main areas are professional development (5 papers in the first search and 5 papers in the second search), supporting the digital learning process (4 papers in the first search and 11 papers in the second search), and community learning (3 papers in the first search and 2 papers in the second search). Below we first present the papers organised in these areas, then we sum up the main findings concerning use of technologies and pedagogical implications, and finally we identify some cross cutting challenges.

TABLE 11.1 Overview papers

Papers search 1	Main issue	Data collected	Country
Kemppainen et al. (2012)	Professional development – technology transfer	Personal experience in curriculum development (research diaries, project reports, e-mail etc.)	Tanzania
Onguko et al. (2013)	Professional development – reflections on blended learning	Interviews, observations – 12 participants	Kenya
Onguko (2014)	Professional development – challenging educational contexts	Interviews (follow-up) – 10 participants	Kenya
Foley & Masingila (2014)	Professional development – large classes	Workshops, questionnaires (10 responses)	Kenya
Tondeur et al. (2016)	Professional development – challenges in e-learning	4 cases (representing different contexts)	Kenya, Australia, Israel, Sri Lanka
Muyinda et al. (2010)	Digital learning process – mobile learning, learning objects	Scenarios	Uganda
Muyinda et al. (2011)	Digital learning process – mobile learning, learning objects	Questionnaire – 446 participants	Uganda
Muganda et al. (2016)	Digital learning process – open educational resources	Workshops with key persons (10), questionnaires (23 respondents)	Tanzania
Msonde & Van Aalst (2017)	Digital learning process – effectiveness of e-learning	Randomized study, 102 participants	Tanzania
Roy et al. (2012)	Community learning – responsible citizens, forest fire	Design experiments – questionnaires, 176 participants	Tanzania
Jobe & Hansson (2014)	Community learning – human rights	Log data from Moodle, 160 participants, 19 answers to course evaluation form	Kenya
Sanga et al. (2016)	Community learning – informal learning among farmers	Workshop, experiment with prototype, 19 participants	Tanzania

(*cont.*)

TABLE 11.1 Overview papers (*cont.*)

Papers search 2	Main issue	Data collected	Country
Almas et al. (2021)	Professional development – teachers use of e-leaning system	Questionnaire, 42 instructors participated	Tanzania
Bariu & Chun (2022)	Professional development - teacher's attitude, effects on implementation	Questionnaire, 475 teachers participated	Kenya
Loyola-Hernández et al. (2022)	Professional development - teachers' response to Covid-19	Mainly autoethnographic	Kenya (Mexico, United Kingdom)
Goshtasbpour et al. (2022)	Professional development - use of open educational resources	Authors critical reflections (based on meeting notes, email conversations, learner activity, post-course survey responses)	Kenya
Anasel & Swai (2023)	Professional development - factors hindering adoption of online teaching	Mixed method Questionnaire including both closed and open-ended questions – 177 answered	Tanzania
Ghasia et al. (2018)	Digital learning process - stakeholders' perception of m-learning	Qualitative interviews with teachers, students and ICT experts (25 teachers, 53 students, 6 ICT experts)	Tanzania
Bagarukayo (2018)	Digital learning process – use of Facebook to apply operating system knowledge	Questionnaire after the course, 48 students responded	Uganda
Ghasia et al. (2020)	Digital learning process - approach to e-learning since 2009	Documents, extracts from Moodle between 2010 and 2018 + policy documents	Tanzania
Mwandosya & Mbise (2019)	Digital learning process - pedagogical impact of the CBEMET prototype	Interviews and questionnaires, 40 teachers and 160 students from one campus participated.	Tanzania
Pete & Soko (2020)	Digital learning process - online learning during Covid-19	Questionnaire, 2341 responded, 842 from Kenya	Kenya, Ghana, South Africa

(*cont.*)

TABLE 11.1 Overview papers (*cont.*)

Papers search 2	Main issue	Data collected	Country
Namirembe & Kyobe (2021)	Digital learning process – factors influencing the uptake of e-learning)	Questionnaire, 184 students from two universities participated.	Uganda
Mwandosya et al. (2022)	Digital learning process - pedagogical impact of the CBEMET prototype	Interviews and questionnaires, 40 teachers, 542 students 8 management staff participated	Tanzania
Bada, J. K. (2022)	Digital learning process - learners view on e-learning	Questionnaire, 39 students participated	Uganda
Dirckinck-Holmfeld et al. (2023)	Digital learning process - students learning practice	Photovoice and workshops. 11 students participated	Uganda
Mwalukasa (2023)	Digital learning process - use of mobile phones among students	Questionnaire, 150 students participated	Tanzania
Kisanjara & Maguya (2024)	Digital learning process - students' perceptions of e-learning	Questionnaire, 241 students participated	Tanzania
Sheila et al. (2022)	Community learning - collaboration between farmers and university	Questionnaire, 466 respondents	Uganda
Honen-Delmar & Rega (2023)	Community learning - refugees' experience from a blended learning program	Interviews, 100 students	Kenya (Malawi)

3.1 *Professional Development*

One of the papers within the category of professional development from the first search, Kemppainen et al. (2012) focus on education of local IT professionals who are competent in IT service management in a given context. The rest of the papers in this category concerns teachers' professional development, thus Foley and Masingila (2014) concentrate on explicating the challenges in teaching large classes (between 300 and 1000 students) and how to use technology to support a large class pedagogy that is efficient and meaningful for the students. There are two papers (Onguko et al., 2013; Onguko, 2014) that study how to use IT to enable teachers to participate in professional development activities without leaving the rural area where they live and work. The specific professional development course examined is about instructional design and blended learning and focuses on the importance of appropriate hardware and locally rooted development of content. Lastly, the paper by Tondeur et al. (2016) discusses five challenges (identified at the International Summit on ICT in Education, 2015) for teacher professional development concerning application of technology to support learning processes. The paper also presents four cases from around the world, one from Kenya, focusing on more context specific challenges and solutions e.g., the experience from Kenya were that schools were provided with expensive equipment, but with marginal support for teachers, which prevented the technology from working as intended.

Of the five papers found in the second search that belongs to this category three of them are questionnaire surveys aiming at explicating different aspects of teachers and staff practice concerning the use of digital technology. Thus, Almas and Machumu (2021) focus on instructors' perspectives, motivational attitudes and competences, whereas Bariu and Chung (2022) concentrate on how teachers' attitude might influence the implementation of ICT, and Anasel and Swai (2023) focus on explicating the factors that hinder the adoption of online teaching. Goshtasbpour et al. (2022) describes the development of an online course aimed at enhancing the knowledge and skills of educators, educational managers, and support staff in online education within the context of the demands put forward by the Covid-19 pandemic. The development was run by Open University UK, with participants from 37 Kenyan universities and involved the use and adoption of Open Educational Resources (OER). The challenges identified were among other things that the course must meet national, local and individual needs, be adapted to the local context, consider restricted internet access, acknowledge constraints on learners such as workload and limited time, and offer technical support. The paper by Loyola-Hernândez et al. (2022) uses an autoethnographic method to describe how academic staff placed at three different universities in Kenya, Mexico and

the United Kingdom experienced the Covid-19 lockdown. They describe the demands for rapid adjustment to online teaching during the first month of the lockdown without adequate IT equipment and training, and without reflection on how this transition impacted the pedagogy. This was a stressful experience for the academic staff and the authors also point out that access to online learning was especially difficult for learners from more vulnerable families as many have no computers and smartphones which made inequality in access to education even higher. On the positive side the authors mention small online groups and one-to-one meetings as something that had a positive impact and also as a way of realising a more critical pedagogy implying a student-centred approach to learning.

3.2 *Supporting the Digital Learning Process*

In the four papers that focus on issues concerning supporting the digital learning process from the first search one is addressing the use of open educational resources (Muganda et al., 2016). More specifically the paper explicates the existing status of open educational resources (in open education in Tanzania) and based on workshops with people with knowledge on the topic, identify critical issues in the production, use, and dissemination of open educational resources to formulate recommendations and a policy to guide the procedures and practices around open educational resources. In line with this, two papers address the deployment and utilisation of mobile learning objects (Muyinda et al., 2010, 2011) Learning objects are a sort of educational resource, and also meant to be reusable, but the content is not necessarily open. In Muyinda et al. (2010) a scenario drawn from the department of distance education at a university in Uganda is used to identify and model distance learners' information and learning needs. The idea is to use learning objects on mobile phones to provide e.g., course material, study guides, take home assignments, different kinds of feed-back, but also more administrative information like information on examination dates and venues, fee payment etc., and moreover allowing learners to communicate with each other, teachers, and the administration. In Muyinda et al. (2011) a framework consisting of 12 dimensions is suggested to support the design and evaluation of learning objects on mobile phones. Finally, the fourth paper in this category investigates how different pedagogical designs of the learning environment influence student interaction, collaboration, and use of resources in an undergraduate chemistry course (Msonde & Van Aalst, 2017). More specifically three designs were tried: one provided access to resources but with no interaction built in (as baseline), one with added activities in discussion forums, and one with both discussion forums and podcasts as tools. The podcasts are short video or audio episodes

explaining specific issues. The design including both discussion forums and podcasts were considered most successful in achieving student engagement and learning.

Two of the eleven papers in the second search focus on uncovering student and staff general use of mobile devices and the challenges associated with this. Ghasia et al. (2018) do qualitative interviews with teachers (25), students (53), and ICT experts (6) from four public universities in Tanzania. The findings reveal that mobile devices (smartphone, tablets, laptops) are widely used but also that limited network coverage, some students' inability to afford mobiles, lack of qualified staff for preparation of mobile content, gaps in existing policies, and faculty course design hinder the deployment of mobile learning at the universities represented in the investigation. Pete and Soko (2020) evaluates in the light of Covid-19 pandemic the instructor and learner preparedness for online learning through a structured questionnaire for lectures and students from different universities in Kenya, Ghana and South Africa, 2,341 answered the questionnaire, hereof 842 from Keya. The study focused on what devices were used (desktop computer, laptop computer, tablets, mobile phones), literacy level, from where they accessed (home, friends' home, internet café, public library, etc.) and finally level of satisfaction). The findings revealed that most learners and instructors used laptops and smartphones, except from Kenya where there also was a high use of desktop computers. The use of tablets was the least used among the participants. The literacy level was intermediate, which meant that respondents were able to use a range of applications. Most of the respondents from all three countries accessed the internet from university or work. And finally, there was a low level of satisfaction with the internet connection, cost and reliability. Based on the study the authors recommend among other things that universities should shift from investment in on-campus desktops, to support instructors and learners by allocating internet bundles to them to use from anywhere, and furthermore lobby for subsidised internet bundles from internet providers.

Focusing only on students, Namirembe and Kyobe (2021) examine the predictors of successful adoption of technology-supported learning among students in two universities in Uganda. The study identifies organisational and individual factors that influence the adoption of technology supported learning. Data was collected from 184 students from 2 different universities in Uganda. The factors influencing the adoption include the goal of the policy, time to experiment with ICT, financial support, and commitment of university management.

Based on the study's findings, recommendations for universities in developing economies include strengthening management capabilities, increasing

the time students can experiment with ICT, and introducing technology supported learning at earlier stages to enhance adoption. Dirckinck-Holmfeld et al. (2023) offers insights into the students' study practices and how they navigate challenges in their educational journey. Data was collected from photovoice and workshop activities with 11 students from three different faculties. The findings show that students face challenges in accessing Wi-Fi and power, with smartphones being their most used ICT tools. Tasks are primarily curriculum-directed, and collaboration is a key aspect of their study practices. Students are dedicated to pursuing their professional careers while also supporting their communities. The study highlights the importance of understanding students' study practices when transforming education and emphasises the need for access to basic tools like Wi-Fi and power. Mwalukasa (2023) investigated the utilisation of mobile phones as a tool for learning among postgraduate students at a university of agriculture in Tanzania.

Data collection was carried out using structured questionnaires with both open and closed questions. 120 students from the different faculties of the university participated. The findings showed that students frequently used mobile phones for sharing and reading lecture notes, downloading academic materials, communicating with supervisors, and watching tutorial videos. The authors recommend that educational experts should explore more in-depth how to use mobile phones as a learning tool.

Mwandosya and Mbise (2019), Mwandosya et al. (2022) present evaluations of a prototype (CBEMET) allowing teachers to interact and share educational content with each other and with students with the goal of innovating teaching and learning. The prototype was evaluated at the college of business education at a university in Tanzania. The university has four campuses and in the first evaluation 40 teachers and 160 undergraduate students from one campus participated. In the second evaluations 40 teachers and 542 students + some managerial staff from all four campuses were involved in the evaluation. Data was collected through interviews, focus groups, and questionnaires. The findings show that students and teachers were satisfied with the functionality of the system and also the included forums and chats that allowed teachers and students to communicate with each other. Thus, the system made it possible to share educational resources among the teaching staff themselves, between teachers and students, and among students in all four campuses. It is concluded that the system paved the way for innovating teaching and learning through peer group discussions and easy sharing possibilities.

Two papers report from experiments with IT in a specific course setting. Bagarukayo (2018) discusses the use of Facebook to facilitate learning and knowledge transfer into practice. It highlights a study where second year

students undertaking an Operating System course at a university in Uganda were tasked with recording and uploading a video of installing operating systems onto a virtual machine on a Facebook group. After the course a questionnaire was filled in by 48 students. The study shows positive effects of using Facebook for learning, including increased collaboration, interaction, and practical skill development. Students found the experience engaging and effective, leading to greater understanding of concepts and improved interaction with peers and instructors. The study recommends integrating Facebook as a learning tool due to its familiarity and ease of use. Bada (2022) discusses the evaluation of blended learning for a Systems Analysis and Design course in an MBA class at University Business School in Uganda. The study used Moodle for online course delivery and gathered feedback from 39 postgraduate students through questionnaires. The results showed that students strongly recommended the e-learning approach, citing benefits such as easy access to lecture materials, efficient coursework administration, flexibility in learning, and cost-effectiveness. However, students also highlighted challenges such as lack of ICT equipment, slow Internet speed, and power/electricity issues.

The last two papers in this category focus on the implementation of an e-learning system at one university in Tanzania. Ghasia et al. (2020) describes the historical background of the system that goes back to 2009 when Moodle was first implemented, and the paper reflects on both successes and challenges as well as recommendations for the way forward. The paper provides insights into the e-learning system adoption, utilisation, and practices at the university. It discusses the use of the Moodle platform for course delivery and student engagement. The findings indicate a notable increase in courses taught via blended pedagogy, along with efforts to establish online and blended learning programs to enhance academic delivery and student-teacher interactions. Despite progress, the research identifies critical challenges faced by the institution, including limited ICT infrastructure, inadequate ICT skills among students and teachers, lack of technical expertise in digital content design, and an over-reliance on traditional teaching methods. The authors offer recommendations for the way forward, emphasising the need for institutional alignment of e-learning initiatives with organisational strategies, user support, and continuous training for educators. It highlights the importance of understanding organisational needs before technological decisions and underscores the role of educators in driving successful e-learning transformations within academic institutions. The study by Kisanjara and Maguya (2024) focuses on the low uptake of e-learning among students at the same university in Tanzania. Data was collected through a questionnaire which was responded to by 241 students. Focus is on students' perceptions and the factors influencing the use

of e-learning, such as infrastructure, technical support, Internet connectivity, and the quality of e-learning materials. The research found that students had a negative perception of e-learning due to factors like inadequate Internet connections, low-quality learning materials, lack of user training, and slow system accessibility.

3.3 *Community Learning*

The three papers on community learning from the first search address different issues and target groups. Jobe and Hansson (2014) describes experiences from creating and running a MOOC on human rights, a course that was available for free, to anyone living in Kenya. In creating the MOOC focus was on ensuring access from any device, especially mobile by using a responsive design, to include audio recording of all textual content to mitigate poor literacy, and to encourage use of personal experiences to stimulate discussion on human rights. Furthermore, a certificate and a digital badge was offered to participants who completed the course. Another paper, Roy et al. (2012) addresses the problem of forest fires in Tanzania. Forest fire is an example of a problem which is highly relevant for the community but not addressed anywhere in the educational system. The paper describes how video was used as material in problem-based learning, in this case in high schools. The paper includes reflections on the challenges of using ICT in educational activities and the advantages of problem-based learning. The third paper, by Sanga et al. (2016) describes the development of a prototype of a mobile phone application to support blended learning for smallholder farming communities in Tanzania. Focus is on developing innovative ways of communicating and disseminating agricultural information and proven agricultural technologies from either extension agents, research centres or universities to farmers. Within the same area the paper by Sheila et al. (2022) from the second search evaluates rural farmers' readiness and intention to use a dairy application for collaboration with a higher education institution in Uganda. Data was collected from 466 respondents in a region of Uganda through a survey. It was found that awareness and normative influence positively affect farmers' preparedness to collaborate through the application. Factors such as readiness, self-efficacy, perceived ease of use, perceived usefulness, hedonic attitude, and utilitarian attitude have a positive impact on farmers' intentions to use the application. The study concludes that understanding these factors is essential for developing effective technology-driven strategies for collaboration.

The university plans to use the application to collaborate with farmers in the future. The last paper in this category by Honen-Delmar and Rega (2023) discusses a research study on how refugees in camps, who completed a

blended higher education program, developed intercultural competence. The study specifically focuses on the experiences of 100 refugee graduates of the Diploma in Liberal Studies program, which is accredited by Regis University (US) and delivered by Jesuit Worldwide Learning in refugee camps in Malawi and Kenya. The online part of the program allows students to access content, to hand in weekly assignments and to participate in a global online discussion forum, whereas on-site activities are centred around weekly discussions in a community learning centre, facilitated by an on-site facilitator, often a graduate student.

Data consisted of qualitative interviews done by local facilitator/instructors. The research found that the program helped refugees build intercultural competencies through knowledge, skills, attitudes, and behaviours. Graduates gained new perspectives on religion and culture, improved conflict-resolution skills, and showed more inclusive attitudes towards other cultures. The outcomes of the program included fostering peaceful coexistence, enhancing community understanding, and empowering individuals to engage in intercultural interactions.

3.4 *Use of Digital Technologies and Pedagogical Implications*

The above overview represents almost 15 years of experience in the use of information technology in educational activities in East Africa. In this context, the term "educational activities" includes initiatives directed towards educators, towards learners and staff in higher education, and towards citizens/the surrounding community. The first search yielded an almost equal distribution of papers across three themes: professional development (five papers), supporting the digital learning process (four papers), and community learning (three papers). However, the second search revealed a notable surge in papers exploring the integration of digital learning in higher education. This might be due to increased access to computing devices and internet, but also the disruption of ordinary teaching practices caused by the Covid 19 pandemic. The impact of the close-down of the universities in connection with the Covid-19 pandemic is explicitly addressed in four papers (Loyola-Hernández et al., 2022; Goshtasbpour et al., 2022; Anasel & Swai, 2023; Pete & Soko, 2020).

Four more papers mention Covid 19 as one of the reasons to work with e-learning (Namirembe & Kyobe, 2021; Mwandosya et al., 2022; Bada, 2022; Kisanjara & Maguya, 2024). However, no matter how many papers explicitly addressing the pandemic, as Kipkorir David put it in a blogpost from July 2021: "Covid 19 has forced a greater demand for digital reliance across the board, and this outcome is likely to be here to stay as the 'new normal'". The more widespread use of digital technologies in higher education can also be seen

in the increasing tendency for studies to focus on the institutional or cross-institutional level rather than the course level. Overall, the papers from professional development emphasize the importance of context-specific solutions and institutional support for educators, the papers on supporting the digital learning process stress the importance of addressing technological barriers, enhancing resource sharing and adapting pedagogical strategies to improve educational practice, and papers from the community learning category illustrate innovative approaches to education and community engagement.

The use of Moodle is explicitly addressed in nine of the papers (Foley & Masingila, 2014; Msonde & Van Aalst, 2017; Jobe & Hansson, 2014; Almas et al., 2021; Anasel & Swai, 2023; Ghasia et al., 2020; Bada, 2022; Dirckinck-Holmfeld et al., 2022; Kisanjara & Maguya, 2024). Moodle is not always the first Learning Management System used at the universities, some mention e.g. Blackboard or other proprietary software system, but the reason given in many of the papers for having Moodle is that it is open source. Other learning platforms described in the papers include a prototype developed at a college of business education specifically for sharing education-related resources (Mwandosya & Mbise, 2019; Mwandosya et al., 2022), and Bagarukayo (2018) who analyses the use of Facebook to facilitate learning in an operating system course. In terms of more specific uses of Moodle and other learning platforms, Almas et al. (2021) mention 'the provision of teaching notes, assessments and feedback, course outlines, and for grading students' work online' (Almas et al., 2021, p. 76), and Anasel and Swai (2023) mention teaching slides, course outlines, and journal articles used in teaching. Bada (2023), who focuses on the students, emphasises their appreciation of the flexibility in submitting assignments, sharing knowledge through the discussion forum, accessing the learning materials, and seeking advice from the course instructor and class members. However, Dirckinck-Holmfeld et al. (2023) also identified problems enrolling students to Moodle due to lack of procedures, and difficulties for students managing passwords.

The fact that mobile devices and mobile network connectivity are much more widespread in East-Africa than desktop computers and wired broadband, means that many of the pedagogical experiments reported in the papers are based on, or include mobile devices, that is primarily smartphones but also laptops and tablets. This reflects, as expressed in one of the papers that … 'it is possible and probably beneficial for tertiary institutions in Africa to leapfrog universities in western countries by not creating large, complex wired networks and instead focus on developing wireless and mobile capacity on their campuses' (Foley & Masingila, 2014, p. 804). But use of mobile devices of course also represents a challenge as there is much less experience with

this, than with the use of computers and wired broadband. E.g., the spread of mobile phones makes the use of SMS more accessible than emails as a form of communication, but as stated by (Foley & Masingila, 2014, p. 805) focusing on large class pedagogy, texting also has drawbacks in institutional functionality as the cost and logistic (SMS charges, collecting and managing phone numbers) would be huge. Thus, the SMS message lack the official status that emails have obtained in many western universities. In later papers (Ghasia et al., 2018; Dirckinck-Holmfeld et al., 2023) examine the use of mobile technologies and point out that social media platforms such as WhatsApp and Facebook play an important role in communication and collaboration. The use of mobile phones, mentioned in most papers, is also explored by Mwalukasa (2023), who concludes that although there is a high level of mobile phone ownership among students and that they also use them to some extent for learning purposes, there is still a need to explore creative ways of using mobile phones as learning tools.

Content development and the issue of open educational resources are addressed in several papers. The focus is on the development of contextualised content, including video and audio (Roy et al., 2012; Onguko et al., 2013; Onguko, 2014; Jobe & Hansson, 2014), on strategies for the development and use of open educational resources (Muganda et al., 2016), and on the danger of the dominance of the Global North in sharing English-language neo-colonial practices (Goshtasbpour et al., 2022). Overall, the need to contextualise or localize not only digital content, but digital technology as such, is a recurring theme in most of the papers.

Regarding the impact of the use of digital technology on teaching and learning practices, many contributions mention the more practical aspects, such as the possibility for students to hold a job and study at the same time, saving on transportation and accommodation costs, and easier access to course materials as well as saving the cost of producing them. It is also mentioned (Honen-Delmar & Rega, 2023) that e-learning can serve to overcome physical barriers that students face, for example, living in a refugee camp, to overcome physical barriers to access higher education. Most of the papers include some reflection on how the use of digital technologies is changing teaching and learning practices. Increased interaction and discussion among students and between students and teachers, increased collaboration among students, as well as considering ICT as a change agent and stating that the use of digital technologies brings about a shift from a teacher-centred to a learner-centred pedagogy are mentioned in several papers. Some of the papers also mention that the use of digital technologies stimulates motivation and innovation, and many papers agree that the use of digital technologies enables self-regulated

learning and higher order thinking. The need to work with real-world problems in a student-centred way is also mentioned in some papers. One paper (Bagarukayo, 2018) focuses on how an online platform (Facebook) can be used as a way for students to apply theoretical knowledge about operating systems in practice. Another paper (Loyola-Hernández et al., 2022) discusses the extent to which it was possible to maintain a student-centred approach during the first period of the Covid 19 pandemic. And although there were many challenges, they highlight the possibility of small online groups and face-to-face meetings as something that allows for student-centred approaches. Overall, the awareness and intention to use digital technologies to focus on real-world problems and student-centred approaches is a recurring theme, but despite the many successful experiences with the use of digital technologies, there are also some persistent challenges reported in the papers.

3.5 *Cross-Cutting Challenges*

We identified three main challenges across the papers, that is the importance of access, the need for digital skills, and institutional support.

3.5.1 The Importance of Access

By access we mean access to digital devices (desktops, laptops, tablets, and smartphones), access to reliable and affordable power, and reliable and affordable internet connections. Regarding access to digital devices, the inability of some students to afford smartphones in particular is mentioned (e.g. Ghasia et al., 2018; Mwandosya et al., 2022; Loyola-Hernández, 2022; Bada, 2022). Tondour et al. (2016) mention lack of access to digital devices in general as a challenge, and Ghasia, et al. (2020) mention that the number of computers in computer labs at the university is not sufficient, or not functioning and/or outdated (Dirckinck-Holmfeld et al., 2023). Internet connectivity issues are the most frequently mentioned challenge in all papers. Some of the early papers (Onguko et al. 2013, Onguko 2014) that focus on creating locally relevant content explicitly address this issue by providing access to content both online and on a compact disc (when working offline). They also report on the successful use of tablets with batteries powered by solar energy. In the remaining papers, problems with Internet connectivity and poor infrastructure are mentioned as a challenge, e.g. Pete & Soko (2020) note in their study that there was an 'extremely low satisfaction with Internet connectivity, cost and reliability' (p. 37). Dirckinck-Holmfeld et al. (2023) conclude that access to WIFI and power are major factors in how students organise their learning processes. Several other articles also mention cost, the high price of internet bundles, as a challenge (e.g. Jobe & Hansson, 2014; Mwandosya et al. 2022; Bada 2022).

The papers show that the use of digital technologies in higher education is becoming more widespread. However, the problem of Internet connectivity remains, as documented by Kisanjara and Maguya (2024). They conclude that, after almost 15 years of experience with Moodle, the main reasons given by students for the relatively low use of e-learning at their university are unreliable Internet connectivity and also the perceived low quality of the material in the e-learning system.

3.5.2 The Need for Digital Skills

The lack of skills to use digital technologies in learning and teaching is mentioned in most of the papers. In the early papers the focus is more on basic issues such as knowing the functionalities of e.g. Moodle or what kind of apps are available (Onguko et al., 2013; Foley & Masingila, 2014; Onguko, 2014). This is also reflected in later studies, but in general the focus shifts to a more pedagogical perspective on the use of these technologies. There is a concern that instructors use the e-learning system to replicate traditional teaching methods and as formulated by Almas et al. (2021), 'The finding of this study suggest a need to develop instructors' competences in areas such as developing online content, quality assurance issues, interacting with students online, marking and assessing/evaluating learning tasks and activities online' (p. 90). Specifically, the need for skills in developing online content is highlighted in several papers e.g. (Ghasia et al., 2018; Almas et al., 2021; Kisanjara & Maguya, 2024). In addition, teachers should be encouraged to take courses not just once, but as a recurring activity (Bariu & Chun, 2022). In addressing the need for digital literacy, the focus is primarily on teachers, as they, in turn, will be responsible for ensuring that students develop the necessary skills. However, some papers address the need for students to develop skills more directly. For example, Namirembe and Kyobe (2021) suggest that more time should be allocated for students to work with digital technologies in the classroom, and Mwalukasa (2023) suggests that students should be taught how to use mobile phones for educational purposes.

3.5.3 Institutional Support

Most papers end with some advice or recommendation for further work on the use of digital technologies to implement student-centred pedagogy. The recommendation is usually directed at what the university should do as an institution, and many address the challenges mentioned above. For example, it is suggested that institutions ensure the necessary ICT infrastructure, including sustainable connectivity, bandwidth, and electricity. Regarding the availability of digital devices, Pete and Soko (2020) suggest that higher education

institutions should shift their focus from investing in ICT on campus (e.g., computer labs) to supporting learners and instructors by providing them with Internet bundles. They also suggest that universities should provide equipment to students in need. Good logistics and user support, i.e. procedures and systems that make technology work, such as maintenance of e.g. learning platforms and equipment owned by the university, registration and enrolment procedures, and the possibility of user support. The general recommendations are that higher education institutions should formulate or reformulate policies to support the implementation of digital technologies and student-centred pedagogies. The term "policy" implies that certain issues, such as those pertaining to connectivity, capacity building, the utilisation of learning systems, and so forth, must be identified and that strategies for addressing them, including the determination of priorities and the allocation of resources, must be formulated.

4 Discussion and Conclusion

It appears from the papers that transforming education through digital technologies and new pedagogies is a complex process. Conole (2017) suggests that there are three types of research challenges in digital learning, namely research on the underlying technologies, research on pedagogies, and research on organisational issues. These are consistent with the cross-cutting challenges identified in this scoping review. And it is a key finding of this review that the complexity stems from the fact that the problem is systemic, that the technological, pedagogical and organisational issues are intertwined and all need to be addressed to successfully transform education.

The review highlights the critical role of digital technologies in transforming higher education in East Africa. Key technologies include learning management systems, especially Moodle, as well as mobile phones and Wi-Fi. The use of these technologies in the region is growing, and several studies reflect the experience of many years. Notably, earlier research tended to focus on course-level implementations, while more recent studies have shifted their attention to institutional and cross-institutional perspectives. Despite this progress, challenges remain. Issues such as internet connectivity, access to digital devices for students, reliable power supply, and the costs associated with internet usage continue to hinder the realisation of effective digital learning. This is explicitly acknowledged and addressed in almost all the papers included in the review.

Pedagogical and organisational issues also play an important role. It is mentioned that the use of digital technologies makes higher education accessible to

more students, that the possibility of access from anywhere allows for a more flexible balance between work and study requirements and saves on travel and accommodation costs, and that online course materials potentially ensure easier access and also save costs for the institution in their production. In addition, there is general agreement that digital technologies bring about a shift from teacher-centred to student-centred pedagogy, stimulate collaboration between students, teachers and the surrounding community, and enable self-regulated learning and higher-order thinking. To realise all of this, there is a need for institutional policies that support the implementation of digital technologies and student-centred learning, as well as the need to strengthen digital literacy, especially among teachers. However, there still seems to be a gap between these pedagogical intentions and the fact that the primary use of digital technologies identified in the papers was the sharing of content such as slides and learning materials. Bekele et al. (2023) suggest that the successful integration of technology in higher education in Africa would require a strategic reform of higher education. They identify the dominant faculty-student relationships and the dictation of pedagogy as a major challenge, they call it a 'master-slave relationship' and suggest that to improve local relevance and ensure faculty and student agency, the overhaul needs to be underpinned by philosophical, theoretical, conceptual and methodological thinking from within Africa. They draw on the philosophical perspectives of Ubuntu and Asabiyya, arguing that these could be the basis for developing more engaging and empowering pedagogies in technology-enhanced spaces (Bekele et al., 2023, p. 1521).

Overall, the activities to transform education through digital technologies and new pedagogical approaches are in line with the idea of the university of the future as articulated in the East African Community Vision 2050, with an emphasis on students being at the centre of their own learning, real-life problems and community engagement. However, many critical questions remain. These include examples of how faculty-student-community collaboration can be implemented in a meaningful way, the relationship between the curriculum and the intention to work with e.g. real-world problems and participatory pedagogies, and what strategies can be used to promote the employability of graduates.

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CHAPTER 12

Introducing Problem-Based Learning in MA Programmes at Gulu University for Community Transformation

Reflections and Lessons

Iben Jensen, Geoffrey Olok Tabo, Judith Awacorach, Hanan Lassen Zakaria, David Ross Olanya and Inger Lassen

Abstract

During the past nine years, Gulu University has been engaged in a pedagogical transition by introducing problem-based learning (PBL) as an educational methodology with a transformative decolonisation potential. Known as a democratic practice that offers an alternative to traditional teacher centred learning, PBL promotes critical reflection and respectful relationships among students and supervisors, given the supervisor's role as facilitator to empower students. The experience of introducing PBL in selected study programmes is investigated in this chapter through exploring how practical PBL activities have been enacted and interpreted by lecturers and management at Gulu University. To which extent has PBL been integrated into everyday staff practices? In which ways has a Gulu PBL-model been developed? Methodologically, the chapter builds on practice theory. Data are drawn from PBL activities (courses and workshops) conducted from 2015 to 2024. Furthermore, four key informants are strategically chosen for interviews, based on their individual experiences as trainers of trainers of the Gulu PBL-model. Against the background of our findings, we discuss the feasibility of adopting a contextualised PBL-model that integrates more local knowledge regarding content, methods, and challenges of organisational change.

Keywords

East Africa – higher education – problem-based learning – community transformation – practice theory – local knowledge

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1 Introduction

Gulu University in northern Uganda was established in 2001 in the last part of the civil war. The aim of the new university was to build Community University Engagement (CUE) inspired by Julius Nyerere, who made a plea to African universities to shake off their elitist colonial mentality and contribute to society:

> let us be quite clear; the University [...] has a very definite role to play in development in this area, and to do this effectively it must be in, and of, the community [...] The University of East Africa [...] must direct its energies particularly towards the needs of East Africa ... It is in this manner that the University will contribute to our development ... In this fight the university must take an active part, outside as well as inside the walls. (Nyerere, 1963, pp. 218–219, cited in Mwaikokesya, 2012, p. 108)

Hence, the University community transformation agenda targets the entire northern region of Uganda. To reach the goals of community transformation, Gulu University, which aims to develop student-centred learning, also took inspiration from the PBL work at Makerere University. Ideas of introducing a Problem-based approach (PBL), as already introduced at Makerere University (Kiguli-Malwadde et al., 2006) took form and resulted in an invitation to researchers from Aalborg University to take part in this pedagogical development.

This chapter aims to explore this nine-year long-term project's change of pedagogical approach from classic teacher-centred lecturing with an individual, mainly theoretical perspective towards a problem-based approach aiming at analysing real-life problems, doing student-centred group work, and fieldwork in collaboration with local stakeholders. The PBL project was introduced in two departments, which are the ones we follow in this chapter. Relevant questions are: How was the whole PBL change process developed? How do some of the changes materialise? How do teachers describe their teaching practices today compared to earlier, and which challenges do they see now and in the future?

These questions will be explored from a practice theoretical approach. We will zoom in and out of the transformation process, zooming out to give an overview of the nine-year long-term project's changing process and zooming in on specific activities and actors. The zooming will point to a workshop with students, staff, and stakeholders negotiating employability and curriculum change, and another zooming process focusing on how lecturers do their PBL practices and how these are changed by PBL. The chapter offers

unique insight into a long-term process of change and is an important contribution to the field of practice change because it has given opportunities to follow these time-consuming changes. The analysis of specific practices gives a deeper understanding of the complexity of change. In the relevant debate on how to collaborate on equal terms between the Global South and North, the chapter contributes with a pragmatic position showing how collaboration between Aalborg University and Gulu University has created a new PBL-Gulu model, which builds on existing practices and sites in Gulu and is, thus, locally anchored (see also Chapter 1, this volume).

2 State of the Art

The PBL approach was introduced in Uganda two decades ago (Mpalanyi et al., 2020), so PBL is familiar in the Ugandan higher education system. The introduction of PBL is documented in science, technology, engineering, and mathematics (STEM) fields. This could be driven by the need to improve the quality of artisans who can independently explore and understand the nature of problems and provide solutions. For example: Makerere University Medical School introduced PBL in the early 2000s to improve the training of health professionals (Kiguli-Malwadde et al., 2006). Here students were presented with priority health problems in the region. They were encouraged to explore and understand these challenges. PBL is known to encourage student participation in their learning and promote student-centred learning by emphasising teamwork, critical thinking, and problem solving (Mpalanyi et al., 2020; Mahlomaholo, 2013). Since PBL opens doors for students to actively participate in learning compared to traditional approaches, it is worth promoting (Mpalanyi et al., 2020) if higher education is to deliver 21st Century skills for employable graduates. Importantly, students are optimistic about the PBL approach (Mpalanyi et al., 2020), and the same is found for a majority of staff members (Jensen & Lassen, 2020). This speaks into a much-needed contribution of education as a service intended for tackling social and economic inequalities in low-income countries (Datzberger, 2018). This is in line with the current strategy of Uganda's education sector interventions of increasing access, improving quality, and employment generation through education (Datzberger, 2018) also seen in the National Development Plan III and Agenda 2040 where schools are seen as change agents (Datzberger & Le Mat, 2019).

PBL has evolved into many variants due to unique implementation constraints and opportunities at each higher education institution (Amoako-sakyi & Amonoo-kuofi, 2015). It is noted that lack of learning resources and facilitation

of PBL sessions present impediments to the approach (Mpalanyi et al., 2020). In addition, this includes learning infrastructure and space challenges to implement PBL. Infrastructure may need a redesign to accommodate the principles and practices of the delivery approach. However, exploring online solutions to manage tutorials and assessment sessions would help address some of these resource constraints in terms of space and time (Mpalanyi et al., 2020).

The introduction of PBL at Gulu University was in the humanities and social sciences, unlike at Makerere University. Some challenges of transforming education are documented in (Awacorach et al., 2021; Jensen & Lassen, 2020). These debates point to the need to localise this approach to address local contexts and problems (see also Chapters 1 and 2).

3 A Practice Theoretical Approach

The theoretical approach to explore the changing pedagogical approach is practice theory as developed by Theodore Schatzki and further developed by Stephen Kemmis (2022). Practice theory seen as a philosophy is distinguished from other cultural theories by foregrounding practice. The main argument is that our practice maintains our social order. It is by certain *'doings'* and *'sayings'* we maintain practice when we teach in classes or communicate with our students (Reckwitz, 2002; Schatzki, 1996, 2002).

> A 'practice' (Praktik) is a routinised type of behaviour which consists of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge. A practice – a way of cooking, of consuming, of working, of investigating, of taking care of oneself or of others, etc. – forms so to speak a 'block' whose existence necessarily depends on the existence and specific interconnectedness of these elements, and which cannot be reduced to any one of these single elements. (Reckwitz, 2002, pp. 249–250)

This specific way to look at practice theory as a cultural theory was developed about 25 years ago when researchers wanted to create an alternative to binary theories, looking at structures and individuals as separate positions (Walker & Buch, 2024). The aim of this version of practice theory was to create a new analytical approach to micro-processes in social life. The building blocks were taken from well-established Western researchers such as Pierre Bourdieu,

Anthony Giddens, Michel Foucault, Harold Garfinkel, Judith Butler, and Bruno Latour, and the original intention was not to create a grand theory, but rather to suggest a new analytical approach. In other words, as formulated by Jensen and Halkier (2011, p. 12) 'the purpose is rather to make a new reading on performance and social practices'. The overall idea was to focus on practices, appropriate performance, and normativity, from a concrete empirical sociological perspective. A growing research issue in the field of practice theory is the field of Education for sustainability. For instance, researchers like Kemmis and Mutton (2012) have followed several schools while they were reconstructing curriculum and school practices into sustainable education. Kemmis and Mutton argue that each practice adds up to practice landscapes in which practices are interconnected and a configuration of one another (Kemmis et al., 2014). This means that a single practice like teacher centred education cannot be transformed unless changes are made to the entire practice architecture that holds existing practices in place.

The model below explains how all practices are carried out by the individual and at the same time have an extra-individual side:

Taking the example of group work in higher education, the *project* would be to write an assignment in a group, equally responsible for the product. *'Sayings'* would be how group work is presented and how students relate to this

<table>
<tr><td colspan="4">Individual side ← Practice → Extra-individual side</td></tr>
<tr><td colspan="2">Projects/teleoaffective structures
How purposes and intentions expressed by practitioners direct activity</td><td colspan="2">Practice landscapes
How practitioners and objects are enmeshed and entangled in activity and how materiality, rules, and procedures prefigure actions by infrastructural sedimentations</td></tr>
<tr><td>Practitioners' characteristic 'sayings'</td><td colspan="2">← How 'sayings' performatively enacts a practice in semantic space through language →</td><td>Cultural-discursive arrangements</td></tr>
<tr><td>Practitioners' characteristic 'doings'</td><td colspan="2">← How 'doings' enacts a practice through the medium of activity and work →</td><td>Material-economic arrangements</td></tr>
<tr><td>Practitioners' characteristic 'relatings'</td><td colspan="2">← How 'relatings' enact power and solidarity →</td><td>Social-political arrangements</td></tr>
<tr><td colspan="2">Dispositions/practical understandings
How actors are attuned to participate in practices, how they have a 'feel for the game', and how they know how to 'go-on': practical knowledge, skillfulness, and appraisal of specific values.</td><td colspan="2">Practice traditions/general understandings
How current practice is enacted to reproduce or transform the traditions and history of the local practice or—more broadly—in relation to the traditions and history of practices that span multiple sites.</td></tr>
</table>

FIGURE 12.1 Elements of practices and practice architecture in the site (adapted from Kemmis et al., 2014, pp. 38–39)

verbally. '*Doings'* would be what they are doing – do they find a leader? Do they divide the work among themselves or share information? '*Relatings'* in group work could either be between the teacher/facilitator or among the group members. Kemmis et al. add in their model that our *'sayings'* are expressed in *Cultural-discursive arrangements*. Our *'doings'* are expressed in *Material-economic arrangements,* which means that our 'doings' are situated in an environment where materiality is at stake. The last part of this model addresses *Socio-political arrangements* and refers to a broad range of activities, which could be university initiatives for change, e.g., working for employability and change of the curriculum.

4 Methodology

Practice theory is chosen as the method because it offers an exploratory approach to understanding the breadth and depth of how PBL is transforming the pedagogical approach from both an individual and an extra-individual perspective. Furthermore, practice theory is developed as both a theory and a method. Because a practice is seen as interconnected with other practices it is an analytical decision where the limits of the practice are defined. The Italian researcher Davide Nicolini (2012) describes how it makes sense in a practice theoretical analysis to *zoom in* and to *zoom out* on selected practices which are seen as informing the overall research question. Accordingly, it is up to the researcher to define the actual practice with an analytical focus and to identify the analytical scope of the practice. This method has the affordance in the assessment of the decade-long experimentation with PBL in MA programmes at Gulu University that it is possible to focus both on the whole change of pedagogical practices and to go into detail listening to experiences from facilitators of PBL.

The analysis is divided into three: (1) *Zooming out* to an overall analysis of the nine-year change process. The data for this analysis are the actual activities during the pedagogical change process. (2) *Zooming in* to one of the PBL activities in the process: a workshop on curriculum change, employability, and pitching skills. Participants in the workshop were stakeholders, students, and management representatives from Gulu University. The data for the analysis are the participants' *'sayings'* and *'doings'*, and the *'relatings'* among them. (3) At last, we zoom in on interviews with four lecturers as key informants to understand the changing of micro practices. The teachers were purposively selected based on their experiences as Trainers of trainers (TOT) in PBL. Our data will be analysed in a structure following the model above.

5 Analysis of Data and Materials

5.1 *Zooming Out – PBL as a Nine-Year Change in Pedagogy at Gulu University*

The first step in all practice analysis is to identify the practice to be analysed. The practice for the first analysis is the overall change process or intervention when introducing PBL as a pedagogical practice. According to Kemmis, the '*project/teleoaffective structure*' for the whole process is to introduce PBL to selected staff members and to facilitate the participants to decide how PBL could make sense in a Gulu Context. Initially, the '*practice landscape*' was formed by actors from the Department of Education and the Department of Business and Development, both from Gulu University. The PBL team consisted of members from Aalborg University and Gulu University.

The change process can be divided into three phases. We systematically describe these phases as follows:

5.1.1 Phase One: Preparing for Teaching through a PBL Approach

In phase one some of the core principles of PBL were introduced to lecturers from Gulu. The '*sayings*' in the introduction to PBL followed six PBL core principles. These are as follows: Problem-based learning takes the problem as a point of departure from a real-life problem or a challenge. The students are the ones who identify the problem and discuss and argue why the problem is relevant and for whom. In some cases, the stakeholder can identify a problem in collaboration with the students. These principles were presented as one way of doing PBL – the Aalborg model; however, a Cultural-discursive arrangement on the importance of developing a GULU model for PBL had already been established in the introduction to the course. The partners from AAU introduced themselves as colleagues, who brought their experiences, fully aware that these were not to be copied in a Gulu context but meant as a structure for local negotiations and changes (Jensen & Lassen, 2020).

According to the Kemmis model, the '*doings*' unfolded in an introduction course and a workshop for finding suitable courses in the curriculum. The courses were held at a local hotel to ensure stable internet access. This can be seen as an Material-economical arrangement, which changes during the phases of the nine-yeartransforming process. As for '*relatings*', the initial stages of the process were characterised by a tendency towards a facilitator-learner relationship, despite our interest in being equal colleagues (see Jensen & Lassen, 2020). After the first year of planning, PBL introduction courses were conducted for lecturers. About 20 staff members participated in the courses, engaging in ardent discussions, especially about interdisciplinarity and research traditions

in relation to the project idea (see also the discussion of the role of the teacher as a facilitator in Awacorach et al., 2021).

5.1.2 Phase Two: Facilitating the Facilitators

The *'doings'* in the second phase were organised as binary courses involving two interacting groups consisting of students on the one hand and lecturers on the other. The first part of the workshop was a two-day course for the lecturers delivered by AAU lecturers, preparing them for their role as facilitators (supervisors) on campus as well as field trips. The next three days had courses for students run by the Gulu Lecturers while AAU lecturers were facilitating the facilitators. This model was well received and was repeated several times. Each course differed from earlier courses according to how stakeholders were contacted, and for how long students had been working on their projects before the course. While the model was stable, the focus of all courses touched upon the following subjects: problem formulation, fieldwork, group assessment, and examination. In the first part of this phase, the courses were held at hotels in town, but the last course was held at Gulu University campus.

All courses were evaluated orally and in a questionnaire form by both students and staff (Awacorach et al., 2021). The overall *'sayings'* were positive, such as "We learnt a lot", or more PBL-related, like "We learned how to learn" or "We learned to be researchers". The Cultural-discursive arrangement was related to a positive learning environment, positive reactions to fieldwork, and interest in real-world problems. The Material-economicarrangement in this phase was the IT system – Learning Management System (Moodle). Moodle is a free and open-source software, which has been implemented at Gulu University around 2012. All PBL courses were to be uploaded to Moodle as a way to introduce Moodle in practice; however, it kept being a challenge to use Moodle effectively. *'Relatings'* between Aalborg and Gulu staff changed during this period because we were facilitating each other and had the students' learning processes as our common goal.

5.1.3 Phase Three: Shared Course Activities

In the third phase, other PBL activities (Social-political arrangements) began to take over. The faculty of Education and Humanities, in collaboration with Aalborg lecturers, held a workshop for students and staff from History, English literature, and Linguistics. Two months before the physical workshop, the workshop began with an online preparatory crash course on PBL for around 20 staff members. The purpose of the course was to prepare the lecturers in Gulu for supervision in the course. The course was facilitated via Zoom by Aalborg lecturers. A physical second part of the workshop was held in Gulu in a shared collaboration between Gulu and Aalborg lecturers.

A team from Gulu and Aalborg University (the author-team) collaborated to arrange a workshop titled: Curriculum Change, Employability, and Pitching. The workshop organisers' project was to learn from stakeholders' experiences related to students' employability and create space for students learning to pitch,[1] and stakeholders to meet. These PBL activities will be the focus of the last analysis.

Another activity in this phase is the course called PBL-hybrid which aims at incorporating problem- and project-based learning (PBL) and the use of digital technologies to prepare graduates to lead community transformation and improve employability. Teachers are experimenting and piloting PBL and digital technologies. The course was conducted as a transformative process at Gulu University complementing the efforts in curriculum change practices to adopt new ways of teaching and learning. IT tools were explored by participants to help in the design and delivery of a new curriculum practice for master programmes that were taken as pilot implementation classes (see also Dirckinck-Holmfeld et al., 2024). While the first part of the PBL-hybrid-course focused on flexibility through digital technologies, the last part focused on enrolment practices. The *activities* in the third phase show a Social-political arrangement, courses, and workshops that invite other students and stakeholders on board. In this phase, the Material-economic arrangement has changed as we now see IT play an important role both with the first part of the course running as an online course and by supporting the implementation of IT in the PBL Hybrid course.

6 Findings from the Pedagogical Change Process

The analysis shows changes in the practical understanding of PBL, the *'relatings'*, and the use of IT. In the Kemmis model *practical understanding* refers to whether the practitioner knows how to go on with the practice. Seen from an individual side of the model, hundreds of people, students, lecturers, and administrators have been participating and being involved in PBL activities. Based on evaluations of the courses, the author team assumed that the participants (students, lecturers, administrators) will know how to go on in the specific tasks they worked with. Still seen from an individual perspective, it is a smaller group that has been responsible for the courses; they know how to set up courses, contact stakeholders, and enrol students in Moodle or other administration tasks, and they have gained the higher-level competencies required for being super users or IT-experts.

Seen from the extra-individual side, the pedagogical change process can be seen as socio-political arrangements that have created changes in some of the curricula at Gulu University, and PBL has been integrated into several courses. As we will elaborate in the analysis of the two workshops, we see a transformation from individual knowledge of how to practice PBL to a growing amount of experience of how these practices can be carried out at Gulu University.

Regarding '*relatings',* a change can be identified. PBL as student-centred teaching has changed the relationship between students and lecturers to a more equal level as the students are invited to participate in discussions in the class and by choosing topics of their own interest. The long-term relationship in the PBL-team has changed from seeing each other as representatives from AAU and Gulu Universities, respectively, to knowing the pedagogical approaches and facilitating pedagogy used as preferred by each partner.

According to the Economic-material arrangement, ICT is noteworthy. During the nine-year-period ICT has changed from playing a marginal role to a more central role when enacting PBL. The first time a BSU seminar was held in Gulu, both a PBL and an ICT workshop were offered. At that time there was an overwhelming part of the staff who chose the PBL workshop and did not find ICT as relevant. During the PBL courses, the work and use of Moodle were marked by inertia. However, Covid changed the situation rapidly, and ICT is becoming a way to offer more flexible PBL teaching, as the master students in some programmes only come to campus one weekend a month.

6.1 *Zooming In on the Workshop: Curriculum Change, Employability, and Pitching*

We now zoom in on a workshop the Author-team conducted in 2021 The *project* was to invite stakeholders to give their suggestions for how Gulu management, (represented by one of the facilitators of the workshop), could change the curriculum to enhance the students' employability and to create space for students to network with local stakeholders. The *practice landscape* was a two-day workshop with 10 stakeholders and 10 students who all held a master's degree in management. The workshop was held at the PBL Lab situated on campus. The stakeholders came from service industries (Hotels, ICT, Water, Waste, Health, etc.), and the local government of Gulu Municipality. The workshop was held in 2021, six years after PBL was first introduced by BSU.

The practice in focus can be described as a curriculum change practice, but it is also a *Social-political arrangement* related to employability and stakeholder contact. The analytical question in this analysis is to explore how the three partners, the students, the stakeholders, and the management represent

interaction and what these practices can tell us about PBL as the overall pedagogical change at Gulu University. The management representative's *project* is to learn from the stakeholders, build relationships with them, and invite them to contribute to further collaboration in the future. The author-team also wants to train the students in pitching, a learning process that is seen as a part of enhancing employability.

For the students, the *project* is to learn to pitch an idea, and to meet stakeholders or (and) to establish good relations with the lecturers at the workshop. For the stakeholders, the project is to contribute to the employability of students and to meet potential staff. The concept '*relatings'* are of overall importance in this workshop; if we take relating factors into account, it is logical that the students are not *saying* much. Their '*doings'* are (a) to bring their idea for a business/project they would like to set up, (b) to pitch their ideas to the stakeholders and (c) to learn from the feedback. The *Cultural-discursive arrangement* is explicit and appears from the eagerness to learn from Gulu University Staff and expressions of happiness about participation.

Zooming further into the pitching, the ideas the students pitched to the stakeholders are very interesting. All students were pitching very well, which showed they had developed relevant communication skills. Also interesting was that most of the topics the students chose to work with were related to real-world problems. The project ideas were as follows: 'Creating an app for buying tickets to public transportation', 'Local production of electric cars for everybody instead of individual transportation' (the idea was rejected as unrealistic and unsustainable), 'Producing and selling a charcoal stove', 'Waste management', 'Production of quality seeds', 'Juice production' 'Developing learning related to gaming' and two more traditional ideas of selling 'clothes for women in villages' and 'data analysis for big companies'. The feedback from stakeholders, however, points out that the students lacked knowledge of the Material-economic position; in that sense, they were not as realistic as the stakeholders had expected.

The stakeholders were offered a knowing position by both managers and students. They were positioned as the ones from whom both students and management can learn. Some of the stakeholders had already been hosts for some of the PBL projects and were positive about PBL and the possibility of working with students earlier in their education. In a warm welcome, management used the term 'Insiders from the outside'.

The stakeholders had many ideas, opinions, comments, and suggestions for change, which may be seen as an indication about existing and future aims for collaboration that may involve PBL:

First and foremost, the stakeholders urged Gulu University to 'collaborate more with industries' and create 'partnerships' and integrate 'new trends' in the curriculum. Regarding the pedagogical approach they suggest 'interdisciplinary work', 'internship at the beginning of the education', 'use of guest lecturers from the industry', and to 'arrange open days, showcasing student work'. In line with the stakeholders' suggestions for partnerships and more influence on curriculum from local industries, a request for more local knowledge was brought up: 'The content of the curriculum dwells a lot on models drawn from international perspectives making it very difficult to apply; it should look at local challenges with homegrown solutions'. These suggestions are sayings from the stakeholders and are enacted as Cultural-discursive arrangements as well.

Some of the stakeholders were rather demanding in their suggestions for better employability for University graduates; they 'need to tune the mindset', 'to change their attitude in the job market', to 'work smart', to 'talk in a polished way (no slang)', and to 'use dress codes as expected in the organisation'. These sayings are interconnected with 'relatings' as the stakeholders take a position from which they have the right to point at the lack of employability for university graduates.

From an overall perspective seen through a Kemmis lens, this workshop has yet to turn into a sustainable practice, but all elements are repeatable. What is needed is a Material-economic arrangement that includes workshops like this, e.g., on a yearly basis.

For the overall project of changing the pedagogical approach at Gulu University, the interest from stakeholders in creating partnerships and making suggestions for changing the curriculum is interesting. Furthermore, it is interesting that they suggest 'more interdisciplinarity' and more focus on local challenges and solutions. The workshop showed how the students were engaged in the project related to real-world problems.

6.2 *Zooming In on Changes in Teaching Practices*

In this analysis, we will zoom further into practices and focus on how lecturers describe teaching practice before and after the introduction of PBL. As we know from practice theory new practices build on former practices, which is why we will also describe how lecturers refer to actual practices by telling what they do not do any longer as for example "teaching to the test" (Int 1). Based on the empirical data, we are especially interested in how lecturers describe changes in (a) Lecturing, (b) Collaboration, (c) Fieldwork based on their experiences with PBL. Since this is the third analysis, we assume familiarity with concepts from the model.

As mentioned, all practices can be seen as a *project,* where the actor has a goal for their practice. In this analysis we will focus on how *'doings'*, *'sayings'*, and '*relatings'* have shifted in the narrative of the teachers. The practice landscape that surrounds all practices has changed considerably in the nine years. Changes in curricula constitute a radical change and determinant of the success of PBL. The practice landscape for teaching practices today can be seen as related to the engagement in the PBL project. As described in the method section, we have chosen to interview four teachers based on their experiences with PBL.

6.3 *Sayings/Cultural-Discursive Arrangements*

This part of the analysis begins with the teachers' *'sayings'.* The PBL lecturers, who have less experience with PBL, find some affordances, like "PBL has raised the completion rate" and "PBL has made the master students better prepared for doing research". The Cultural-discursive arrangement these PBL lecturers draw on is rational and relates to completion and achieving research skills. The lecturers with more PBL experience draw consistently on pedagogical discourses. They describe lecturing before as "Typically you would find a lecturer getting all the information and delivering it to the students, and even making notes and giving them to students, so basically it was just like a crossword" (I1). She comments that the students did not learn much from that time. One of the informants concluded on the exams done "It was more a summative than a formative assessment". The same informant described how group work in the past was described as the students just signed up and did their write up and submitted. "So I would not say they learned so much from it" (I1). Another lecturer describes how the use of technology has changed during the change with PBL.

> Now in the PBL period when PBL has come ok, there is an integration of technologies, and there is also a more interactive course technology; we talk about Moodle the Google Drive to facilitate online interaction, but of course, before, we used ordinary technology like What's App, emails. Still, of course there have been introductions of other approaches. But of course, another issue is we have not – it has been more or less teacher-centred but now it is more teacher and student-centred.

(I2). It is characteristic for their 'sayings' that they find their teaching with PBL more advanced and competent than their former work.

6.4 *'Doings'/Material-Economic Arrangements*

If we look at the '*doings'* regarding lecturing, collaboration, and fieldwork the overall picture is that the activities were the same before and after PBL was

introduced, but the ways of *'doing'* the activities have changed. Lecturing before PBL is described above, with a teacher-centred approach as lecturing to give the student the 'right' understanding of a topic. One of the teachers explains that he still uses lecturing if he is to present a new topic, but he creates a dialogical room, where he prepares space for the students to come up with questions. Regarding group work the pattern is the same; group work used to be carried out, but in the past, the students did not collaborate so much but were working individually and handed in to their group leader who would send the assignment to the lecturer. Fieldwork was also carried out before PBL was introduced, but before PBL fieldwork was more passive for the students; earlier they made trips to relevant places, but they were not allowed to ask questions or to define their own topic related to the field.

Although the changes coming with PBL mainly seem positive, they also build on some Material-economic challenges. One of the main challenges in PBL is *Material-economical arrangements*, which refers to how the practice is changed, formed, and influenced by practical elements, such as students needing transportation for going to the field and financial challenges. The analyses show that the Material-economical arrangements are one of the most important and demanding parts of implementing PBL at Gulu University. IT plays a dominant role in both PBL (basic) and PBL (Hybrid). PBL is introduced in a way that takes for granted that all students have access to a computer, to the internet, and have IT skills to operate at such a level that they can communicate, make PowerPoint presentations, and enrol in the Moodle system.

6.5 *Relatings/Social-Political Arrangements*

Also in this analysis, *'relatings'* appear to be one of the most important elements in the pedagogical change process. First and foremost, it is described how PBL as a student-centred learning practice allows students to act differently. The word '*allowed*" pops up often. With PBL, the students are allowed to "decide what they want to do a project on". They are allowed to learn from peer learning. The students are allowed to work more independently, and the teacher is no longer the only source for learning. *'Relatings'* among the students are also different in group work. One of the lecturers explained:

> In PBL there is also a lot of collaboration among the students. When raising the traditional methods, we only see students working in groups and giving you finished work. In PBL, when they go to the field, they have to come and present, and then you allow peer learning – so another group can critique what the other group has done, so there is a lot of collaboration and peer learning in PBL (I1).

According to the quote above there is no doubt that the experienced lecturers know how to go on when using PBL as their pedagogical approach. It seems like the two experienced lecturers have been in a process of transformative learning, knowing the pedagogical theories and informed choices. One of the lecturers describes how she has learned to plan didactics with PBL. Furthermore, she has made herself a co-learner:

> It should be an experience for both me and the learner, … it should be to be open minded to go for new ways of learning things as participatory, and flexible. And now I should be able to understand the needs of the learners and their interests before I can design a pedagogy (I1).

The other experienced teacher explains how the integration of IT has changed lecturing to be much more flexible and how teaching online still includes student activity.

Summing up, the teaching practice is described from the individual side as follows: Lecturing is still a part of teaching practice, but lectures are more interactive and planned with more space for student activities, questions, and discussions. The teachers see themselves as facilitators and supervisors and do not see themselves with the former authority. Students are encouraged to take roles in the group work; a group leader, a dreamer, and a planner lastly, IT has been integrated into the teaching practice, especially after COVID-19.

6.6 *Practice Tradition/General Understandings*

In summary, it seems that more and more students and staff are adopting a PBL teaching approach. They support project work in groups, work with problem formulations, do fieldwork, and collaborate as they have always done, but the pedagogical approach is now student-centred, IT is integrated, and the *relatings* between students in groups and lecturer-students have changed.

7 Conclusion – Reflecting on How PBL has Changed Teaching Practices at Gulu University, 2024

The aim of this chapter was to explore a nine-year pedagogical change process from a practice theoretical perspective. The analysis has been conducted through three analyses: one zooming out to the total process, one zooming in on a PBL activity, and the last analysis zooming in on micro processes looking at the specific pedagogical changes. Which changes have the lecturers observed, and which challenges remain to be overcome?

The first analysis showed a process going from information and awareness of PBL as an alternative pedagogical approach to PBL related to hybrid teaching and offering PBL hybrid courses where master students can also participate from home. Evaluations from the longitudinal study also showed how changes are added one by one.

The second analysis of the PBL activity, 'Curriculum Change, Employability, and Pitching', showed that stakeholders, Gulu University management representatives, and students shared an interest in this type of workshop. The workshop showed that the students were engaged in their project and pitching ideas and that the local stakeholders were highly interested in further collaboration and workshops on an annual basis.

The third analysis showed that the experienced lecturers had gone through a transformative learning process, in which they were pedagogically aware of why they had chosen their way and the skills they were trying to train. The *relatings* between lecturers and students have changed considerably, giving more room for discussion and inviting the students to choose subjects of relevance and interest for the students. Other lecturers argued from a rational perspective that the master student's completion rate has risen and that it seemed like the student was better prepared to do research. The analysis also showed how IT has become an integrated part of PBL, which is both a challenge (economically and regarding IT skills) and a positive result, as IT, communication, and collaboration skills are valuable for the master students in their work life (outside university) and contribute to their employability. Looking at the nine-year process of change, how did Gulu University manage to adapt the basic principles of PBL to its own context?

As described earlier all new practices build on previous practices, and in the case of Gulu University, we see that the former practices have shaped the new Gulu PBL practice. Most significant is the way group work is carried out and how group work is related to collectively shared work. At Gulu University (a tradition inherited from the Ugandan educational system), it is common practice to elect a group leader who is responsible for his or her group. The group leader chairs the meetings and is the one who presents the work in plenary. When the Aalborg Model was introduced, the Aalborg lecturers were puzzled by this structure, because they were afraid that one person would dominate the discussion. However, this problem has been solved within the tradition as the students are engaged and accept to take in more roles.

Another way group work differs is that Gulu students prefer to form groups with many participants. This is well accepted at the university, also because the number of students. But it is still quite different from the rules at Aalborg University, where you need permission from the Study board if there are more than four students in a group.

Perhaps the Gulu University PBL model is best described as a dynamic Gulu University PBL practice that has been inspired by the PBL model from Aalborg University. It is a dynamic practice that is developing organically to comply with the exigencies of the local context in terms of community engagement and development. The Gulu PBL approach thus takes important steps towards community transformation.

Note

1 A 'pitch' is a brief concise presentation of an idea.

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CHAPTER 13

Rethinking Transformative Learning in Higher Education

Contextualizing Pedagogical Tools to Create Employable Graduates at Gulu University, Northern Uganda

Judith Awacorach and Helene Balslev Clausen

Abstract

Transformative learning in higher education can encourage students to be job creators rather than job seekers. Due to scarcity of jobs, universities need to adopt new methodologies of teaching and learning to meet the demand of the communities. Through the conceptual lenses of transformative learning the study dives into understanding the students' creativity and critical thinking skills in adapting to the environment and capture potential and innovative business ideas. Transformative learning theory presents a process which leads the adult learner to initiate a moment of disorientation that ends in self-reflection and irreversible /deep understanding of changes of one's perspective. This study used groups of year 2 and 3 students in the Faculty of Science to design prototypes of the different business cases that they wish to establish based on the courses offered and adapted to the Gulu context in northern Uganda. The findings suggest that creativity and experimentation with tangible tools construct new realities to teachers and students, to critically think of start-up and their risks as a solution to rampant unemployment for graduates. Transformative learning challenges the students to think differently when finishing their studies and be open to different ways of employment.

Keywords

transformative learning – Gulu University – critical thinking – students' creativity – employment – entrepreneurship – context

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1 Introduction

Over the last decade, Gulu University has engaged in a transformative journey, systematically revising its curricula to favour problem-driven pedagogies over conventional lecture centric models of teaching. Creative Thinking Learning Lab (CTLL) is one of these innovative pedagogical strategies to teaching and learning in Gulu University in which the focus is on *a problem driven* methodology for learning tailored to it being situated in northern Uganda with its motto for community transformation. The CTLL seeks firstly, to foster pedagogical innovation and secondly to support educators with instructional strategies that nurture key 21st century competencies: critical thinking, creativity, complex problem resolution and collaboration. Such competencies are fostered not only in students but also in teachers who facilitate the knowledge. This learning methodology transcends research-informed teaching to establish a platform for conducting pedagogical research with an emphasis on improving and empowering the learning process with focus on strengthening local knowledge. Hence, the paper contributes to the educational milieu of Gulu University motto; for community transformation.

In accordance with the findings of Sanchez et al. (2022) this paper articulates pedagogical innovation as the adaptation of novel learning methodologies within an academic framework and particular context. The different learning laboratories share inherent characteristics as specialised environments designed to stimulate creativity, collaborative journeys, entrepreneurial skills and problem-solving capabilities. As outlined in Sanchez et al. (2022) the concept of 'laboratory' encompasses both a physical space dedicated to productive journeys and a sphere for scientific inquiry. Hence, a learning lab encapsulates the dual aspects of practical application (the creation process) and explorative research (experimental learning). In this framework and context, learning can be understood in its broad sense as developing new teaching practices for teachers or new learning strategies for students (Sanchez et al., 2022).

In the first section of the paper, we situate Creative Thinking Learning Labs' (CTLL) pedagogical and learning perspectives. Subsequently, CTLL is situated within the theoretical framework of transformative learning following the methodological design and description of the case and implementation of CTLL in Gulu. From its start, Gulu University has focused on developing problem-based learning (PBL) as a methodology to break away from teacher and curriculum centred pedagogies. The chapter explains the theory of transformative learning and experiments in the teaching and learning methodologies to enhance employable skills. The chapter contributes to the practical lenses of

the nine years of facilitating competence development of PBL among students and staff by creating a learning lab as a tool that integrates local knowledge, methods, and community transformation.

Finally, a critical analysis of the empirical data provides insights into the reflective process of the pedagogical and learning outcomes and experimental dimensions of adapting the CTLL framework as a tool in the particular context of Gulu University.

2 Situating the Creative Thinking Learning Lab within Transformative Learning Framework

Transformative learning constitutes a complex construct, it encompasses the individual's perspective of the world, the process of experiential learning during transformative events, and the adoption of methodologies that foster transformation (Stevens-Long et al., 2012). Historically, academic inquiry has primarily concentrated on the shift in worldviews, moving away from traditional reference frameworks encompassing political biases, cultural prejudices, ideological convictions, stereotypical perceptions and behaviours, professional habits, and scientific paradigms (Mezirow, 2003). However, recent scholarly debates have shifted towards exploring the dynamics of the learning processes within transformative contexts (Anand et al., 2020). Informed by Dirkx and Mezirow (2006) transformative learning has emerged within the field of adult education for understanding how adults learn (Mezirow, 1978), and can be defined as "a deep, structural shift in basic premises of thought, feelings, and actions" (Transformative Learning Centre, 2004, cited in Kitchenham, 2008, p. 11). By focusing on problem driven and learning-by-doing approaches in CTLL we root the interventions in Dewey's work with deep learning (Dewey, 1938/2015) that gained significant traction with the studies of Kolb (1983). With the theoretical framework of transformative learning in which the methodologies seek to uncover the different ways of knowing and different types of insights to seeing for instance the extraordinary in the ordinary (Polaine et al., 2013) to dive deeper beyond the information on which decision-making is based and to figure out what questions it makes sense to ask (Clausen & Andersson, 2018a). According to Kolb, the importance for learners lies in experiencing (either directly or vicariously through the experiences of others) as the basis for observation and reflection from a range of perspectives. This implies that the learning process is clearly connected to experiences and that experience-based learning can form stronger learning opportunities (Kolb, 2015). Morris (2020) provides an expansion of Kolb's model as he explores the

contextualised nature of experience. He argues that learning requires hands-on learner experiences in real-world situations. This means that learning becomes hyper-contextualised, and the learning process must take into consideration the contextually rich nature of learning. Moreover, Morris and Ogan (2018) suggest that there is a need for critical reflection among learners in order to achieve experience-based learning. Central is criticality for learners in order to effectively solve problems and transfer knowledge across contexts. In Dewey's seminal work, the actors' interests and experiences are considered key drivers for learning. This includes learning-by-doing with a focus on inquiry, meaning that individuals learn when they interact with the world by posing hypotheses and testing them against reality and reason. Along these lines, learning is also understood to take place in complex social environments in informal settings (Lave & Wenger, 1991).

The transformative learning framework is the foundation of the initiatives with the CTLL methodologies' aim as well as to cultivate reflexivity in students regarding their presuppositions. This initiative aspires to achieve several objectives: (1) to foster the development of substantiated methodological beliefs through active engagements in an ongoing, informed dialogue; (2) to prompt actionable steps regarding their fieldwork, teaching tools and employability skill set; (3) to foster an orientation towards research that not only receives institutional endorsement but facilitates the emergence as (credentialed) professionals. This journey from student status to becoming a professional and employable person encapsulates a transformative path. The CTLL is a teaching and research model integrating ethnographic methods to enable teachers to adapt and contextualise their pedagogical learning tools to create the transformations necessary to create sustainable learning. The CTLL addresses the need to think differently to solve societal challenges, and it becomes essential that the students, educators, organisations and institutions (public or private) and enterprises collaborate and co-create to ensure innovative solutions (Clausen & Andersson, 2020).

By bringing together new ways of collaborating by changes in: (1) physical environment in which an atmosphere invites to collaboration, interactions, imagination, creativity, play, teamwork and innovation; (2) creative process that is designed to support a journey from identifying a local, organisational challenge to generate a solution to address the challenge; (3) using tools and activities that are recognized for facilitating the creative process.

Within the context of Gulu University, the CTLL was conceived as a vehicle for professional development, adopting participatory action research with several interventions. These interventions were integrated into the teaching practices with Gulu University students. This process of collaborative design

and implementation of pedagogical innovations constitutes the core pillar of the research presented in this paper.

3 Methodology

The transformative learning framework is the foundation of the initiatives with the CTLL methodologies' aim as well as to cultivate reflexivity in students regarding their presuppositions. The research methodology for this work is participatory action research with an ethnographic interventionist approach to learning. Participatory action research was initially propelled by the acknowledged scholar Lewin (1946) and the methodology has gained traction within higher education and recognizes the capacity of people living and working in particular settings to participate actively in all aspects of the research process.

The actions taken are oriented towards improving the practices in the specific contexts by the participants themselves. Contrary to conventional participatory methods, the participatory action research concerns research done not only for or on but also with people creating a space of dialogue between equal subjects (among others see Lewin). People have expert knowledge that is of great value to research and the point of departure is an orientation toward changes with others (Lewin, 1946; Reason & Bradbury, 2008; Clausen & Andersson, 2021).

The primary aim is to produce knowledge overcoming cultural, social and economic barriers of creating new scientific knowledge (researcher's aim) and of practice (create something) with others (Reason & Bradbury, 2008). Additionally, the intervention with applying the methodologies of CTLL is to create an ethnographic intervention which is based not only on participatory action research principles but also to encourage the hidden voices to capture critical questions. This approach emphasises the collaborative and co-creation element and is a shift from an underlying expert-driven creation and delivery to an increased co-creation process in which the processes of co-creation and co-producing are leveraging the participant's own resources and engagement to identify how solutions are executed.

3.1 *The Gulu University Setting*

The study is cognizant of the fact that CTLL is being piloted, while being practised in learning space as a recognized methodology. The chapter further acknowledges it as a methodology under development as a learning lab that can stimulate student learning as well as reflexivity. The concept of local knowledge, visual thinking, collaboration, co-creation and knowledge creation

based on the cases discussed with the second and third year students gives an understanding of the CTLL at Gulu University. This temporary space is based on theoretically informed and empirically tested concepts such as visual thinking, collaboration and knowledge creation (Camacho, 2019; Clausen & Anderson, 2020). At Gulu University, the CTLL is characterised by its engagement with local issues as catalysts for deep participatory learning – hence the integration of the ethnographic approach.

The CTLL held a four-day-workshop as a first iteration which then was further adapted and rethought regarding materials and problems by the first author to the Gulu higher educational context. The concept was slightly sliced and moderated in the learning tools to explore the challenges with her students at the different educational programs at Gulu University benefitting from her local knowledge in both the design of the adaptation phase as well as the implementation of the tools. During this workshop, participants worked iteratively on community problems, gathering data and engaging with relevant stakeholders and community members. They employed CTLL tools to aid and support the collaborative and creative processes, thereby uncovering, comprehending and fostering innovative solutions. This learning environment is intentionally cultivated to facilitate interactions and co-generation of knowledge among the participants, in this case between students and teachers as in Awacorach et al. (2021). The CTLL inherently facilitates a connection between the external environment – where the identified issues exist- and the academic setting seeking to foster a synergy between the real-world and learning/educational sphere (in this case the university classroom).

The intervention had several iterations in which the first author took notes, recorded documents with photos, audio and videos to the degree the context made it possible. Additionally, she made reflections and head notes, and the two authors had numerous meetings and talks during the periods of the iterations. All the students' presentations were recorded and documented with photos, audio and video and reflection papers as well. Moreover, the methodologies also became explicit during the contextualising of the cases with the students described in the following sections.

One aim of the CTLL workshop was to inspire teachers at Gulu University to work with different learning tools and to co-create learning processes with them during the CTLL workshop enabling a transformative learning environment for future Gulu University's students. The first author decided to implement a CTLL inspired intervention with a group of second year and third year students at the Faculty of Science. These groups were to design prototypes of different business cases that they aspired to establish after finishing their university years based on the university courses offered. Whereas the second

author is one of the facilitators from Aalborg University who presented the CTLL approach to Gulu University. The facilitator and first author did run the CTLL intervention with her students from August 2022 to December 2022.

At the beginning of the year, the students were asked to think about challenges faced by different small businesses in the communities they live in. Their aim was to come up with different groups who have different ideas of community challenges. Three different groups were then established based on similarity of ideas. The groups used weekly schedules to run through the formation of ideas from week I, II, III and IV before deriving a solution in the form of a prototype using lego materials for the creative solutions. The first week was an assessment of how 2 or 3 people interviewed each other about the knowledge of problem analysis and the group members took notes. All group members were able to contribute to the ideas that were being formulated. Week II was for the team members to visit the sites to identify the nature of the knowledge generated from the sites, to question what they had seen and what was new on their visits. Week III was for analysis of the situation to tease out the kind of solutions they would create with the Lego materials through the lab experience using CTLL. Week IV was used to present ideas for solving problems and to note comments from other peer groups and facilitators to enable peer learning and improvement. It is from these weekly activities that the students were able to move on with identifying activities in the communities.

3.2 *A CTLL Intervention at Gulu University*

The intervention is conducted by primarily the first author at Gulu University, and she decided to work with three groups of students from the educational program of computer science with the purpose of: 1) creating an environment with transformative learning potentials 2) involving the students in a co-creative process to solve a local problem. This means that the groups of students conducted fieldwork in Gulu to be able to identify a problem. To translate these abstract conceptualizations, the students in the first group conducted fieldwork with observations and had interactions with the communities in which the groups decided to work Neergard et al. (2020). This will be explicitly described in the following sections.

3.3 *This First Group of Students at Gulu University – Business Computing Students*

The first group had an ethnographic approach to their ideation process. The students observed and discussed how customers who buy products or gadgets for lighting and farming such as solar lights and irrigation pumps suffer due to their inability to communicate back to the sales personnel when the lights or



FIGURE 13.1 Second year students discussing co-creating with materials their perceived solutions PHOTOGRAPH: JUDITH AWACORACH

irrigation pumps fail to function, since most consumers have basic technical knowledge and are not connected to the national grid. The student's idea was to address the communication gap between the sales shop and their customers. The students observed low sales from the solar shop (entrprenuer) due to communication gaps between the farmers (customers) who made complaints and feedback from customers is required by the entrepreneurs. The student's idea was to design an App which can use mobile phones to enable customer care between users of solar products and the entrepreneurs to enable effective communication and feedback from the end users of the solar lamps and irrigation machines. The customers could not report back to the entrepreneurs or go back and complain to the shops where they bought. One of the customers said, 'I got discouraged when the salesman could not answer my call after the machine had failed to pump water due to technical hitches which were solvable to the technical team.' This group of students visualised an App to receive complaints from the customers thus creating employment opportunities for the business computing students of the faculty. One student explained how the ethnographic approach opened their eyes to an issue in the community, 'my team walked in the community to pick out the problem we needed to embark on'.

Another team had a particular focus on risks in restaurant management. They identified a wide range of different risks such as employee injuries, financial difficulties, theft and property damages within the restaurants; however the group decided to narrow down to the specific risk of delay in the delivery of goods ordered by the restaurants. In this case, charcoal consumption was an issue since buying was done from different suppliers as an alternative to relying on one supplier only. This implies a higher cost for the restaurants since



FIGURE 13.2 Third year students pitching their solutions to their peers to generate feedback for next iteration of problems being solved
PHOTOGRAPH: JUDITH AWACORACH

every time they bought, prices would change. The group observed and carried out an interview to ascertain how low-skilled workers were employed in the restaurants to procure items to be cooked and carry out the cooking instead of professional cooks: 'I am a primary two dropout and I have been employed to cook here'. Cooking appliances were used in the various cooking points such as blenders for making juice and rice cookers; they also observed and interviewed staff on how the management handled early school dropouts among their staff on duty. The group talked to two assistant managers of restaurants, three chefs and three waitresses. This local restaurant was selling food around campus, and it was necessary to improve on the business set up to make the business vibrant through this study. The first group then came up with only one project.



FIGURE 13.3 Third year students after the feedback. They start their second iterations
PHOTOGRAPH: JUDITH AWACORACH

The group was discussing their fieldwork seeking to visualise their observations using Lego. Inspired by the CTLL the facilitator encouraged the students to use the materiality in this case the Lego, whiteboard, pens to draw either what they saw or their thoughts. By supporting the ethnographic approach with numerous materialities, the facilitator creates a space for a process of externalising ideas and thoughts to visualisations that enhance the concreteness of a problem. At the same time the construction of ideas with for instance Lego made space for changing and interfering in established structure forms as one student can place a Lego at one place but then another can move it to another space or add another Lego to the existing model. Once visible and concrete, the group can discuss reformulate and transform models, and the model becomes "shared objects of thought". Thinking together through materials demands learners to listen to each other, focus on the constructed object, ask reflective questions, be open to change, as the dialogue and the construction of knowledge and sense making might lead to new understanding of a problem or to the redesign of a solution.

The fourth week was presentation of prototypes to different peer groups by the students for critique and comments from facilitators who were able to listen to the presentations. The facilitators had this comment: 'We need transformative



FIGURE 13.4 Photo showing the reformulation and transformation models of an ideal restaurant
PHOTOGRAPH: JUDITH AWACORACH



FIGURE 13.5
Photo showing an ideal computer centre after a feedback session from peers
PHOTOGRAPH: JUDITH AWACORACH

learning for our students since they can create different solutions to community problems thus promoting simple and practical solutions to entrepreneurship'. The teaching and learning of the students used a real-life experience exercise through solving the community problems while solutions were design solutions using Lego. One of the students said: 'I will now start my own business instead of waiting for employment only'. The ideas covered a broad range of restaurants, computer centres, and coffee and internet café businesses in the community, where the students used Lego materials to design solutions.

3.4 *The Second Group of Students at Gulu University – Coffee and Internet Café Business*

The second group designed solutions to coffee and internet café business with low customer turn up. This group also used interviews and observations to ascertain the challenges with coffee and internet café businesses. The interviews showed that the challenge was poor customer service and lack of financial support from the commercial banks to boost the coffee and internet café business. They also faced high tax charges from the municipality besides vandalism by customers, who appeared with flash disks with viruses that would run the computer centre down. Staff such as waitresses and waiters did cleaning work bare foot thus sliding and causing accidents.

The wide range of data material and information from the different sources drive the creative process to identify the problem, including familiar settings and can take place in many types of communities including formal and informal settings such as workplaces, urban communities. The staff were advised to wear gum boots with tight grips so that they do not slide. Charcoal was offloaded everywhere on the compound. The students further advised, "Charcoal should be bought in large quantities, offloaded well and stored in secure places".

The second group designed a set up where there are spacious areas to operate the restaurants. Staff such as waitresses and waiters who are cleaning should wear gum boots with tight grips so that they do not slide. Charcoal should be offloaded well and stored in secure places. They imagined there should be a bank where the managers can negotiate for loans in case money is not sufficient to operate the restaurant business.

3.5 *The Third Group of Students at Gulu University-Developing Ideas on an Ideal Computer Business Centre*

The third group examined issues affecting computer centres as a business. These students were keen on making alternative solar solutions as the Computer Center Business in Gulu City experienced frequent power blackouts. The group identified the challenges with failure in delivering power at the centre

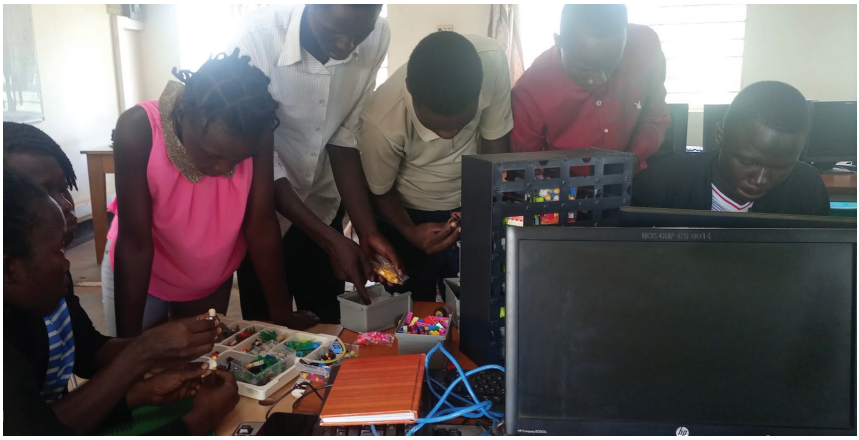


FIGURE 13.6 Photo showing another project in which the students ideate
PHOTOGRAPH: JUDITH AWACORACH

and the assistant manager complained of low customer turn up thus making losses. The group looked at how to operate a computer centre business with a huge number of customers. They interviewed customers, employees and business owners of different computer centres. They also conducted fieldwork applying the ethnographic methodologies as: observation and interviews to assess the challenges facing small businesses.

The challenges of running computer centres were power blackouts, few customers during the rainy season, machine breakdown, increasing costs of paper for printing, theft due to an insecure environment. The students went to the business community in the first week to observe and discuss with the beneficiaries of solar lighting companies. This group used observation to identify the above problems and discuss it further with customers how solar can act as an alternative source of power besides electricity from generators. This group examined issues affecting computer centres as a business. The group looked at how to operate a computer centre business with a huge number of customers. They interviewed customer's employees and business owners of different computer centres.

An app for the solar company was designed by the students and the entire team participated in putting pieces of Lego together to design the communication App in a more participatory way using Lego as a prototype built to illustrate how possible solar panels could be constructed and positioned in the computer business centre such as materials such as solar panels and network signals. Students realised that most of the customers were used to relying on electricity rather than other sources of power. The communication shown in the photos above portrays the design that was anticipatorily made. One of the

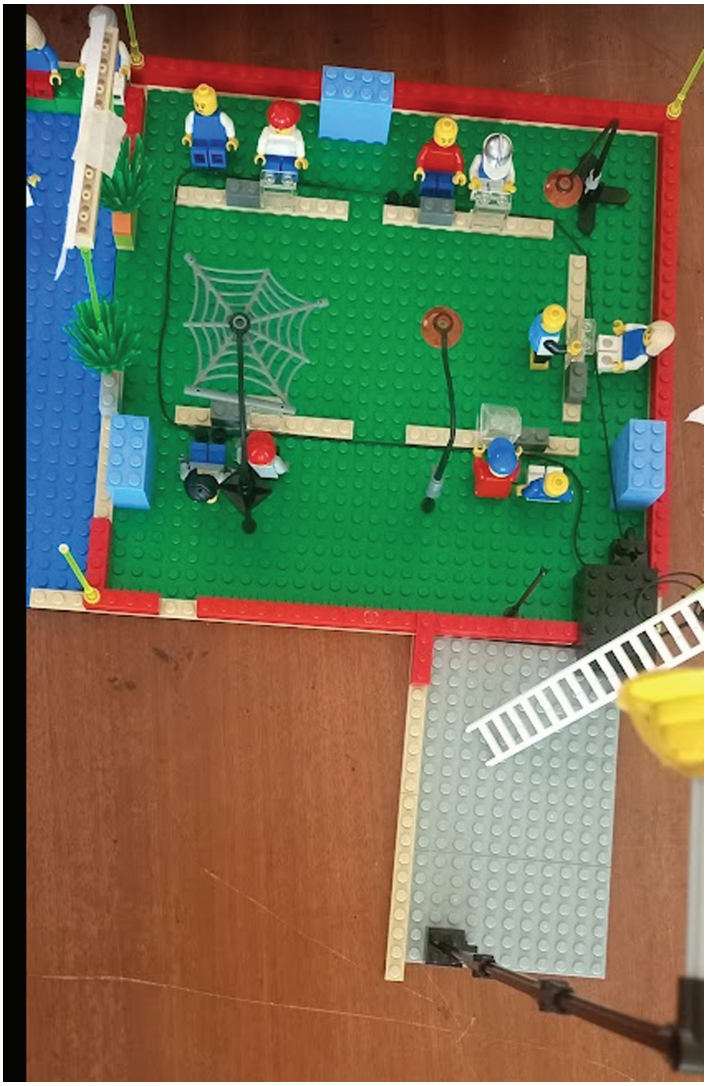


FIGURE 13.7 Photo showing remedial options for alternative source of power and collaborative space for both students and business
PHOTOGRAPH: JUDITH AWACORACH

solutions encouraged by the students was that the design of the solar system and the communication App should be flexible for both mobile phones and computers in order to help reporting power failure to solar light customers. The group reaches this model through building with Lego materials a prototype, which could reduce power blackout which would enhance the possibilities to avoid constraints that the Computer Center Business faces in real-life within

the Gulu University community. The group of students designed a strong solar system that they think can act as an alternative source in case of power blackout which had been identified as a challenge for computer business around Gulu University community. This group of students validated their designed ideas having feedback sessions and several iterations with the customers after having come up with the design prototypes. In these sessions several comments were made to improve the work.

4 Discussion Applying CTLL and Transformative Learning

In this study the first author takes a point of departure from her local teaching and learning experience and knowledge gained from the Northern partners (Aalborg University) during her interaction with CTTL, Consufé consultant and the students under her instructions as a platform to build on transformative learning sessions. The informal knowledge emerging from the students and their understanding of how employment perceptions in their community are put together for specific local purposes in this study. This forms part of the ethnographic approaches employed in this case and the CTLL as inspiration for the students engaging and using this knowledge to make the materials and skills in a field understandable through participatory observations, and the underlying images, meanings, symbols, and rules and that can be understood through ethnographic dialogues.

Temporary creative thinking space (within existing infrastructures) was implemented to create transformative learning. Learners had to explore new ways of learning, interacting, and creating knowledge while solving a real-life and in this case a local problem in Gulu context. This temporary space is based on theoretical informed and empirical-tested concepts, such as visual thinking, collaboration, and knowledge creation.

Transformative learning applied by experimentation with the CTLL methodologies can offer enhanced learning outcomes, and designing with CTLL offers greater chances of achieving transformative learning to students to develop employability skills. Forming part of the work with CTTL resonates with the experience of the first author living and teaching in the Gulu University. This facilitates the adaptation of the CTLL to local situations. The students live and work in the community and have a lot of informal knowledge and experiences which, due to the ethnographic approaches, make their knowledge visible when they share with stakeholders in this study. The way of interacting with the stakeholders requires local knowledge such as norms, life values and attitudes, which also contributes to adapting the transformative learning perspective to

a global south (northern Uganda) context. This paper suggests that the iterative processes and knowledge acquired from the workshop and real life setting creates a space for co-creation in which the collaboration between a lot stakeholders (in this case for instance customers, waitresses, waiters, managers, field managers in agriculture, researchers, students) generate more holistic contextualised solutions than just focusing on just one holder's perspective (Olanya et al., 2023) This also includes informal knowledge or experiences exchanged by the students. Linking the CTLL to the intervention with the students at Gulu University, the quotes from the students suggest that the CTLL approach contributes to generating transformative learning. By allowing for comprehensive interventions and a dynamic learning with focus on ethnographic methodologies, the paper demonstrates that ethnographic approaches allow for creating observation data needed to analyse learning outcomes (Phi and Clausen, 2021). Allowing the students to identify and act in a real-life context and then working with collaborators through several iterations not only discussing but also seeking to collaboratively build and reconstruct models of the identified problem enables the students to be better equipped to solve real-life problems. The CTLL approach enables the students and thereby their employability potential to enhance, in the way that the approach has several general societal implications related to stimulating the development of skills needed to solve the local problems that might create possibilities to impact their lives in a better way.

5 Conclusion

Transformative learning can be a great opportunity for graduate students to exercise their skills by using lego materials to improve their skills during learning and practical activities. However it is important to adapt and contextualise the CTLL tools to the environment and integrate local knowledge, methods, and community transformation. For instance in this case the lego is a tool that requires both financial and physical resources which might not be available in all regions and at all times. The adaptation and open-endedness of the CTLL encourage the development of using approaches based on the surrounding environment. The findings suggest that creativity and experimentation with new methodologies construct new realities to teachers and students, to critically think of start-up as a solution to unemployment for graduates. Transformative learning challenges students to become job creators rather than job seekers, thus students can take to entrepreneurial activities instead of being jobless after graduation.

Yet, one of the major challenges is to create a transformative learning environment within a context characterised by scarce resources, for instance lack of access to Lego or to costly whiteboards, pens and paper. However, the main point is also to use the resources available and contextualise the transformative learning environment and build a structure around a value sensitive and contextualised learning environment for community transformation.

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CHAPTER 14

Circular Entrepreneurship in Northern Uganda

Frida Skovgaard Sørensen, Cornelia Thea Seger Jakobsen, Annebeth Colic Landsvig, Judith Awacorach and Arne Remmen

Abstract

There is a dilemma. University graduates in Uganda experience high levels of unemployment combined with low practical relevance and limited preparation for entrepreneurship during university programmes. In addition, several environmental problems require innovative circular solutions that can create employment. Therefore, the primary objective is to explore this research question: How can the potential of circular entrepreneurship be enhanced through collaboration between academia, industry, civil society and government?

This research will examine the quadro-helix actor groups, in particular academia and industry, and to a lesser extent civil society and government. It also explores how their interactions can strengthen the possibilities for creating innovative circular solutions through entrepreneurship.

Primary data were collected through interviews and observations with academia and industry in Gulu city. Supplementary data was drawn from literature on the role of government and civil society. The conceptual basis is the circular economy, circular entrepreneurship and the Quadro-Helix model. By evaluating the practices of Gulu University and Takataka Plastics, key success criteria for circular entrepreneurship are identified. It also explores the role of government in promoting circular entrepreneurship. Finally, the collaborations and interactions within the Quadro Helix are examined and it is discussed whether this can make circular entrepreneurship appropriate in Uganda.

Keywords

circular entrepreneurship – circular solutions and innovations – Quadro Helix – Uganda – Gulu University – circular business strategies

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1 Introduction

Ugandan adolescents struggle to find work. Uganda has a very young population, with almost 75% of the population under the age of 30 (UBOS, 2021). The official unemployment rate is 13% for youth aged 18–30 (National Household Survey, 2019/2020), while other statistics suggest that at least 1/3 of youth are unemployed. According to a national survey, around 40% of male youth are employed and almost half of them is 'own account workers' (self-employed). Among female youth, 30% are employed, 36% are self-employed and 28% are 'contributing family workers' (Annual Labour Force Survey, 2018/19). Self-employment indicates the importance of the informal economy, and that some youth work as entrepreneurs in local communities.

Uganda is a country of entrepreneurs was the headline in the Guardian in February 2016, since 28% of Ugandan adults own or co-own a new business. This headline was based on a ranking in 2015 in the Global Entrepreneurship Monitor (GEM) that is an international survey on entrepreneurship. However, only few of these entrepreneurs survive the first few years.

The reasons for the high unemployment rate are lack of employability skills, lack of access to resources such as land and capital, lack of a comprehensive employment policy, lack of practical skills, etc. (Young Leaders Think Tank, n.d.). One way of overcoming the problems of unemployment and the fact that few young entrepreneurs survive as businesses in the early years is to prepare young people for entrepreneurship.

The Ugandan government has therefore promoted entrepreneurship through industrialisation to ensure inclusive growth and employability. For example, it has reduced the cost of doing business (Uganda National Planning Authority, 2020). Thus, circular entrepreneurship has become an interesting topic for both academia, government and entrepreneurs (Muñoz-Pascual et al., 2019; Ploum et al., 2018; Gast et al., 2017).

Waste management is another major issue in Uganda. The waste management systems in North, South, and West Africa are developing, but the East Africa waste management system is lagging behind. East Africa has the highest rate of open dump sites for waste in Africa (Shi et al., 2021). Waste management systems are challenged in both rural and urban areas although African citizens are producing significantly less waste compared to citizens worldwide. The average daily waste generation per citizen in East Africa was 0.49 kg in 2016 compared to an average of 0.89 kg and 1.2 kg in the Middle East and Europe respectively (Shi et al., 2021). However, waste generation in East Africa is expected to increase, intensifying the already poor waste handling in the region (Aryampa et al., 2019). The amount of waste will continue to increase due to population growth particular in urban areas (Castellani et al., 2022).

To date, many businesses in East Africa have focused on economic growth and with less attention to environmental protection leading to environmental degradation and various social challenges (Chege & Wang, 2020). To address these challenges circular entrepreneurship can be a way to improve the balance between all three pillars of sustainability as well as to create job opportunities for Ugandan youth. Turning waste into a resource and improving entrepreneurial skills in the study programs at different educational levels can help creating circular entrepreneurship, and in this way overcome two key issues in Uganda, youth unemployment and waste management.

Due to the lack of job opportunities for academics in Uganda as well as lack of responsible waste handling, this study aims to address how circular entrepreneurship can be enhanced through curriculum development and collaborations with businesses. The aim is to explore and understand the interdependency and need for collaboration between academia and various actors within circular entrepreneurship.

2 The Background

In this part, the concepts of Quadro Helix, circular economy and the nine levels of circularity are explained. These concepts form the foundation for investigating the environmental pillars of circular entrepreneurship, thus providing knowledge of how to encounter and embrace circular principles in entrepreneurship in northern Uganda.

2.1 *Circular Entrepreneurship in East Africa*

The study is based on the master's thesis *Sustainable Entrepreneurship in East Africa*, written by three master students from Aalborg University in 2023 (Landsvig et al., 2023). The thesis addresses waste and environmental issues, social issues such as inequality and unemployment and economic conditions with a high proportion of the population living in the informal economy and in poverty. These issues are addressed through the problem formulation: *How can the prospects of sustainable entrepreneurship for communities in East Africa be enhanced?*

The interviews and analyses have been used as background to conduct this study. However, the thesis theoretical background and scope is different from this research as the thesis is about both Uganda, Kenya and Tanzania and not just about circular entrepreneurship but about sustainable entrepreneurship. Therefore, the scope has been narrowed for this article to only involve northern Uganda and circular entrepreneurship.

2.2 *Quadro Helix and Problem-Based Learning*

Triple Helix is the connections and interactions between academia, business and government to foster innovation and entrepreneurship (Etzkowitz & Leydesdorff, 1995). There is a need for these three actor groups to work together to make effective changes. Especially these actor groups have important roles, when it comes to innovation and enhancing entrepreneurship. In the case of Sub-Saharan Africa, then it is also important to involve civil society and non-governmental organisations due to their role in the communities, and the amount of youth being 'self-employed' in the informal economy. This has also been referred to as quadro-helix collaboration. These actor groups have separate roles, yet it is necessary in enhancing circular entrepreneurship that these groups collaborate and engage with each other.

Quadro helix also relates to problem-based learning (PBL), which has been explained in Chapter 13 (Jensen et al., 2025). PBL is a learning strategy with focus on solving real-world problems in collaboration with a diverse group of stakeholders depending on the specific problem in question. When working with real-world problems, it is necessary for the universities to engage with local communities as well as businesses and governmental organisations for the solutions to be viable and sustained in the long run.

2.3 *Circular Economy*

The concept of circular economy is based on the principles of refusing, reusing, recycling, and regenerating to keep resources in use for as long as possible, and at the same time minimizing waste and environmental impacts (Ellen MacArthur Foundation, 2019). Entrepreneurs have the potential to establish their businesses on the foundation of circular principles that aim to optimize resource utilization and create economic value.

Circular entrepreneurs can enable businesses to elevate from the traditional linear business model based on take-make-dispose of resources towards a more sustainable model (Geissdoerfer et al., 2018). Circular entrepreneurs have a different perspective regarding focusing on the resource loops within the biological or technical dimensions. Moreover, the focus of circular entrepreneurs can extend to various loops encompassing part and product manufacturing, as well as repair and maintenance services (Ellen MacArthur Foundation, 2019).

2.4 *The Nine Levels of Circularity*

On the journey towards circularity, improved resource usage and waste minimization can be employed as strategies within entrepreneurship. A comprehensive framework known as 'The nine levels of circularity' (shown in Figure 14.1) provides an overview to assess the circularity of strategies and the ability to keep materials and products at the highest possible value.

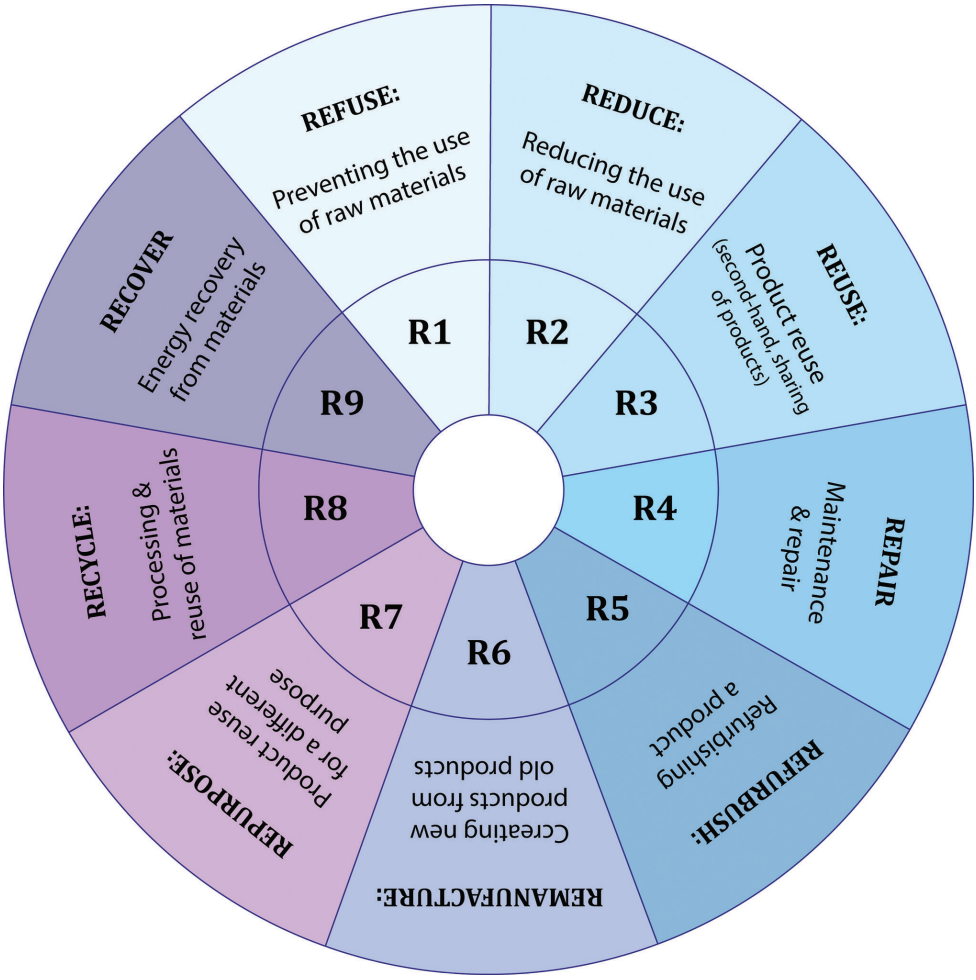


FIGURE 14.1 The 9Rs for circularity (inspired by Rli, 2015)

The framework initially includes levels ranging from the most circular (refuse and reduce) to the least circular (recover) (Rli, 2015). Refuse and reduce are preventive measures, where less resources are used to produce a product, and the same effect can be reached by making durable and reliable products that last longer. Reuse, repair and refurbishment are all extending the lifetime of the product with rather minimal resource use. Remanufacturing and repurposing demand more efforts to retain the value of the product or to change e.g. from being a glass bottle to a drinking glass.

Recycling is related to closing material loops at end-of-life, while with recovering the material is lost (with incineration) or transformed (with composting). Compared to landfilling, recycling or recovering present the better options since waste become a resource. Even though recycling and repurposing may be

classified as lower levels of the nine levels of circularity, this categorization does not imply a lack of sustainability. Recycling and repurposing waste is superior to using virgin materials and waste ending at landfills. Hence, increased circularity leads to more environmental benefits (Potting et al., 2017).

Increasing the circularity of a value chain allows the products to remain in use for longer time, and for materials to be recycled after a product is discarded. This reduces the need for new resources to be extracted and manufactured, which are beneficial for the environment and the economy (Potting et al., 2017). Overall, increased circularity in a product chain reduces the consumption of natural resources and materials, resulting in fewer environmental effects (Potting et al., 2017). Circular businesses can therefore create environmentally sustainable value in a long-term perspective, and narrowing resource loops (Geissdoerfer et al., 2018).

The concepts are used to analyse and assess how different actors can contribute to the enhancement of circular entrepreneurship in Uganda. By applying these concepts to the analysis, the research identifies areas where the waste management systems are superior and areas where they must improve. Moreover, it serves to assess how the actors can actively participate and cooperate in enhancing circular entrepreneurship.

3 Data Collection

This research is conducted based on interviews, observations, and a systematic literature search. The interviews and observations were conducted in Gulu, Uganda, while the literature search was conducted to supplement the data collection.

The actors investigated have been limited to the four actor groups of the Quadro Helix: Academia, Industry, Government and Communities shown at Figure 14.2. Closer collaboration among these groups can form a platform for circular entrepreneurship

The focus is on the groups of actors in the quadro-helix, because interactions between these actors can promote innovation and entrepreneurship (Etzkowitz & Leydesdorff, 1995). Moreover, in the case of Uganda, civil society plays an important role in understanding entrepreneurship because of the dominance of the informal economy. However, the focus of this chapter is on academia, and particularly its interactions with the business community.

3.1 *Interviews*

Interviews with individuals from industry and academia have been conducted to get an understanding of the topic from the actor's point of view. An interview

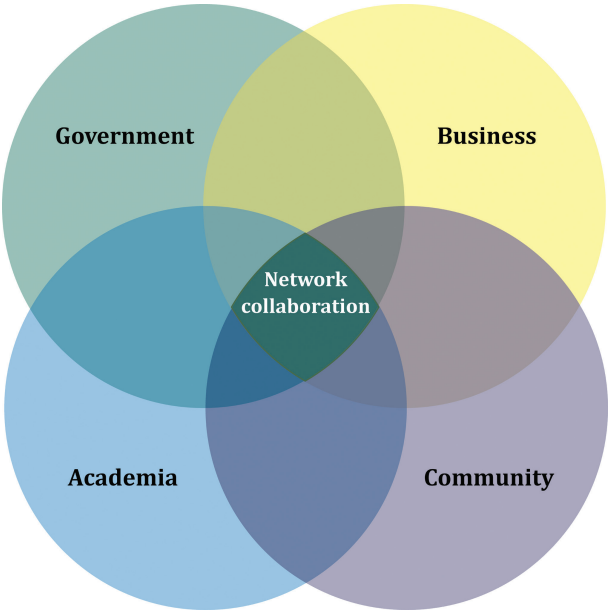


FIGURE 14.2 Illustration of Quadro Helix collaboration

with Peter Okwoko and Paige Balcom, founders of Takataka Plastics, was conducted to include a business perspective. This interview provided insight into how a circular business can be developed, what obstacles exist, and how circular entrepreneurship can have a positive effect on the social sustainability.

In order to obtain data from the perspective of academia, and thus to understand the role of universities in promoting circular entrepreneurship, five interviews were conducted with a BA student, PhD students from the Faculty of Business and Development Studies, the Faculty and Head of Department of Computer Science, and the Dean of the Faculty of Agriculture and Environment (Landsvig et al., 2023). These interviews at Gulu University have provided insight into how the university is working to promote entrepreneurship, the barriers they face in relation to circular entrepreneurship, and the impact of problem-based learning on the outcome. The interviewees also commented on the role of government in promoting entrepreneurship and how this could be optimised based on their perceptions and needs.

3.2 *Observations*

Unstructured observations have been conducted in Gulu, Uganda, to supplement the knowledge from the interviews. Some of these have been conducted simultaneously with the interviews. One observation was conducted at Takataka Plastics to understand how their products are manufactured, and how their business functions. Another was an observation of the waste, infrastructure,

and Takataka Plastics' open containers for collecting plastic bottles in Gulu. The observations have thereby provided an understanding of the problem field by engaging with the local community in Gulu city.

3.3 *Literature Search*

A literature search has furthermore been completed to obtain relevant knowledge about circular entrepreneurship. The literature search has provided knowledge on the role of government and partly of civil society as the two other actor groups of the quadro-helix. Thereby, the literature search has made it possible to obtain knowledge of, for example local policies and regulations that address the environment, entrepreneurship, and businesses.

3.4 *Analysis*

The four actor groups of Quadro Helix all have a role to play in enhancing circular entrepreneurship. Therefore, these actor groups need to assume their responsibility. This section describes how each actor group can enhance circular entrepreneurship and how collaborations between the actor groups can benefit it even more.

3.5 *Industry*

The industry can serve as a source of inspiration to others for circular entrepreneurship, and several opportunities exist to become an inspiring reason for making circular entrepreneurship in practice. The industry can create awareness about the opportunities of circular entrepreneurship by creating internship opportunities for university students. With internships, students can learn business management in practise, and furthermore be exposed to the opportunities of circular business strategies. Moreover, the industry can inspire innovation by inviting students to a tour of their facilities and make presentations of their business at the universities. The industry can also become an inspiring factor by making themselves visible and creating awareness about the advantages of their products to show society that circular entrepreneurship can be a job opportunity.

All these factors are used in practice by the business Takataka Plastics.[1] They are collaborating with Gulu University for the students to do internships at Takataka Plastics, which has led to a drive of circular entrepreneurship by the students. This has also been an advantage for Takataka Plastics to learn from the students and get new ideas for improvements of products and techniques. Besides, Takataka Plastics creates awareness about circular entrepreneurship for students from different schools with tours of their facilities.

> At Takataka Plastics we invite the local schools; both on primary, secondary, college and university level, to get a tour or we go out to teach at the schools. We also teach in the communities and facilitate clean ups. We use a method where we try to 'scare' the locals, because it is what works. Therefore, we talk on their level and talk about plastic pollution, cancer, yellow fever, goats and cattle dying from eating plastic, but we also show our recycled products, so the locals become proud. – Peter Okwoko, Takataka Plastics. (Landsvig et al., 2023)

As part of their teaching, Takataka Plastics does also highlight the importance of the circular principles of refuse, reduce and reuse. Takataka Plastics has furthermore become visible in society, by implementing containers for the locals to deposit their used plastic bottles. With the visibility, they can inspire potential entrepreneurs in the city, which is also seen as Takataka Plastics is getting a lot of job applications. Thus, Takataka Plastics is a great example of the mentioned inspiring factors that can enhance circular entrepreneurship.

The industry cannot include all nine levels of circularity in their business models simultaneously. Yet, when acknowledging waste as a resource, it is possible to have a business strategy, where discarded resources are given a new life. This is both an economic and environmental advantage, because these resources are cheap or free, and they are then not becoming waste in nature. Takataka Plastics is an example of a business giving the resources a new life. They collect plastic bottles in containers and recycle the plastic bottles into e.g. tiles for bathrooms or kitchens. In Gulu, the number of plastic bottles in nature has decreased. Thus, this business example shows the opportunities of using circular business strategies that have advantages for both the environment and the employment rate.

Therefore, the role of the industry in enhancing circular entrepreneurship is to inspire and show the potentials for new entrepreneurs to establish circular businesses.

3.6 *Academia*

The resources and outreach possibilities are available within Academia that can improve knowledge about circular entrepreneurship through education. Universities are actors within academia as they have a wide audience and facilities to provide the needed knowledge and skills to do circular entrepreneurship. General knowledge about entrepreneurship, business management, and the advantages of entrepreneurship is needed among students, and universities can provide this knowledge through lectures and workshops. Besides,

lectures about circular economy are not common at East African universities however circular economy could be a part of the curriculum of the universities especially the faculties of business and development as well as agriculture and engineering. Problem based learning (PBL) is a way to engage students in potentially becoming entrepreneurs. With PBL the students learn how to analyse and solve real-life problems by exploring problem fields, working result-oriented, and in teamwork. Internships and field trips, likewise, provide the students with knowledge and skills to do entrepreneurship and prepare them for the labour market.

Some faculties at Gulu University are practicing PBL and preparing students for the labour market with internships and field trips. PBL has been implemented at several faculties to provide reality in the lectures and the students learn how to analyse and solve real-life problems. Besides the implementation of PBL has led to a two-way learning process with students presenting for the teachers and both parties are gaining new relevant knowledge. The students become more independent and critical thinkers, because the students are experiencing real-life problem cases, and the two-way communication makes also a safe space for discussions (Interview with Dean at Gulu University in Landsvig et al., 2023).

At Gulu University, the students collaborate with the industry and the local community in internships and problem-solving projects. This is for the students to understand the problems in real life and how to solve them, which in the long run can encourage entrepreneurship. Some students at Gulu University have initiated their own innovations. An example is a group of students making an app to track transport because they saw a problem of people spending a lot of time waiting for busses. This does not relate to circularity, yet it shows that students leave the university with the knowledge and skills to do entrepreneurship. This is emphasized by one of the faculty and Head of Department:

> In general, we try to make the students come out of the university as much as possible and engage with the society and build solutions for people. […] In the beginning, we tried to build solutions for a given problem, but now we see a need for a broader perspective and involvement of the local communities that we are creating solutions for. – Faculty and Head of Department, Gulu University. (Landsvig et al., 2023)

Thereby the role of academia is to give potential entrepreneurs in terms of students the knowledge, skills, and practical mindset to engage in entrepreneurship and include circularity in their business models. With the numbers of existing entrepreneurs failing within the first years, then there is also

a need for Open Education and special courses to support the entrepreneurs and inspire new ones.

3.7 *Government*

The government and local authorities are an actor group that must be considered when enhancing circular entrepreneurship as they can promote circular entrepreneurship through regulations, policies, and making resources available. With their means, the government can support aspiring entrepreneurs in innovation by making space and providing grants. According to one of the interviewees it is essential to have a tradition in the local community where students can innovate and adjust business ideas. 'The government should make it easier by creating an environment where people can come and innovate. […] The government and also universities need to facilitate space and grants'. – Faculty and Head of Department, Gulu University (Landsvig et al., 2023).

Such a breeding ground for circular entrepreneurship can be fostered by regulations made by the government. Yet the regulations must be carefully implemented as they can delay innovative thoughts and solutions to current issues. An example is the banning of plastic bags, which has been a subject in the Ugandan Government for 15 years (Behuria, 2021). Instead of only implementing a ban, the government could have benefited from preparing the community on how to create circular businesses from the ban on plastic bags, hence fostering the innovation of alternatives. Thus, the government could have applied strategies such as refuse and reduce, while simultaneously enhancing circular entrepreneurship by providing funds for innovating alternatives based on natural and local resources.

This is rather essential as most businesses are 'killed' at an early stage, due to the regulations and tax systems that do not enhance micro, small, and medium-sized enterprises. (Faculty and Head of Department, Gulu University in Landsvig et al. 2023). However, more frameworks promoting entrepreneurship in Uganda have been developed but need financial backing for actual to work (Odongo, 2019). Meanwhile, most businesses in Uganda are in the informal sector, meaning that they do not follow the tax system and regulations (Deléchat & Medina, 2020). Therefore, the government needs to consider how to include the informal sector in their regulations as the informal sector is such a large part of the working force in Uganda. The UNCTAD has supported Uganda in developing strategies and regulations to enhance entrepreneurship, but there is a need for the government to follow it through (UNCTAD, 2022).

Therefore, the role of the government is to enhance circular entrepreneurship by supporting it financially, making room for innovation, and implementing strategies and regulations that make it possible for businesses to sustain.

3.8 *Collaborations*

Every actor group has their different resources and roles in enhancing circular entrepreneurship. The industry's role is to pave a path to innovation by becoming a source of inspiration for other businesses, hence both inspiring start-ups and existing businesses to become circular. Academia must proactively provide knowledge and skills regarding entrepreneurship as well as circular strategies. Besides, engaging more in PBL and internships will let the students understand and experience working with real-life problems. Likewise, academia must facilitate relationships and partnerships among the industry, academics, and the government to fulfil the need for circular entrepreneurship, where all actors and interests are engaged. Accordingly, the government must adjust the legislation to facilitate the possibilities of entrepreneurship and in particular circular entrepreneurship.

These different actors will have to be involved and interact to enhance the potentials of circular entrepreneurship. Similarly, the different actor groups can have different roles and address diverse strategies of the nine levels of circularity. The preventive strategies of refuse and reduce have potentials for existing businesses to become more eco-efficient by reducing impact on the environment and at the same time save money. Furthermore, the government can create incentives for industry to work with preventive strategies and reduce the use of resources such as water, energy, etc. and refuse the use of dangerous substances. The industry can significantly affect the other strategies by extending the lifespan of products through repair, reuse and refurb strategies. This is already common circular strategies in East Africa mostly within the informal economy. However, circular entrepreneurship has the potential to become more systematised and innovative, by support from universities and public authorities. Takataka plastics is a showcase of how plastic waste can be transformed into products, and of the benefits of collaboration with Gulu University. Besides, the case also shows how civil society can benefit and contribute to such circular entrepreneurship.

Circular entrepreneurship can thus appear in many guises leaving potentials for different circular strategies. Innovation can be fostered by the interactions and involvement of the quadro-helix actors and can take place between businesses as well as with knowledge institutions.

'For Community Transformation' is the motto of Gulu University, and circular entrepreneurship is a potential source of innovation that can transform the local communities and benefit both businesses and governmental authorities. Quadro helix collaborations are key to enhancing the conditions of innovation and this can be formalised by establishing networks and hubs among the different actors since this can provide improved opportunities for innovation – more than any of the single actors alone (Etzkowitz & Leydesdorff, 1995).

4 Discussion

This study has explored how the actor groups of the quadro-helix – academia, civil society, government and industry – can enhance the opportunities for circular entrepreneurship, thereby bridging the gap between obvious environmental problems and the need to create employment, especially for the youth in Uganda.

Although the study included relevant groups of stakeholders, other stakeholders could have been included. Universities and their role in promoting circular entrepreneurship are important, especially in ensuring higher levels of innovation and product quality. However, many more actors and other types of schools for younger students can also teach young people to understand how waste can be turned into a resource and the various job potentials related to extending the life of products through repair and reuse. There are several ways to create the mindset, knowledge and tools for young people to become circular entrepreneurs later in their lives.

In Zanzibar, Kawa Training Center educates young students with the purpose to becoming tour guides, entrepreneurs, or working at the hotels. At this school, the students are learning how to use waste as a resource, by doing beach clean-ups and using the materials to make new products. Besides, Kawa Training Center takes the students to markets for them to sell their products. Existing technical and vocational training schools in Uganda could also prepare younger students to become circular entrepreneurs in the future.

In Nairobi Kenya, many hubs exist related to circular businesses for example Circular Innovation Hub that is a platform for circular businesses, where start-ups can meet, develop, exchange experience, and become recognised (Circular Innovation Hub, n.d.). They have programs that address challenges experienced by circular businesses covering various topics such as marketing, fundraising, upscaling, relevant staff, and pitching.

National governments have a role to play in creating the framework conditions for entrepreneurship, but local governments also have an important role, as they are responsible for resource and waste management. The national government has the ability to impose sanctions and provide incentives, e.g. through support programmes, while local governments are closer to communities and local actions. Local governments should recognise the environmental and employment benefits of promoting circular entrepreneurship, which can be done by creating challenges and competitions for young people, as well as supporting training and financial conditions.

Industry is a relevant actor in circular entrepreneurship, as in the case of Takataka Plastics. Similar cases of waste to resources can be established, for

example by converting agricultural waste into bio-briquettes and 'green charcoal', as another project at Gulu University is investigating. Furthermore, many actors in communities are involved in repair, reuse and other types of service provision. There are many opportunities to improve these services within the circular economy, and it may be beneficial also to investigate these options.

This research has been limited to parts of the Quadro Helix and, in particular, from the perspective of universities, while the role of civil society, government and industry has been less explored. However, the local community has an important role to play – also in collaboration with academia, industry and government, given the dominance of the informal economy in Uganda. More attention to local communities could lead to stronger analysis and results, as the local community need to take part in the transition to circular entrepreneurship. Without the understanding and support of civil society for circular entrepreneurship, it will be difficult for businesses to survive in the long run.

Products based on waste materials can be difficult for the locals to understand, because they see waste as waste and not as a possible resource. Peter Okwoko, from Takataka Plastics, elaborates this: 'We have a hard time convincing the locals that a recycled based product also can be a good product as there is low trust in the recycling and a common perspective of it is not sustainable' (Landsvig et al., 2023). In order to enhance circular entrepreneurship, the local community needs to be involved and see the advantages of using waste as a resource. Takataka Plastics is involving the local community by employing local youth, and this is a way to enhance trust and build a commitment with the local community.

Another reason why the local community is important in promoting circular entrepreneurship is that they are close to the local problems related to waste and resources. Citizens also need to be involved in developing solutions to ensure local support. There is a lack of job opportunities for both academics and non-academics, so solutions for both groups need to be explored, and thus the quadro helix perspective can benefit this research.

In general, the opportunities to promote circular entrepreneurship can come from many more and different actors than those addressed in this study.

5 Conclusion

Uganda is struggling with both improper waste management and unemployment. To improve the waste management system, circular business strategies can be implemented in Uganda. This can create more employment by using waste-to-resources in entrepreneurship, and by improving existing and new business strategies related to repair, reuse and retrofitting.

The study of the actors within the quadro helix: industry, academia, civil society and government, showed that there is a need to involve all groups of actors to promote circular entrepreneurship and thereby create employment opportunities for Uganda's youth, as the informal economy is dominant. Through literature review, interviews and observations, the role of each stakeholder group was analysed, and solutions were identified on how to promote circular entrepreneurship.

Industry can promote circular entrepreneurship by inspiring and training potential entrepreneurs. This can be done by inviting visitors to their company, taking in interns from the university, and employing local citizens. Academia has the knowledge and outreach possibilities. By educating students about problem-based learning, entrepreneurship, and circular economy, students get knowledge that can be used to create circular business strategies. Besides, universities can advance circular entrepreneurship by having students analysing real life problems and come up with viable solutions. Making projects and doing internships in businesses are ways to boost this. The Government has the power to promote circular entrepreneurship through regulations, policies, and providing resources. To create circular entrepreneurship, the entrepreneurs need improved conditions through tax systems adapted to circular entrepreneurship and physical conditions such as workspaces and grants.

However, the different actors cannot create circular entrepreneurship by working independently, the chances of survival can be improved through collaboration and engagement with each other in partnerships and/or in networks. The actor groups have different strengths to increase circular entrepreneurship both related to resources, power, knowledge, and outreach possibilities. Besides, the circular strategies address different challenges, and to create circularity all the strategies need to be implemented at different levels. Actors need to work together, take responsibility and use their strengths to promote circular entrepreneurship in Uganda.

This research did not cover all groups of actors within the Quadro Helix. Therefore, further research is needed on more actors in the Quadro Helix and especially on how to involve the local community in promoting circular entrepreneurship in Uganda.

Note

1 Takataka Plastics is a business located in Gulu, Uganda. They recycle plastic bottles into tiles that can be used for kitchens and bathrooms.

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CHAPTER 15

Developing Infrastructures for Learning

Perspectives and Proposals in Design of New Practices

Geoffrey Olok Tabo, Lone Dirckinck-Holmfeld and Ann Bygholm

Abstract

This chapter discusses the institutional challenges of implementing new innovative pedagogies mediated by digital technologies in higher education in a resource-constrained environment. This transformative process is understood through the lens of the concept of infrastructure. We aim to explain how infrastructures for learning can be designed to enable localised educational formats of PBL and hybrid learning. Designing infrastructures for learning requires a multifaceted approach due to the complexity involved and is in principle an ongoing process. Participatory design is used as an overall methodological framework. Specifically, collaborative eLearning design and the Futures Workshop were used for data collection. Qualitative data were collected at different stages between 2015 and 2019. Cultural Historical Activity Theory provided a framework for analysing individual and group actions within the activity system. In particular, we draw on the hierarchy of activities, according to which an activity is composed of actions, which in turn are composed of operations. Following this hierarchy, challenges are identified at the level of practical issues, pedagogical issues and institutional issues. We demonstrate that the use of participatory methods, local materials and examples captures contexts and promotes collective responses to transforming education and infrastructure. Participants reflect on the process and identify further gaps for future cycles of design and implementation.

Keywords

infrastructures for learning – design – localisation – internal contradictions – Gulu University

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1 Introduction

In this chapter we present infrastructures for learning as a concept that encompasses technologies, resources, institutional structures and human actors/processes that support the realisation and transformation of education. Our starting point is that infrastructures are relational, socio-technical and situated in nature. They are both a product and a process (Star & Ruhleder, 1996) that we engage with and experience in our practices. *Infrastructuring* is therefore an ongoing process as the development of institutions is dynamic in nature. Infrastructures are usually intended to enable institutional practices and therefore must emerge in relation to those practices (Guribye, 2005).

When we think and talk about infrastructure, we often refer to the ecology of physical things, which is closely related to engineering artefacts. In essence, infrastructure can have multiple meanings and conceptualisations. It represents a level of complexity whose boundaries are loosely defined (Guribye & Lindström, 2009). Star and Ruhleder (1996) suggest that infrastructure is both relational and ecological, and that it becomes infrastructure in relation to practices rather than as a thing stripped of use. They imply that infrastructure should be defined by how the thing is used in practice rather than by the thing itself. It is the ecology of tools, actions and the built environment, not just technology, but aggregated and inseparable from social and non-technical elements (Star & Ruhleder, 1996). Accordingly, Guribye and Lindström (2009) have argued that infrastructure is part of the technological, material and social conditions of organised practices such as in universities – which we refer to in this chapter as teaching and learning. We therefore organise our work around infrastructures for learning, which we conceptualise as the interconnectedness of technological artefacts and how such artefacts are themselves intertwined with other technological, institutional and social arrangements (Guribye, 2015) within university settings and beyond.

Infrastructure is relational in nature, so that within university environments it is designed to support the core function of teaching and learning, which is similarly aligned to a specific university-wide pedagogical approach to achieve the vision and mission of the institution. In this regard, infrastructure design is important to deliver educational services for 21st century competencies documented in the Sustainable Development Goals, including problem solving, collaboration and innovation, among others (Tabo, 2020). This is part of the transformation of education in local contexts.

In the context of transforming education, we discuss infrastructure for learning in relation to local teaching practice at Gulu University. We show how the use of technology to support teaching and learning is gradually becoming

an integral part of university education and systems. Inspired by the ongoing introduction of new innovative pedagogies to transform teaching and learning at Gulu University, this chapter explains how learning infrastructures can be designed collaboratively to meet local training needs based on participatory approaches. Furthermore, as demonstrated in previous chapters, we document and share our experience of a decade-long capacity building process in higher education by introducing the idea of designing infrastructures to accommodate a new and localised PBL and hybrid learning model. These approaches integrate problem-based learning (PBL) mediated by ICT tools and services with a participatory design approach. The chapter, which provides an account of a local infrastructuring process, draws on Tabo's (2020) work on designing infrastructures for learning with technology and human practices in mind, and is guided by the research question: How can infrastructures for learning be designed to accommodate new teaching and learning practices with PBL and hybrid learning?

2 Methodology and Materials

Cultural Historical Activity Theory (CHAT) is a framework that originated in the early 20th century, primarily associated with the work of the Russian psychologist Lev Vygotsky, and later developed by others such as Alexei Leontiev and Engeström. It focuses on understanding human action as part of a broader system of social practices. We use this framework to analyse individual and small group actions within the activity system, using mediating artefacts in their activities (Engeström, 2000). The chapter draws on the third generation of activity theory (Engeström, 2001), which presupposes the ability to understand internal contradictions within the activity system, in addition to cultural diversity and dialogue between different activity perspectives and learning traditions. We draw on the hierarchy of activities, according to which activities are composed of actions, which in turn are composed of operations (Kaptelinin & Nardi, 2012), to discuss how infrastructures should take into account the contradictions and challenges identified at the different levels of an activity. That is, at the activity level we focus on fundamental issues and pedagogical values such as PBL, at the action level we focus on learning and teaching practice, and at the operation level we focus on the actual access to technology such as Moodle. This notion of a hierarchy of activities is also the basis for Bygholm and Nyvang's (2009) categorisation of critical problems in implementing infrastructures in higher education. Simple problems at level one, such as the lack of ability to login, are linked to more complicated issues

at levels two and three, such as what kind of communication is relevant where and when? And what is the role of dialogue in the pedagogy? These three levels can be treated as distinct systems of activities, depending on support skills and availability of technology.

Participatory design formed our overall methodological framework (Tabo, 2020). Specifically, we applied collaborative eLearning design (CoED) (Ryberg et al., 2015) and Futures Workshop (FW) (Jungk & Müllert, 1987) to support our data collection processes. CoED, in combination with FW, provided the much-needed tools to re-imagine the future of technology in education through collaborative designs with teachers. CoED is a kind of card-sorting technique that helps with design thinking and also critical reflection on the collective decisions made about the design solution. In a similar way, the FW method facilitated reflection on past interventions, review of current practices and based on these reflections, research participants are able to re-imagine and design for the future.

Participants were purposefully selected from a group of teachers and managers from faculties of Science, Business and Development Studies, and Education and Humanities. These teachers and managers had previously been introduced to the concept of PBL and how to carry out teaching and learning using this pedagogical approach. The introduction was based on the Aalborg Model of Problem Project Based Learning, in addition to the Maastricht and other models of PBL that are known to be successful (see also chapter 12).

The workshops took place between 2015 and 2017 and were combined with interviews with key stakeholders (academic registrar, director of planning and development, deans, and some managers and teachers). Of the 30 faculty members who participated in the workshop series, follow-up interviews were conducted with 12 teachers and 3 managers.

3 Results and Discussion

The work to develop the ICT infrastructure (computers, internet bandwidth, software and applications) together with the introduction of problem and project-based learning and its localisation to the context of Gulu University has been a key priority of the Building Stronger Universities (BSU) project at Gulu University in collaboration with Danish universities. When the BSU project started, the ICT infrastructure at Gulu University was rather poor. Internet bandwidth was low (2Mbps) and access points were few. The teaching tradition was dominated by teacher-centred methods. However, visionary faculty members and managers from the Faculty of Education and Humanities,

Science, Business and Development, Institute of Peace and Strategic Studies wanted to use the BSU project to develop new and localised formats of action learning, such as problem-based and project-based learning, which could be used as a method of community engagement (see Chapter 12). From the outset, digital tools, internet bandwidth and access hubs were seen as necessary and integrated to achieve the pedagogical transformation. To lead the way, BSU was able to secure some funding to increase bandwidth and, with the support of Maseno University in Kenya – which in a few years had built an e-campus with over 7000 students – helped Gulu University to implement Moodle as a content management system. Several scholars, PhD students, support staff and managers from Gulu University also visited Danish universities and got first-hand experience of PBL and how digital tools and PBL are integrated. In the following subsections, we present discussions from the Future Workshop.

3.1 *Perspectives on Infrastructure for Learning*

It was the first time that a FW was organised as an empirical method at Gulu University. The BSU project partners from Aalborg University introduced the method to the workshop participants and made the participants look at the cultural past, present and future activities/practices of teaching and learning towards student-centred learning. Participants identified and discussed the need to adopt new pedagogies in response to the challenges of the 21st Century and the employability of graduates. This workshop was preceded by other workshops that introduced PBL and eLearning and discussed their applicability to the situation at Gulu University.

The workshop participants had agreed to introduce new pedagogical approaches based on PBL and e-learning. This was the starting point for this workshop to critically and thoroughly examine the problem, to create possible futures and to provide practical solutions and action plans.

This made the FW an excellent starting point for discussions. Participants were invited to the workshop by the BSU Project Coordination Team following the previous workshops. Participants were selected on the basis of a voluntary application by open online advertisement to attend the workshop. Due to the complexity of the curriculum development, participants were deliberately grouped according to their expertise, interest, professional area and background. Based on previous workshops that had decided to adopt new ways of teaching and learning (PBL and e-learning), the objectives of this workshop were to i) establish a mutual understanding of the vision, ii) explore barriers to achieving the vision, and iii) develop a roadmap of activities to achieve the vision. In a short introduction, the workshop facilitators introduced Moodle as a technology to support the development of the future learning environment.

The outputs from each phase of the FW are described in detail in Tabo (2020). In the following we will bring excerpts from the three phases to illustrate the discussions taking place.

3.2 *From the Critic Phase*

Specific to the subject of redesign, a group identified

> gaps and weakness in methods of teaching in the programme which should be strengthened in the redesign. They noted that all the programmes are based on the traditional teacher-centred approach without seminar presentations or individual/group fieldwork activities. They also listed a number of problems that needed to be addressed: students' inability to internalise the concepts taught in class; the content lacking ways to encourage students' creativity; the time allocated for the course delivery being too short because the programme is on the weekend; the format offering no time for students to perform practical sessions and share experiences; the assessment method needing to be improved because in its current form, it is prone to plagiarism and reproduction of lecture notes; and students normally developing phobias for tests and examinations. They emphasised that no research projects are given to students during the teaching semester. (Tabo, 2020, p. 104)

In the summary of the critique phase Tabo (2020) highlights the institutional critique of the adoption of blended learning strategies:

> Participants presented the institutional critiques of adoption of blended learning and strategies to mitigate these challenges in order to achieve the desired outcome. Critique points included lack of relevant policies, negative attitudes toward eLearning and a limited budget, and they suggested strategies such as curriculum review, developing enabling policies and involvement of stakeholders, and others. (Tabo, 2020, p. 104)

3.3 *From the Fantasy Phase*

In the summary of the fantasy phase, Tabo (2020) focuses on the modes of delivery, request for innovative learning, and the related issues with ICT and digital technologies.

In this session, participants came up with their mixed ideas of the proposed visions which they called solutions, alternative views and desires of the future. Zooming in on their recommendation to incorporate blended learning (PBL,

eLearning and networked learning (NL)), participants focused on proposing designs advocating for student-centeredness. The critique of the traditional approach opened opportunities for rethinking the future of university graduates. For example, Group 2's vision of having student enrolment from all over the world with a mission of providing an enabling ICT infrastructure to facilitate global NL underscored the need for embracing ICT. They proposed improving IT systems (hardware, software, networks), content development, technical support, personnel to manage these systems and Moodle as an LMS. (…) The group envisioned the university as having stable and good internet connectivity and designed a strategy to reduce maintenance cost of these artefacts by transferring the cost to the students, instead of setting up computer laboratories. (…) They advocated for stable and good internet connectivity for these systems, and to 'move maintenance of hardware and software to the learners by using the "bring your own device" concept' (BOYD). The BOYD idea (Bring your own computer) was welcomed by both IT support and technical staff. The workshop participants appreciated the amount of work that would be placed on the IT support staff once all these programmes were running, which made it logical and appropriate for the BOYD to be adopted.

From the students' perspective, Group 3 emphasised the university's need for computer literacy and integrating social media in the LMS because students like to stay on social media for networking purposes. They argued that it is important to interest students in using social media for academic purposes. They presented a proposal for more access to online learning facilities, which will gradually reduce pressure on the physical facilities of the campus. Group members noted in their vision statements that 'there is need to establish online facilities, for example, online course content' and that they should 'decongest the classroom by introducing e-campus' (…) and an infrastructure for learning that will allow for student enrolment from all over the world. Because of the numerous problems, it was proposed that students become an avenue for the university to attend to some of those problems, to address them as part of students' outreach programme. Through the faculty of Education and Humanities, the group proposed that some of the philosophy of PBL and NL could be introduced at lower levels in schools (…) Stakeholder involvement at all levels in the design and implementation of these programmes was noted as lacking and needing to be addressed along with appropriate budget allocation by the university (Tabo, 2020, pp. 105–106).

Overall, the participants presented their perspectives on the integration of technology in teaching and learning at the university based on the current situation and use of digital technologies. PBL and other ways in which innovation, collaboration and critical thinking skills could be incorporated into

programmes to make them more practical and focused on contributing to community transformation were highlighted (Tabo, 2020).

In the FW, participants presented a variety of perspectives on infrastructure for learning. They acknowledged the complex nature of infrastructures and the challenges they pose to learning designers. These include the need to develop institutional learning environments as infrastructure for learning for blended learning and PBL, increased internet bandwidth with stable connectivity. In addition, IT staff to manage these infrastructures in resource-constrained institutions was identified as a bottleneck (Tabo, 2020).

The challenges identified in the FWs opened debates on the design of institutional infrastructures and learning spaces that should enable the new practice of teaching and learning. Thus, when innovative approaches such as PBL and blended learning (later conceptualised as PBL hybrid) are introduced, adequate capacity building and investment in infrastructure should be targeted. The concept of infrastructure has been broadened to include not only physical but also, importantly, virtual spaces within and beyond formal learning environments. The design of these learning spaces should then be aligned with PBL hybrid learning.

The findings of Tabo's (2020) study revealed that the issues of hardware and software were particularly challenging for the participants (see Table 15.1). The institutional settings had installed a low level of infrastructure that was usable at the beginning of the experiment. Users' knowledge of technology was generally low, as was their ability to navigate software environments and the number of technical support staff. Moodle was seen as a promising LMS, hosted in the UK at the time. This was to ensure that the services were up and running 24/7 and not dependent on power cuts, etc. The Moodle setup was designed in collaboration with learning designers from Maseno University.

Participants' voices categorised at level one are mostly descriptions of practical problems related to users' inability to manage their credentials and general connectivity to the Internet. This connectivity is described as the availability, accessibility and reliability of connections on campus. The Learning Management System (Moodle) was implemented by the BSU project to become the central digital infrastructure for learning at the university. The LMS was seen as important for achieving the pedagogical goals presented by all groups. However, the difficulty of focusing on the IT infrastructure, as it is the foundation on which all IT systems are implemented – and on which teaching and learning depend – was seen as a major challenge. An inclusive approach to building and using the infrastructure was important to discuss, in addition to what the experts from Maseno were providing by sharing their success stories and acceptance to scaffold Gulu in the same process (see also Tabo, 2020).

TABLE 15.1 Practical issues and challenges in implementing infrastructures

Level 1 *Practical Issues*	
Username Passwords Mails Server connections	‘Technology can be viewed as delimiting factor ... some categories of staff will be excluded ... those illiterate’ ‘...availability and reliability of a service influence our attitude to adopt technology’ ‘Our LMS is hosted somewhere in the UK to ensure that the services are available to users as and wen required’ ‘The campus wide connectivity and services offered on the current infrastructure are poor’

Teachers are calling for an intertwined pedagogical perspective where technology, pedagogy and organisation systems are intertwined. However, for the technology to become fluent as a tool for action at the operational level, the difficulties with the digital infrastructure should be addressed.

However, some of the challenges were clearly at the pedagogical level (level 2). For example, some participants mentioned that the programmes were based on a teacher-centred approach, with no room for discussion, student presentations, fieldwork or other forms of student participation. The dominant teacher-centred approach was defended by some teachers who argued that student-centred approaches had been tried in Uganda but had failed (Kiguli-Malwede et al., 2006) at Mulago Medical School, so were not guaranteed. However, although most agreed that more participatory approaches would improve student learning, the relationship between these activities and curriculum redesign needed to be further explored. In addition, PBL and e-learning would require teachers to change their teaching practice, which was a challenge, but combined with the many technical issues, the barrier became somewhat overwhelming.

At the institutional level, there were discussions about the core values of teaching as a practice (level 3) and aspirations for the future. Recommendations to incorporate blended learning (PBL, e-learning and networked learning (NL)) and designs that advocate student-centredness provide directions for setting goals and making appropriate choices about technology and learning infrastructure. Suggestions for making teaching and learning more inclusive, the costs of investing in technology, including bring your own device (BYOD) policies, investing in people and integrating these changes in the early stages of implementation. The FW provided insights from a group of teachers and managers who are eager to engage in the development of these new teaching

TABLE 15.2 Pedagogical issues and challenges in implementing infrastructures

Level 2 *Pedagogical Issues* Using the system properly Messages for the right audience	‘Lecturers do not use ... pedagogically prepared material ...’ ‘Our curriculum is teacher centered and classroom based’ ‘...many people and societies adopt technology as symbolic and transformative’ ‘...the challenges of achieving goals is a result of differences in teaching methods, approaches and attitudes of lecturers’

TABLE 15.3 Institutional issues and challenges in implementing infrastructures

Level 3 *Institutional Issues* Fundamental values of practice Goals, choice of platform	‘We incorporated ICT and blended learning in our structure right from the beginning’ ‘the cost of ICT Uganda is high “... we propose Moodle as a learning Management System ...” ‘...when infrastructure is properly enacted, teaching is enhanced. Teaching and learning practice is made more inclusive’

and learning practices and the infrastructure that supports them. They argue that proper implementation of the infrastructure will lead to effective teaching and learning in general, but specifically to inclusivity and ownership.

The three levels provide a concrete breakdown of the complexity of the infrastructure within an institution engaged in Design for Learning. It is also a way of answering the question: How can infrastructures for learning be designed to accommodate new teaching and learning practices with PBL and hybrid learning?

The concepts and technologies we are working with are both an opportunity and a constraint for development (e.g. the Moodle system inscribes understandings, values and culture of practice).

The whole process needs to meet some of the user requirements for the proposed blended learning and for IT infrastructure, eResources, space, furniture, books, LMS and human capacity development. Many of these requirements, such as policies, IT infrastructure, learning resources and staff development, are at the macro and meso levels of the university. The findings are summarised in Table 15.4.

TABLE 15.4 Summary of requirements

Case infrastructure	Requirements
Curriculum	Redesign the curriculum with the principles of PBL and blended learning, content development, accreditation
IT	Improve network, bandwidth, access, computer (hardware and software), LMS based on Moodle, overall design
Personnel	Training of IT support, expert, administrators, academic staff (ICT skills, PBL and online course design), continued support by Aalborg University and Maseno University.
Policies	Develop ICT, eLearning, end user, IT management and security policies
Resources	Library eResources, physical books, classrooms and LMS

4 Discussion

The development of institutional infrastructure for learning is a rather slow process that requires the active involvement of stakeholders and the careful incorporation of their needs into the design. This is particularly important when designing for new practices, as was the case at Gulu University, where new ways of teaching and learning were introduced. The process is mixed and complex, requiring a deeper understanding of institutional culture, pedagogy, user skills and the underlying infrastructure on which the new is built.

The development of academic institutions has often been closely linked to research, innovation in teaching and outreach, but there are many innovative collaborative activities that require well thought out and designed infrastructure to be successful. A holistic view of these processes required in educational transformation is important in the early stages of designing and implementing learning infrastructures.

Advances in information technology are contributing significantly to the paradigm shift in higher education in Uganda and beyond (Ayoo & Lubega, 2008). This transformation aligns technology with organisational vision, integrating technical, pedagogical, managerial and other structural processes as ingredients for transforming education. This approach to transforming education also requires an examination of cultural practices and a change in culture for learning and management levels, especially the higher institutional management level. University management is responsible for leading the transformation agenda, but also for funding these processes to achieve the vision.

Therefore, participatory approaches are important to engage professionally in discussing the ways forward and the challenges ahead, and one way to try to address these challenges more explicitly is to introduce change labs, following the work of Engeström et al. (1996). The change laboratory has been further developed by Virkkunen (2013) into a tool for collaborative development of work and education.

From the contextual understanding of the empirical activity at Gulu University, there are positive signs that developing infrastructures for learning at the university requires participatory approaches that can facilitate development with top management. This approach will lead to the development of shared understandings and goals, and the appreciation of the commitment of teachers and middle management through a series of change lab experiments.

Following the engagement with teachers and students during the research process is an indicative experience of how to develop infrastructures to manage both physical and digital learning spaces at Gulu University, which is also applicable to universities in similar contexts and situations and the other emerging and young universities. For example, younger universities are in the early stages of establishing institutional systems and infrastructure, so there are opportunities to use technology to define new ways of developing sustainable infrastructure, compared to the more mature and established universities where change is more difficult to achieve. In such institutions, systems tend to be stable and resistant to challenges. Institutionalising the infrastructure process creates its own path of development for the institutions and thus contributes to the decolonisation of education in this context.

Infrastructuring processes raises important questions that this chapter seeks to answer. The need to understand how new pedagogical models fit with existing infrastructure forms the basis of how to design for collaboration and interdisciplinary ways of working. Empirical activities found that the diversity of ideas from research participants emphasised the need to support collaboration and student-centred learning. Hybrid learning, blended learning, e-learning or technology enhanced learning in general have been used in higher education and universities in developed countries but the same has not been possible in low- and middle-income countries including Uganda (Ssekakubo et al., 2011). This position questions the interest and method of introducing new ways of teaching and learning in low-resourced countries. However, it is our contention, based on the work of Tabo (2020), that infrastructure and pedagogical development should go hand in hand. Infrastructure and pedagogical change are closely related and interdependent. Guribye (2005), based on an ethnographic study, documents that all too often infrastructure development, teaching and learning practices, and management operate in different

activity systems (or silos). The Gulu case shows us the power of bringing the different groups (activity systems) together in participatory workshops. These workshops give participants a shared insight into the perceived challenges, but also an opportunity to share values and develop shared visions and goals at level 3 that can guide further implementation work. Looking back on our research design, however, we would recommend integrating participatory workshops with top management. In many higher education institutions, top management sets the direction, detached from day-to-day practice. However, the design of participatory workshops with top management, faculty, students and the IT service staff would provide a platform where challenges at the three levels of the organisation could be explored and negotiated.

In the new ways of teaching and learning, we present problem-based learning and hybrid learning as the most important to address the various challenges of higher education in Uganda and beyond. Transforming education is important for Uganda to address local issues by adopting PBL and PBL hybrid as pedagogical approaches. Designing institutional infrastructure and learning spaces that allow for such innovative approaches prepares learners to address community challenges. The learning space needs to change to include not only physical but also, importantly, virtual spaces. The design of these spaces should then align with PBL hybrid learning, while also taking into account blended learning. This design idea also aims to address issues of large student numbers and to improve quality and access to education. Infrastructure is dynamically embedded in the decolonisation of higher education as a means to achieve their aspirations. Using participatory methods to create a platform for the voices of different stakeholders is the first step to continuously develop infrastructures to accommodate new teaching and learning practices.

5 Conclusion

Moving from the physical classroom to virtual spaces is a concrete way of responding to the ever-increasing demand for access to higher education. Developing a learning infrastructure that accommodates a diversity of learning approaches can deliver on the promise of widening access, as physical spaces are slow and expensive to build. In hybrid learning environments, students use information technology tools such as smartphones, computers, headphones and internet connectivity to become active participants in the learning process.

To apply PBL principles more actively, flexible seating arrangements within the physical learning environment are needed to support group activities. In

the PBL hybrid, the idea is that students do not need to be on campus all the time, but rather come to campus a few times a month for seminars and other practical things. They can be on campus once a month to reduce transport costs and to free up space for other students to use.

However, infrastructure design and development is a non-linear process and product with many complications, contradictions and challenges, and is therefore a slow process. It is a process that requires time from users and support from management.

Educational pedagogy is central to the decision on infrastructure design as it provides the theoretical and practical basis for implementation and learning (Tabo, 2020). Designing internal systems that meet the needs of pedagogy requires a participatory approach to the design of learning environments.

We demonstrate that working systematically with users through participatory design workshops uncovers contextual issues and promotes collective responsibility for the development of the learning environment. Reflection on the process leads to the identification of further gaps for future design and implementation. However, in this chapter we have discussed infrastructure design from a participatory approach and local context in relation to transforming education and decolonising education.

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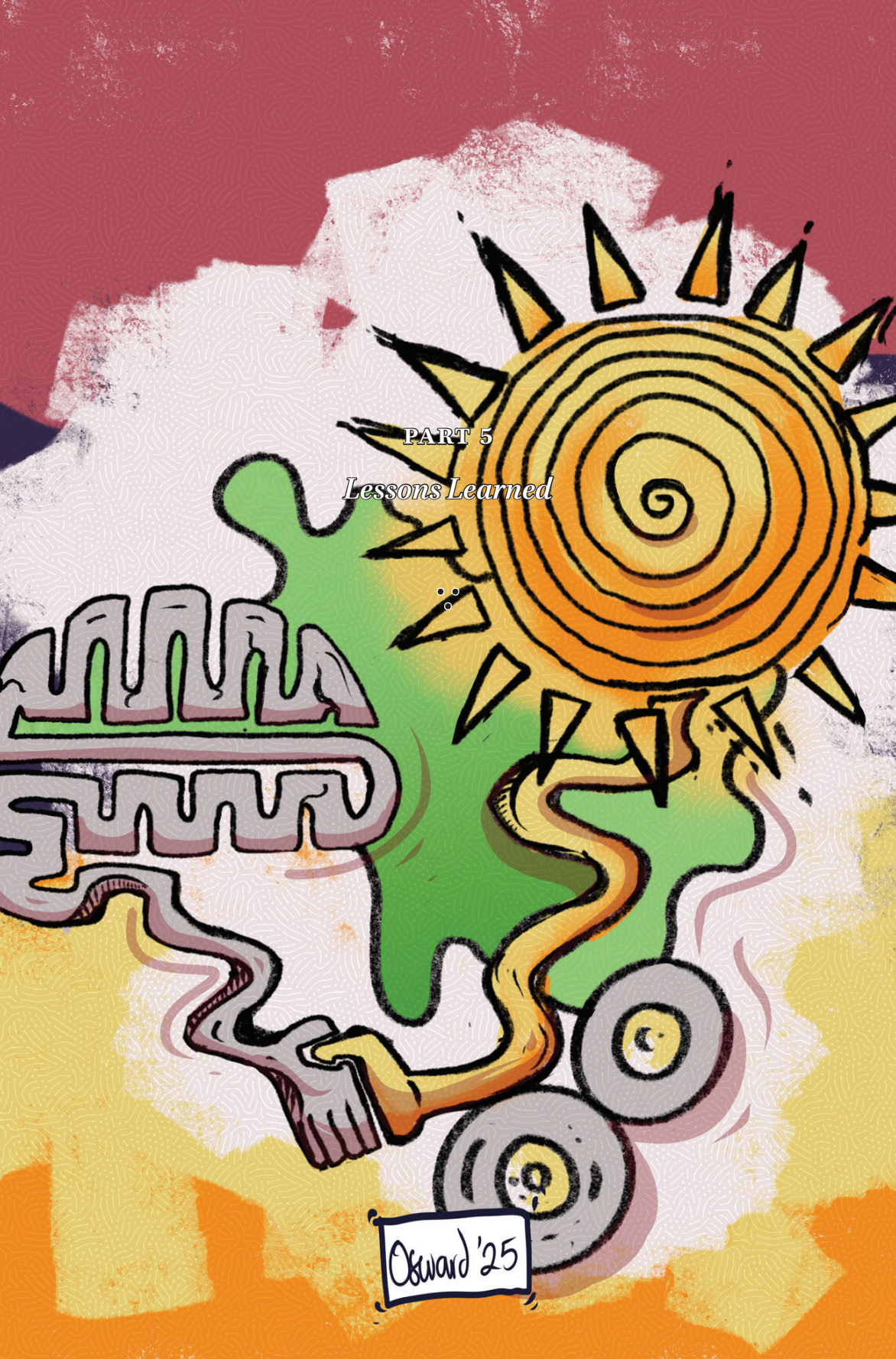
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PART 5

Lessons Learned

CHAPTER 16

Lessons Learned – Building Stronger Universities, Transforming and Transitions

Education as a Driver for Development

Lone Dirckinck-Holmfeld, Charles Nelson Okumu, Geoffrey Olok Tabo and Inger Lassen

Abstract

This chapter examines the lessons learned from research on educational transformation conducted within the Building Stronger Universities project. BSU – GU is a long-term collaboration between the University of Gulu in Uganda and Danish universities. The project aims to transform education as a driver of community development in northern Uganda. Education must change as society develops, and education is an important vehicle for development. This chapter explores the successes and challenges presented in this edited volume on transforming education. It highlights the importance of continuing dialogue and research on decolonising education, addressing systemic inequalities and promoting local knowledge systems. The findings emphasise that to create more equitable, inclusive and empowering learning environments, the advancement of human actors, together with collaborative, interdisciplinary research, participatory methodologies, problem-based learning and digital technologies, can make a valuable contribution.

Keywords

transforming education – decolonising education – problem-based learning – PBL-hybrid – systemic inequalities

1 Introduction

In this edited volume, we have explored the role of universities, education and research as a cornerstone for community development. Based on the ongoing and long-term Building Stronger Universities collaboration between Gulu University and Danish universities (BSU-GU) an initiative supported by the

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Danish Development Agency (DANIDA), we have established a platform for collaborative research and research capacity building with the aim of contributing to the transformation of education as a vehicle for community development in northern Uganda.

This final chapter critically examines the lessons learned about education as a driver of change and the long-term international partnerships on Building Stronger Universities to support research capacity building in the context of northern Uganda. As researchers, our concerns are linked to discussions of development and a shared commitment to working towards decolonisation in transforming education.

As noted by Warwick et al. (2022) such collaboration raises questions about who determines what research is important, how it is conducted, and whose perspectives matter. It also touches on what we referred to as decolonisation in Chapters 1 and 2. In this regard, Warwick et al. (2022) outline two schools of thought and approaches. One approach is the one adopted by agencies such as the World Bank, which often adopt a top-down approach to formulating research problems, with the aim of producing knowledge that is value-free and decontextualised. A second approach is critical of development agencies and the seemingly uncritical international transfer of research and evaluation modalities in the field of international development cooperation (Mason et al., 2019). This second school of thought challenges the idea that best practice can be transferred without consideration of local contexts. The second approach appears to be informed by interpretivist and participatory approaches with the aim of promoting epistemic justice (Walker, 2020, in McCowan & Unterhalter, 2022).

These overarching ideas and thoughts highlight tensions in educational research. However, we argue that these approaches are not either/or propositions, when working within university systems, but are in constant dialogue. The research in this edited volume has been conducted, intersecting these two poles.

This research was made possible by funding from Danida (Denmark's International Development Association). Denmark's development policy and objectives are reflected in the overall research capacity strategy for Building Stronger Universities (BSU). From a decolonising perspective, BSU has gradually changed its practices. Since its second phase, BSU-GU has been formally led by academics and management from Gulu University in close collaboration with academics from the Danish universities. As a point of departure, Gulu University has taken the lead in proposing "what issues are important, how the research should be conducted, and whose perspectives matter". The aim was not per se to transfer knowledge systems from the global North, but to

create mutual learning spaces. The tools have been the establishment of joint pilot collaborative research projects with scholars from Gulu University and the Danish universities, including the training of master's and PhD students. Looking at the BSU platform through the lens of the cartography of spaces proposed by Andreotti et al. (2015) (see chapter one), two spaces resonate with the BSU platform: BSU as a *soft-reform space,* and BSU as a *space of radical-reform*, as also reflected in the chapters of this volume.

The soft-reform space focuses

> on inclusion, mobilized through personal or institutional transformation (…). Like the 'everything is awesome', space, the soft-reform space emphasizes the rights and responsibilities of individuals to determine their own success or failure, as measured by the values of the existing (and taken for granted) system, with little or no reference to structural power relations or alternative measures of success or modes of knowing and being (…). It is also assumed that any disagreements that do arise can be addressed through rational dialogue oriented towards (a predefined) consensus. (Andreotti et al., 2015, p. 26)

The radical-reform spaces recognise

> the epistemological dominance (largely absent in the soft reform space). This recognition of epistemological dominance is tied to systemic analyses that highlight the historical, discursive, and affective dynamics that ground hegemonic and ethnocentric practices. The radical-reform space also allows for the recognition of how unequal relations of knowledge production result in severely uneven distribution of resources, labour, and symbolic value. (Andreotti et al., 2015, p. 27)

Analyses within the soft-reform space call for inclusion or access that does not require fundamental changes, while systemic analyses within the radical-reform space call for a more drastic disruption of business as usual.

Looking at the practices within the BSU and the contributions to this volume, both spaces are active simultaneously. Most of the research operates in the space of soft reform, based on dialogue and a consensus of community transformation, addressing inequality and injustice, while also containing elements of systemic critiques. The dialogues have been rich. The dialogues and co-construction crossed several epistemic boundaries: humanistic, social and technical, local and scientific, tacit and explicit, participatory, critical, cultural, colonial and decolonial. The main outcome is localised knowledge

construction that holds the elements of the epistemic critique of 'modernity' and offers pathways for alternative developments. The chapters provide insights into 'the powerful voices' – of teachers, students, parents, managers and communities. These are necessary and valuable insights – which should be adopted in the development of new pathways.

Although some of the chapters tend towards a positivist research approach, using analytical approaches with experimental designs based on measurements and indicators that reproduce the dominating epistemics of modernity, all the chapters add a critical and transformative research angle, thus negotiating decisions about 'what to study, how to study it, how to analyse the results', and offering insights into the local conditions and context.

2 Lessons Learned on Transforming Education

2.1 *Historical Background to Transforming Education Including Perspectives on a Colonial Past*

The chapters provide a rich background for understanding the movement to transform education, particularly in northern Uganda. Lassen et al. (this volume), Alidri (this volume) highlight how colonialism has cast a long shadow over education systems around the world, particularly in formerly colonised nations. This legacy manifests itself in several ways, including the continued dominance of Eurocentric perspectives in the production of knowledge and the imposition of educational models that may not meet the needs and aspirations of local communities. As Alidri argues, the term *Global South* itself reflects this complex history, representing countries that often share an experience of economic, political and epistemic dependence on the *Global North*.

In response to this colonial past, a strong movement has emerged to decolonise education, which is also the overall aim of this edited volume. This involves challenging Eurocentric knowledge systems and integrating diverse perspectives, experiences and epistemologies into the curriculum. It involves empowering learners with skills and knowledge relevant to their local contexts and promoting a more equitable distribution of power in educational partnerships. It also brings in the role of humanities and literature as an emancipatory practice.

Okumu (this volume) shows us how the renowned work of Okot p'Bitek, the Acoli poet and cultural activist, can be used to critique colonial education. Bringing p'Bitek's major work to life in an educational setting addresses the conflicting values of the colonising knowledge system and the alienation of Africans from their culture and the promotion of Western values. Building on the work of p'Bitek and others, Okumu argues for the inclusion of African

literature, indigenous knowledge, languages and perspectives in the curriculum as the basis for transforming education.

Ofoyuru and Okello (this volume) work from an assumption that Gulu University has transformed in response to the socio-economic challenges of operating in the aftermath of civil war, while still bearing traces of colonial structures. They argue for the importance of increasing the real-world relevance of education by addressing local challenges and empowering graduates to contribute to their communities, and their curriculum analysis of programs at Gulu University document that these changes are taking place. They further argue that localizing education can help mitigate the potential for neo-colonialism in educational partnerships. By prioritizing local knowledge systems and needs, educational institutions can avoid simply replicating Western models and instead foster a more equitable and empowering learning environment. This also implies amplifying students' voices and giving them a meaningful role in shaping their learning experiences.

Adebua and Oriangi's chapter (this volume) emphasises that transforming education is deeply intertwined with community transformation and gender. The research shows that women in business and public service roles have made a significant contribution to transforming the community around Gulu University, suggesting the importance of promoting women's leadership and economic empowerment.

In general, the chapters in the section on the historical background to transforming education including perspectives on a colonial past, provide insights into how programmes at Gulu University, with support from BSU and in line with government education reforms, are undergoing curriculum transformation to meet the needs of their students and the wider community, including:

- The development of the Higher Education Access Certificate (HEAC) programme to widen access to higher education for students from disadvantaged backgrounds.
- Initiatives to align its curriculum with societal needs by developing new academic programmes and revising existing ones to address community challenges and labour market demands.
- Advocating more practical, student-centred and problem-solving approaches to teaching and learning to equip students with real-world problem-solving skills and a competence to localise knowledge construction to avoid a simple replication of Western theories and models.

2.2 *Institutional Practices, Access and Quality of Education*

Looking at institutional practices and the quality of education provides several lessons that influence the success of educational transformation. As

documented by Bagaya (this volume), school inspection (SI) is a tool for developing the quality; however, the chapter documents only limited effects, not least because the SI is used primarily as a tool for control, and not as a dialogical vehicle for developing pedagogy, teacher's qualifications and leadership. These findings are further elaborated in the chapter by Odama et al. (this volume) emphasising the importance of effective leadership in driving educational transformation in schools, particularly in post-conflict regions such as Gulu City. Empathetic and transformational leadership styles have been shown to be most effective in improving school performance. Characteristics of successful leaders include prioritising the needs of followers, fostering strong relationships within the school community, encouraging creativity and change, maintaining high performance expectations, implementing problem-based learning approaches, and engaging with the community to promote ownership of educational issues.

Amongin et al. (this volume) explores emotional intelligence (EI) and highlights a positive relationship between emotional intelligence and non-academic achievement among university students in Uganda. Her findings suggest that EI plays a crucial role in the overall success of students and should be integrated into the education system. EI includes self-awareness, self-control, emotion management, empathy, positive relationship management, problem solving, decision making, teamwork, cooperation and adaptability. The long-lasting effects of conflict in northern Uganda, such as psychological trauma, and disruption of learning processes, call for educational reforms with a focus on the emotional aspects, and special programs which can significantly impact educational quality in northern Uganda.

Bismarck Okumu's findings (this volume) are especially related to how participation in co-curricular activities is linked to improved discipline among university students. Co-curricular Activities (CCA)'s teach students time management, persistence, responsibility, teamwork, self-confidence, and accountability. By fostering discipline and responsibility, CCAs contribute to a positive learning environment that supports the implementation of interactive learning pedagogies. Based on the chapter, we can also ask the question whether principles from CCA should be integrated more actively in curriculum development? Why not integrate time management, persistence, responsibility, teamwork, development of self-confidence, and accountability as learning goals in the formal curriculum?

Aciro et al. (this volume) study how limited access to higher education is a problem and continues to create divides. Entry into public universities is highly competitive, and various factors influence students' entry grades and chances of acceptance, including A' Level performance, program of study,

entry scheme, mode of study, and financial constraints. New divides are also produced, when entering the university. Students are admitted through different entry schemes, however the students experience unique challenges, such as social isolation for those admitted through the disability scheme, the need to balance academics and athletics for talented sports persons, and financial constraints for privately sponsored students. As Aciro et al. conclude, transformation of education that can make universities more accessible implies several systemic changes such as career guidance, access to quality learning materials, sufficient internet access, and ways to deal with the high student-to-teacher ratios. Teaching should be research based, and most importantly address the problem of poverty.

In general, the chapters in this section call for different theoretical foundations to underpin successful transformation. Building on Habermas' theory of communicative action, Bagaya emphasises the importance of shifting from strategic action to communicative action that promotes open dialogue, consensus building and collaboration, and shared responsibility for improvement among all stakeholders in the education system. Furthermore, community engagement should be increased to foster a sense of ownership and responsibility for educational progress by involving parents, community leaders and other stakeholders in school activities and decision-making processes; by using PBL, teaching and learning processes will address local problems. The chapters also address inequalities between institutions in different regions of Uganda and argue for the depoliticization of education by strengthening transparent and accountable governance structures within the education system. A holistic approach to transforming education requires moving beyond a narrow focus on academic achievement and developing well-rounded individuals. This involves the integration of EI development, CCA and other activities that promote personal growth, social responsibility and the integration of theory and practical skills that enable students to succeed in different aspects of life.

2.3 *On Innovation in Teaching and Learning, Focusing on Digital Technologies; Participatory Practices and Employability*

The previous chapters have all argued for the need for change in higher education. In Section 4 of the edited volume, researchers present different experiments and explorations in the search for the development of new practices in teaching and learning. The chapters highlight the potential of digital technologies, problem-based learning, creative thinking, participatory methods and the concept of circular economy to support and give a direction for transformative learning, particularly in higher education. Realising this potential requires addressing challenges related to access to and use of digital and analogue technologies, skills

and pedagogical development, and values and policy negotiation and alignment in what is presented as infrastructuring (see Tabo et al., this volume).

The chapters share an interest in researching moving away from curriculum-centred and teacher-centred to student-centred, participatory, project and action-oriented teaching and learning. From the beginning of the BSU collaboration, the idea of PBL as an inspiration for transformative learning and larger institutional change has been at the centre of the collaboration. In addition, the implementation of Moodle as a campus-wide learning management system, various digital tools and the opportunity to pilot PBL and digital learning in programmes in the Faculties of Education and Humanities, Business and Development and Science have resulted in a high level of awareness, interest and ownership among students, teachers and management at Gulu University to change towards these active learning principles.

As reported in (Jensen et al., this volume), a localised GU model of problem and project-based learning (PBL – hybrid) integrating digital technologies is being developed. Digital technologies are used to support PBL and community engagement initiatives that focus on real-world problems and are in line with the transformative learning emphasis on applying knowledge in relevant contexts. An example of this is the Creative Thinking Learning Lab (CTLL) at Gulu University, which is specifically designed to address local issues. Students engage directly with community challenges, using ethnographic methods to understand the complexities of the local context. Further CTLL uses creative and analogue tools such as Lego, whiteboards, pens and post-its as reported by Awacorach & Clausen (this volume). This adds to the general findings that technologies (digital and analogue) facilitate increased collaboration and interaction among students, between students and teachers, and with the wider community, and how this fosters critical dialogue and challenges to learners' assumptions, contributing to transformative learning.

Underlying all the chapters, see especially Tabo et al. (this volume), is an appreciation of the importance of digital technology integration and flexibility. Digital technologies play an important role in enabling flexible learning, facilitating communication, supporting PBL activities and enabling knowledge construction across geographical and temporal boundaries. Balancing a technology-driven and a pedagogy-driven transformation, the BSU-GU projects have explored what the literature refers to as entangled and hybrid post-digital approaches (Fawns, 2022) in a resource-constrained setting. What characterises the experiments and pilots in the BSU project is that they have been driven by values and what changes we want to achieve and, on that basis, integrating the principles of PBL and digital/analogue technologies, considering the available technologies (Moodle, Google Drive, WhatsApp, PowerPoint, etc.).

The integration of PBL and digital technologies (PBL-hybrid) is in line with the national education policy in Uganda with its aim to implement competency-based education, and the broader perspective on digitisation of teaching and learning within the Inter-University Council of East Africa (IUCEA). However, the findings in the chapters underline the importance of being open and flexible to different PBL-hybrid models, and of co-creating PBL-hybrids that are localised to the context and overall purpose of the university, here Gulu University with its motto 'for Community Transformation'. As initiated in the review of educational experiments in the East African context and the chapter on infrastructure for education (Bygholm et al., this volume; Tabo et al., this volume), the value of participatory methods is emphasised as a fundamental requirement in the development of new educational formats.

The findings from the experimentation and piloting of digital learning, PBL, CTLL and entrepreneurship education projects, including a chapter introducing the concept of circular economy and the quadruple helix (see Sørensen et al., this volume) reflect:

- The hands-on, problem-solving approaches promoted by digital technologies, PBL-hybrid and CTLL lead to deeper learning and better understanding of real-world issues.
- Students gain critical thinking, problem solving and collaboration skills that are valuable in today's job market by engaging in the transformative learning experiences of PBL, digital/analogue technologies and entrepreneurship.
- Students move away from a passive job-seeking mindset and begin to see themselves as capable of creating their own opportunities and develop an entrepreneurial mindset.
- The focus on local problems in these approaches encourages students to develop solutions that contribute to positive change in their communities; especially, the focus on local problems related to environmental exhaustion and entrepreneurial ingenuity has created a promising path.
- Linking theory and practice, 'giving voice to the powerful' (Adriansen & Madsen, 2011), contributes to building theoretical knowledge and new developmental pathways that reflect contextual issues and local experiences.

3 Conclusion

Decolonising education is a shared endeavour that involves the engagement of scholars from the South and the North in the pursuit of equity, justice and fairness, and a non-linear path of development. This means breaking with the epistemic hegemony of modernity and the colonial-imperial project. These are

the embedded values that scholars (both South and North) take for granted, however the global crises, not least the climate and diversity crises and the increasing inequalities call for critical research in which all taken-for-granted values are deconstructed, research on pressing issues is prioritised, and local knowledge is given a voice? Danida, through the BSU, has paved a way by providing funding for 'soft and critical reform spaces' to develop and flourish. This has tiled the way for increased research capacity, support for PhD students, and collaborative pilot projects with scholars from the South and the North exploring new ways of learning. PhD projects with scholars from Gulu University have provided insights into educational issues in northern Uganda that inform the overarching theme of transforming education, based on extensive empirical studies of these issues. The platform has also served as an experimental space for piloting new approaches to education.

The collaborative spaces have enabled scholarly inquiry into a shared commitment to a decolonial perspective on education and experimentation with new methods such as PBL and digital learning to promote personal growth and social responsibility, link theory and practical skills, and empower students to succeed in various aspects of life. Localised versions of PBL-hybrid (Dirckinck-Holmfeld et al., 2024) are under development as a driver for the integration of technology, pedagogy and organisation in all its complexity, driven by Gulu University's motto: 'For Community Transformation'.

3.1 *Education and Development*

Inspired by McCowan and Unterhalter (2022), we close this edited volume by considering the relationship between education and development. McCowan and Unterhalter suggest that the relationship can be perceived along two axes, one that sees education as part of development and another that sees education as a precondition for development. From a decolonial perspective, education needs to change as society develops. On the other hand, education is at the same time an important vehicle for the societal changes.

This perspective on education is in accordance with the chapters in this book, and the overall ideology of the Building Stronger Universities programme. However, as also noted by McCowan and Unterhalter (2022), this requires a critical discussion of how we understand development, and not least – development for whom. The chapters in this volume have provided detailed insights into the transformation of education – both how to develop education to respond to societal needs, and how new ways of learning within higher education are (perhaps) the most important vehicle for development. Here, PBL deserves to be mentioned as an important tool for change, as PBL enable the new generation of students to research problems of importance for

them (and society), and thereby dynamizing the curriculum contributing with new insights, knowledge and methods for development.

The chapters do not provide a single, unified answer to the question of how to transform education, but offers insights into this and suggest concepts, empathies and actions that specify directions for community development.

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AFRICAN HIGHER EDUCATION: DEVELOPMENTS AND PERSPECTIVES

Transforming Higher Education for Community Development

Participatory Reflection on a Decade of Mutual Capacity-Building in Northern Uganda

Lone Dirckinck-Holmfeld, Geoffrey Olok Tabo, Charles Nelson Okumu, Morten Kure Kattenhøj and Inger Lassen (Eds.)

This volume explores educational transformation as a tool for community development in northern Uganda, with an emphasis on student-centred, hybrid and problem-based learning. It addresses key questions about existing education systems, the need for transformation, desired outcomes and foreseeable challenges. The introductory chapter contextualises the reforms within Uganda's colonial history, while subsequent chapters analyse institutional practices, curriculum design, quality of education and innovation in teaching and learning. The book argues for new participatory learning infrastructures, real-world problems and curricular entrepreneurship to enhance graduates' employability and position them as active contributors to community development. The book is the result of a long-term partnership between universities.

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