# Teacher-Centered vs. Student-Centered: An Examination of Student Teachers' Perceptions about Pedagogical Practices at Uganda's Makerere University

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## Abstract

Wright (2011) distinguishes between teacher-centered and student-centered learning approaches along a spectrum of five dimensions: power balance, course content function, teacher and student roles, responsibility for learning, and assessment purposes and processes. Based on Wright's framework, this study explores students' perceptions of their experience with teaching methods at Uganda's Makerere University. Specifically, the investigation uses a mixed-methods research approach that combines survey data with focus group discussions. A total of 82 students volunteered, with 54 returning questionnaires. From among the 54 students, eight were chosen for focus group discussions. Students provided information about course content, educational philosophy, and teaching activities. In the area of course content, students reported that course completion and examination results outweighed skill development. The results for educational philosophy showed that the preparation of compliant citizens took precedence over the development of self-reliant individuals. Finally, the findings for teaching activities indicated that while teacher-centered tasks still predominated, several students had been exposed to some student-centered activities.

***Keywords:*** Student-centered, student voices, teacher-centered, Sub-Saharan Africa, pedagogical practices

In the last few decades, the education field has witnessed a gradual transformation from teacher-centered approaches to student-centered methods for delivering material and administering assessments. However, this transition has occurred unevenly across geographical regions. While western countries have begun to adopt these methods at all levels of education, much of the developing world continues to rely mainly upon teacher-centered learning. In particular, many regions of Sub-Saharan Africa (SSA) still implement an educational system based upon rote learning and memorization (Nsereko-Munakukaama, 1997; Vavrus, Thomas, & Bartlett, 2011). Although a few initiatives exist to implement the foundations for student-centered learning in SSA (Education Global Access Program, 2016), these initiatives represent isolated efforts rather than wholesale and systematic changes. In some ways, this study attempts to verify the perception, widely held in the literature that in SSA primarily uses teacher-centered rather than student-centered pedagogies.

## Theoretical Framework

Kanuka (2010) differentiates between teacher-centered and student-centered learning on the basis of the teaching and learning experience. While teacher-centered learning prioritizes the experience of teachers or instructors, student-centered learning emphasizes the experience of

students. Widely regarded as the founder of student-centered learning, Paulo Freire established the groundwork for a system of education that empowered impoverished and illiterate individuals within western countries as well as throughout the world. Freire regarded traditional, teacher-centered learning as a means of perpetuating oppression and correspondingly advocated for a system of education that allowed students to express their voice through the creation of dialogue with the teacher and situated educational activity within the lived experience of participants (Freire, 2018). Based on Freire's concepts, teacher-centered and student-centered learning can undergo differentiation through the extent of student involvement. Specifically, teacher-centered methods involve the mass transmission of information from teachers to students through lectures; notes or handouts that require memorization; and summative assessments, such as standardized tests, which assess students on their ability to duplicate teacher-delivered material (Vavrus et al., 2011). Conversely, student-centered methods challenge students to actively create their own knowledge through real-world experiences as well as provide activities and assessments of the students' choosing (Freire, 2018). In this type of learning, instructors teach students the skills required to discover their own knowledge (Froyd & Simpson, 2008). These abilities generally correspond to the real-world soft skills required by today's knowledge-based or creative economy, including problem-solving, critical thinking, collaboration, innovation, and creativity (Sawyer, 2008). Such skills, resulting from students' meaningful participation in their education, can provide freedom from poverty and oppression (Freire, 2018), which contains relevance in post-colonial societies and underdeveloped regions such as SSA.

In some cases, teachers can employ a mixture of teacher-centered and student-centered pedagogical methods. According to Wright (2011), pedagogical methods exist along a spectrum of five dimensions: power balance, course content function, teacher and student roles, responsibility for learning, and assessment purposes and processes. Based on the power balance dimension, teacher-centered learning occurs when teachers control the delivery of knowledge, while student-centered learning shifts the power to the students, who construct their own knowledge with teacher assistance (Fry, Ketteridge, & Marshall, 2009; Wright, 2011). The second dimension, course content function, concerns the process by which learning occurs. While teacher-centered learning strives to cover all of the curriculum and requires that students memorize vast reams of material, student-centered approaches teach students the skills required to learn the material in a more meaningful way (Wright, 2011). Specifically, teacher-centered learning involves lecturing and reading teacher-assigned materials, while student-centered learning uses real-world materials, cooperative learning, and inquiry-based investigations to develop soft skills grounded in practical experience (Barron & Darling-Hammond, 2008; Freire, 2018; Sawyer, 2008; Vavrus et al., 2011). Wright's third dimension, the role of the teacher, contrasts the two instructional modes based on the instructor's place in student learning: teacher-centered learning envisions the instructor as a "sage on the stage," and student-centered learning places the instructor as the "guide on the side" (Wright, 2011, p. 93). In teacher-centered learning, teachers assume the role of knowledge provider while students function as passive recipients of information. In student-centered learning, students function as co-designers of the curriculum and their learning environments by establishing learning goals, creating a reflective process, and taking learning outside of the classroom (Bray & McClaskey, 2015; Campbell & Robinson, Neelands, Hewston, & Mazzoli, 2007). The final dimension concerns assessment; while teacher-directed learning motivates students to focus on grades, student-centered learning promotes education as an end in itself (Wright, 2011). Specifically, teacher-centered learning uses mainly summative assessment, which tests a student's acquisition of knowledge after a unit

of study, while student-centered learning includes formative assessment, which occurs throughout the duration of a unit (Stull, Varnum, Ducette, Schiller, & Bernacki, 2011). Wright's five dimensions of pedagogy will serve as the basis for analyzing the pedagogical methods reported in this study.

**Pedagogies in SSA**

While developed, western countries have been gradually implementing aspects of a student-centered pedagogy, education systems in SSA continue using teacher-centered methods at all levels of schooling, including post-secondary education (PSE) (Nsereko-Munakukaama, 1997; Vavrus et al., 2011). A variety of literature extensively documents the challenges of effective post-secondary school pedagogical approaches in SSA countries (IUCEA, 2014; Kasozi, 2003; Mamdani, 2001; UWEZO, 2015). In particular, studies show that teacher-centered pedagogical methods, especially at the PSE levels, deprive graduates of the required abilities for participation in the workforce or entrepreneurship; this deficit fails to stimulate SSA economies, leading to unemployment and underemployment among SSA PSE graduates (United Nations, 2011; UWEZO, 2015). The continuation of traditional post-secondary pedagogical approaches, also known as teacher-centered methods, have failed to engage Ugandan students in ways that create meaningful, useful, and shared outcomes from their learning (Kasozi, 2003; Mamdani, 2001). These inadequate learning outcomes subsequently create skills gaps in many industries (Kasozi, 2003; Mamdami, 2001; McCowan, 2014; UWEZO, 2015). Nganga (2014) described at least half of the graduates produced by East African universities as poorly prepared for the workforce. In addition, a study undertaken by IUCEA (2014) confirmed employers' concerns that most graduates lack adequate preparation for the twenty-first century job market. This issue has undergone further confirmation by various reports, such as UWEZO (2015), which indicates that university graduates from East African universities lack the soft skills required by employers, hence enhancing their difficulty in the job market. This dire situation calls for a greater examination into the pedagogical methods employed by SSA PSE instructors, which this study purports to achieve.

Due to their position as educators of future teachers at all levels of schooling, PSE instructors have the widest scope of influence among all educators, as they transmit their pedagogical beliefs to student teachers, who subsequently pass the same material, processes, and values to their own students in primary, secondary, or tertiary education. In fact, Otaala, Maani, and Bakaira (2013) found that most teachers or instructors attribute their pedagogical approaches to their education and to the importance of standardized national exams, resulting in the perpetuation of teacher-centered methods. Most of the teacher education programs in SSA remain inadequate, lacking accreditation and government regulation in both pre-service and in-service training (Marphatia, Legault, Edge, & Archer, 2010). In addition, many teacher education programs in SSA still utilize teacher-centered learning approaches, which emphasize the use of specific technical skills to deliver curricular material rather than strategies for teaching students to engage in critical thinking (Otaala et al., 2013; Vavrus et al., 2011). In addition, teacher education programs contain significant gaps, including lack of proper training for teacher educators, minimal opportunities for reflective practice, and restricted focus on linguistic development (Jaffer, Ng'ambi, & Czerniewicz, 2007; Vavrus et al., 2011). Otaala et al. (2013) highlighted that pre-service educators adopt the teacher-centered pedagogical model that they learned throughout their own schooling, including their teacher education program. As a result,

teachers in SSA countries, on average, possess a level of knowledge equivalent to that of a twelve-year old (Watkins, 2013). In addition, limited resources and infrastructural issues lower the quality of teacher education (Alidou et al., 2006; World Bank, 2011). In sum, these issues harm the development of future teachers, which subsequently perpetuates the delivery of substandard education to future generations of students at all levels of education.

Literature indicates that the majority of SSA countries inherited their education systems from European colonial governments and missionaries (Kasozi, 2003; Mazrui, 1975). Consequently, most PSE institutions followed the philosophy and pedagogy of their founders (Muwagga, 2005). The aim of colonial PSE institutions pivoted on the need to train and reproduce a class of obedient civil servants built on the European model of civilization (Mamdani, 1976), which explains the use of teacher-centered pedagogies to generate compliant citizens within a structured society. A second reason concerns the fact that these schools indoctrinated African students with European language, culture, and religion while alienating these students from their own roots (NCHE Report, 2018; Nsereko-Munakukaama, 1997). Finally, older education systems and pedagogies result from the lack of funding provided for education in SSA, which limits the options for teachers and instructors. Consequently, the education systems in SSA still lag behind most other schooling systems on measures of enrollment, educational achievement, gender equality, and basic literacy and numeracy (Bloom, Canning, & Chan, 2006; UNESCO, 2012; United Nations, 2011; United Nations University, 2008; Watkins, 2013). This lack of funding results in many deficits to all levels of education, including resource limitations, infrastructural challenges, crowded lecture halls, and high student-teacher ratios (Bunoti, 2010; Kandiero & Jagero, 2014; NCHE Report, 2018; Traxler & Dearden, 2005; United Nations University, 2008). Thus, the lack of human, capital, material, and technological resources impedes the ability to deliver student-centered learning pedagogies in Ugandan universities, resulting in the perpetuation of teacher-centered pedagogies.

**Research Study Context**

Among all SSA countries, Uganda represents one of the most promising targets for educational improvement. The Inter-University Council for East Africa (IUCEA), which regulates higher education in the East African Community's five countries, Uganda, Kenya, Tanzania, Burundi, and Rwanda, found that Uganda has the highest proportion of graduates (63%) that lack job market skills (IUCEA, 2014). Like many other SSA countries, Uganda acquired its current education system from the British colonial model. Anglican and Catholic missionaries established the first Ugandan schools in 1877 and 1879 respectively. Subsequently, Roman Catholic missionaries established the first post-secondary institution, Katigondo National Seminary, in 1911. The colonial government founded the first university, Makerere University, in 1922; however, the first private universities were not established until 1992. As of 2014, Uganda possessed six public and 31 private universities, which totaled 37 fully-registered universities. In 2014, Uganda's university subsector registered a growth of 8.8% and comprised 18% of Uganda's PSE (NCHE Report, 2018). These numbers demonstrate that although education, especially PSE, underwent late development in Uganda, these recent figures indicate strong growth levels, thus justifying Uganda as the ideal location for investigating PSE pedagogical methods. Furthermore, Uganda stands to reap the greatest benefits for improved pedagogical approaches due to its status as an education hub for the East African Community. According to the Uganda Government's *White Paper on Education for Sustainable National*

*Development* (1992), Uganda's PSE serves as the pivotal point for the country to achieve all social, economic, and political goals.

Within the prime study location of Uganda, Kampala's Makerere University represents one of the oldest and most respected universities in the entire continent. Makerere University comprises the largest PSE institution in East Africa, commanding an enormous community of instructors and students. For many years, Makerere has represented a destination for many students and scholars from SSA and the rest of Africa (Makerere University, 2016). Makerere University was chosen for the site of the study because of its rich history, vast influence, and potential ability to typify the learning processes and pedagogical methods of most SSA PSE institutions. Since Makerere University comprises the largest university in Uganda, this school not only serves students from Uganda but also those from most SSA countries (Makerere University, 2016); accordingly, this location potentially provides diverse perspectives from the participants, thus enabling a broad array of information about pedagogical methods. In addition, the perception of Makerere as an elitist university makes it an ideal institution to study due to the traditional association of elite universities with teacher-centered methods typical of most SSA universities (European Commission, 2013).

In an effort to obtain greater insight into post-secondary pedagogical practices in SSA, this study examined student teachers' perceptions about the pedagogical methods they have observed and learned during their teacher training program. Specifically, this study interviewed students about three main issues: (1) the importance of the syllabus and examination; (2) the aim of university education; and (3) teaching activities. These three aspects overlap with Wright's (2011) five dimensions that differentiate teacher-centered learning from student-centered learning. The importance of the syllabus and examination corresponds to course content and assessment, while the aim of university education aligns with responsibility for learning and teacher/student roles. Finally, the teaching activities correspond to the power balance and course content function. The aim of this study purports to ascertain the realistic viewpoints of student teachers concerning the uses of student-centered and teacher-centered pedagogical methods within Makerere University. Specifically, the participants provided information about their experiences and perceptions that they derived from their own classes as students rather than as student teachers. The results of this investigation have several implications for the education field with SSA, including the potential restructuring of education programs to incorporate more student-centered teaching methods.

The remainder of this paper is divided into several sections. First, the method section outlines the methodology of the study along with information about the context, location, sampling method, participant selection, data analysis, data collection, and ethical considerations. Subsequently, the results of the study detail the themes that emerge in each portion of the interview to correspond to the three study questions. Following the results, a discussion relates the study findings to the literature and suggests implications, limitations, and future studies.

## Method

This mixed methods study utilized a novel, two-part methodology: the first part provided semi-structured questionnaires to third-year Bachelor of Education (BEd) students at Makerere University's College of Education, while the second part used purposeful selection to choose eight students from the questionnaire group to participate in focus group discussions. Tariq and

Woodman (2013) define mixed methods research as focused on "collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies." This methodology combines aspects of numerical and informational research with the aim of achieving both breadth and depth in a study (Schoonenboom & Johnson, 2017). Mixed methods research allows researchers to "compensate for the weaknesses of any one individual method by combining them with the strengths of others" (Neuman & Robson, 2015, p. 347), thus allowing researchers to overcome the limitations associated with a solely quantitative or qualitative research approach. In this case, the qualitative research entails the questionnaire data, while the qualitative research incorporates narratives from the focus group discussions. While the qualitative research data by means of the questionnaires seeks to obtain breadth through the larger sample size, the qualitative data achieves depth. All aspects of research occurred during the 2016-17 academic year at Uganda's Makerere University in Kampala, Uganda.

The sampling method chosen involved a convenience sample of third-year education students at Makerere University. Convenience sampling, which selects participants based on their accessibility (Martinez-Mesa, Gonzalez-Chica, Duquia, Bonamigo, & Bastos, 2016), allowed the researchers to quickly obtain voluntary participants that met the inclusion criteria of education students in their third year. In comparison to first-year and second-year students, third-year students had accumulated a larger wealth of knowledge in terms of both theoretical material and practical experience about pedagogical methods. Makerere's three-year undergraduate education program consists of a combination of courses and practicums known as school practice. The courses cover subjects such as foundations of curriculum, teaching methods, philosophy of education, contemporary issues in education, research methods, administration, and ethics, while the school practice component requires students to attend a local school and engage in practice teaching (Makerere University, n.d.). Based on their two-to-three years of receiving academic and practical information about pedagogical approaches as well as their status as student teachers, these third-year students are ideally positioned to provide information about their experiences and perceptions of course content, teaching philosophy, and activities.

**Data Collection**

In the first part of the methodology, a total of 965 students were recruited for this study, which represented the entire field of third-year education students at Makerere. All students in their third and final year of study received a letter describing the rationale of the study. Subsequently, 82 students volunteered to participate. Students that agreed to participate responded to semi-structured questionnaires that asked them various questions about the topics of course content, educational philosophy, and teaching activities. All participants were guaranteed confidentiality and were informed that they could withdraw from the study at any time. Among the 82 students that agreed to participate, a total of 54 students returned fully-completed questionnaires that provided the information for the analysis of results and discussion. The questionnaire method was used to acquire a larger sample size of students while still gaining a broad perspective on a topic that has, to date, received minimal research at Makerere.

In the second part of the study, eight students from the 54 participants that returned fully-completed questionnaires were purposively selected to take part in focus group discussions. In qualitative research, purposive sampling aims to conduct an in-depth exploration of an individual's experience rather than generalizing the experiences of select individuals to a larger

population (Lincoln & Guba, 1985). Thus, students that demonstrated the broadest array of diverse perspectives on the research questions underwent selection for the focus groups. Once the eight individuals were chosen, the focus group discussions were conducted with the use of a facilitator to mediate the discussion. The facilitator, a research assistant, used a guide to generate responses from the participants. The focus groups aimed to gain an in-depth understanding of the personal experiences, beliefs, perceptions, and attitudes about the purpose of university education. In this arrangement, which resembled a jigsaw configuration, different groups of students discussed all of the questions in a single meeting. Subsequently, the entire group reformed to meet three times, once to discuss each question. The focus group discussions were tape recorded in their entirety, while a note taker recorded and highlighted the important points emerging from the discussion. From this perspective, the focus groups supplemented the raw data from the questionnaires by further exploring the issues presented in the survey. This second step mitigated any potential misunderstandings or biases generated from administering the questionnaires while simultaneously gaining a deeper understanding of student teachers' perceptions of pedagogical methods in SSA university education. In addition, multiple methods of data collection, analyses, or theories, especially those that tie together the qualitative and quantitative branches, serve as a way to ensure the validity of the data, a process known as triangulation (Gall, Borg, & Gall, 1996; Neuman & Robson, 2015; Sandelowski, 2000).

**Data Analysis**

The analysis of data incorporated both the quantitative data obtained from the questionnaire responses and the qualitative data obtained from the focus group discussions. The quantitative data obtained through the 54 questionnaire responses was organized into tabular format in order to facilitate the interpretation of results. Subsequently, all data was displayed in tables, with one table corresponding to each of the three sections: course content, educational philosophy, and teaching activities. For the first two parts of the survey, course content and educational philosophy, the questionnaires used a three-point Likert scale to provide respondents with multiple options for assessing their opinions about the importance of structured course content, such as syllabuses and examinations, versus unstructured course content that focuses on skill development rather than merely informational content. In the final section, which related to the participants' choice of teaching activities, a five-point Likert scale measured the extent to which respondents utilized various teaching strategies that corresponded to either teacher-centered or student-centered methods of learning. Once all of the questionnaires were received, the numerical data underwent conversion to percentages to provide a clear overall picture about students' perceptions of course content, educational philosophy, and teaching activities. All tables, with the corresponding percentages, are shown in tabular form in the results section.

The next part of the data analysis involved the use of qualitative material to analyze the focus group discussions. Marshall and Rossman (1999) defined qualitative analysis in terms of organizing and attributing meaning to the data. In this study, data analysis involved the interpretation and analysis of the questionnaire and focus group information to ascertain common themes and patterns that related to the identified topics. Themes constitute important features that distinguish a case (Gall et al., 1996), while patterns refer to the observed variations in the phenomena that systematically relate to each other (Yin, 1993). The data obtained from the session recordings underwent transcription. Following the transcription of data, the investigators read and re-read the data, along with the notes highlighted by the note taker, until they began to

notice similarities and contrasts among the information. Once patterns emerged from the data, the researchers established commonalities and differences that corresponded to identifiable themes. The quotations that appear in the results section were chosen for their degree of consistency or inconsistency with the data as well as the frequency with which such comments occurred during the focus group discussions. From this perspective, the quotations provided a rich source of material that represented the complexity of contrasting information that emerged from the study. This diversity of material displayed in the study results reflects the aim of purposive sampling (Lincoln & Guba, 1985).

Specifically, the process of qualitative data analysis followed the three-step process outlined by Miles and Huberman (1994): (a) data reduction, (b) data display, and (c) conclusion drawing and verification. In the first step, the researcher selects, simplifies, and extracts themes and patterns from the questionnaires and focus group discussion notes. After multiple readings of the transcripts, the identification of themes and patterns are coded, or provided with a category that facilitates subsequent cross-case analysis (Creswell, 2007). Following the coding of information into themes and patterns, the second step, data display, organizes the information into matrices or networks, which involve charts or tables to facilitate further analysis and conclusions (Miles & Huberman, 1994). The final step, conclusion drawing and verification, involves first drawing preliminary conclusions and subsequently verifying the conclusions through reexamination and triangulation (Stake, 1995), which the inclusion of both qualitative and quantitative data also provides in this study. Through this method, the information that constitutes the results in the form of extracted quotations, displayed and discussed in the following section, was generated. Driscoll, Appiah-Yeboah, Salib, and Rupert (2007) state that in cases where the same participants supply the data for both the quantitative and qualitative research, the results can undergo comparison more easily. Following the results, the discussion section compares both sets of data and relates the data to relevant research in the field.

## Results

The study results are divided into the three parts that correspond to each of the three main topics: (a) course content; (b) educational philosophy; and (c) teaching activities. Each section reports on the quantitative and qualitative data before discussing the potential interpretation of the findings.

### Course Content

In the first category, course content, student teachers were asked about the relative importance of three aspects about the course content: course completion, examinations, and student potential. As shown in the table below, 46% of the students rated the completion of the course as very important, while 41% ranked the importance of course completion as medium and only 13% of students rated course completion as having a low degree of importance. The second category, passing examinations, exhibits a similar pattern to that of course content. Among all respondents, the majority (56%) of students perceived that passing examination merits a very high importance, while 37% of students rank the passing of examinations as medium importance and a mere 7% attributed a low degree of importance to passing exams. Finally, the third category, potential skill development, demonstrated an inverse pattern to that of course completion and examinations. While the majority (54%) of participants ranked skill development as having a low importance and 24% of the students rated skill development as occupying

medium importance, a mere 22% of respondents considered skill development as having a very high degree of importance. **Table 1** provides the raw data concerning student teachers' perceptions of course completion, examinations, and skill development.

**Table 1**
***Course Content***

| Category | High Importance | Medium Importance | Low Importance |
|---|---|---|---|
| Completion of Course | 25 (46%) | 22 (41%) | 7 (13%) |
| Passing Exams | 30 (56%) | 20 (37%) | 4 (7%) |
| Potential Skill Development | 12 (22%) | 13 (24%) | 29 (54%) |

During the focus group discussions, the students expressed their viewpoints about the relative importance that instructors place on different aspects of the course content. As the following excerpts show, the majority of students believe that instructors prioritize the completion of the course content over the development of student skills.

> *Most lecturers aim at syllabus completion and a university student aims at finishing their studies to go and work elsewhere.*
>
> *Every lecturer works towards course completion and it is a must so that we can have broader knowledge. But in the end, we only acquire theoretical knowledge.*
>
> *Little time is given to students' learning. Instead, completing the syllabus is the main thing to prepare us for examinations. In the end, learning changes nothing about the situation.*
>
> *Most teachers used to teach and the state of teaching showed that most of them were aiming at finishing the course unit – theoretical knowledge - rather than any other practical benefit. This is especially true with the sciences.*
>
> *Our learning focuses on the coverage of broad and theoretical knowledge. We are given so many courses, some of which are irrelevant. We are not going to apply it anywhere.*
>
> *Teachers use the lecture method to cover a lot of content and they are specialists in transmitting factual details covered on course outlines. So, they give handouts, some of which have not been updated since 1993.*
>
> *True the syllabus must be completed…. But what is taught does not, at any moment, help me to adapt to the changing situation; I am taught different things in a different environment, so I cannot apply anything anywhere.*

In addition to the prioritization of course content over skill development, students emphasized the importance that instructors placed on preparing students for the year-end standardized examinations. As the following responses indicate, instructors clearly train students to pass exams rather than focus on any type of skill development.

*It is because evaluation and assessment is examination oriented. Everyone is aiming at passing the exams at whatever cost.*

*Most teachers simply peruse through the concepts so that they can finish on time. So, the teachers always force students to read hard in order to pass exams.*

*All teachers and student trainees want to have positive result slips even if they didn't understand what was taught.*

*We still think and believe in pumping the learners with a lot of theoretical knowledge as we prepare them for examinations, since school efficiency is determined by the percentage of students that are passing examinations.*

*This is mostly manifested when some of the lecturers fix lectures even at the last minute. It seems their aim is to complete the syllabus before exams are done.*

In response to discussions about the teaching of practical skills, the majority of responses indicate the lack of meaningful learning that results due to the pressure that teachers place on students to memorize syllabus material and cram for examinations.

*Since year one, we have never engaged in practical work. We are constantly bombarded with handouts so that we can just cram and pass exams.*

*Even the set exams show that what they are aiming at is how best we can pass exams. The exams are not provoking us to think but to reproduce what we have learnt.*

*The content that is taught is not fully memorized by the learners but stored for only three months. At the end of the exams, all is lost until the end of the three years and the individual cannot even talk about what was taught in first year.*

Overall, the student teachers indicated, through both quantitative survey results and qualitative focus group data that course completion based on the syllabus requirements and examination results ranked as much more important than the development of skills. Some of the responses hinted at the fact that the course outline and syllabus information, along with the instructor handouts, were both standardized across the classes and outdated. In addition, students indicated the pervasive desire of instructors to focus on theoretical information that students find useless rather than practical abilities that students can transfer to any field or job. The predominance of breadth over depth of information ensured that students received a plethora of isolated, subject-dependent facts in an artificial environment that they failed to replicate in the real world. Instructors trained students to memorize and cram rather than to apply the knowledge in a realistic context or to learn the soft skills, such as problem-solving, critical thinking, collaboration, and innovation (Sawyer, 2008). In terms of assessments, students received summative rather than formative assessments, where instructors prioritized high grades on year-end tests over actual knowledge retention and skill development. The use of summative without formative assessment corresponds to teacher-centered learning (Stull et al., 2011; Wright, 2011). The desire to complete the mandated course syllabus and achieve successful grades on a standardized examination at the expense of skill development reflects a teacher-centered orientation of education and traditional pedagogical approaches.

**Educational Philosophy**

The second category of results provided information about the educational philosophies of student teachers. In particular, students expressed their extent of agreement with two contrasting aims of education: preparing compliant citizens and preparing independent and self-reliant individuals. For the category of preparing compliant citizens, 43% and 26% of participants completely agreed and somewhat agreed respectively, while only 31% of students disagreed that the aim of education involved preparing compliant citizens. For the other category, preparing independent and self-reliant individuals, only 9% and 13% of respondents expressed complete agreement or agreement with this educational aim, while a whopping 78% of students disagreed that education should aim to create independent citizens. **Table 2** provides the precise statistics concerning students' beliefs about the aim of education.

**Table 2**
***Educational Philosophies***

| Category | Completely Agree | Somewhat Agree | Disagree |
|---|---|---|---|
| Preparing Compliant Citizens | 23 (43%) | 14 (26%) | 17 (31%) |
| Preparing Independent and Self-Reliant Individuals | 5 (9%) | 7 (13%) | 42 (78%) |

As in the case of course content, the focus group discussions supported the quantitative research on the educational philosophies that student teachers have learned from their instructors. As many excerpts show, participants believed that the aim of education involves preparing students to function as compliant citizens within society.

> *Most lecturers want us to be under them to the extent that if you fail to comply, a retake awaits you even if you didn't deserve it.*
>
> *Within the school setting in Uganda, everyone is brought up in an orderly way or pushed out after failing to comply.*
>
> *In practice, we have a standard to follow and once you are out of it, you are considered to have gone wrong.*
>
> *The way of doing things is systematic, so that students have to fit in. Through professional ethics, which is taught in first year, we were taught how to be compliant, obedient, and efficient in schools.*
>
> *Courses such as professional ethics, educational administration, and curriculum studies aim to create professionals who are orderly, compliant, obedient, efficient, and systematic. Yet, other courses, like economics of education and philosophy of education, aim at products that are innovative, creative, flexible, and democratic.*
>
> *We are only taught to comply, where rules are passed without students' consent or agreement.*

While the majority (69%) of students indicated that educational philosophies prepare students for compliance within a structured society, a few responses suggested that teaching aims increasingly emphasize the importance of empowering students to develop skills that will enable them to participate in the world of work.

> *Some lecturers create room for critical thinking through their methods of teaching, like research and group work.*
>
> *Teacher trainees are given a lot of research through course work, which enables teachers to open their minds.*
>
> *Professional ethics enables us to be efficient at work and adaptive to the different cultural settings of different fields in which we work as well as enabling us to be open-minded and innovative through learning the various teaching methods.*
>
> *We engage in diverse ways of learning, such as group work as well as doing reports and presentations. All of these prepare us to invent and innovate in the workplace.*

Considering both the qualitative and quantitative data, the results overwhelmingly indicate that students perceive the main objective of education as preparing compliant citizens rather than fostering students to become independent and self-reliant individuals. The excerpts emphasize the necessity of a predetermined structure or order not only in society but also in the university. The instructors, along with many of the courses, seem to influence students to fit into a homogenous mold rather than nurturing their uniqueness. Answers also indicated that students felt forced to comply with the inherent bureaucratic structure, which provided the instructors with power over the students in a type of vertical hierarchy. Rules, regulations, procedures, and protocols failed to consider student voice or choice. A few of the responses even indicated that students perceived a sense of coercion from their instructors, who expected obedience with the threat of examination or course failure looming as a potential consequence for the failure to comply. These results reinforce the relationship between teacher-centered education and oppression articulated in the work of Freire (2018). On the contrary, a smaller number of quantitative data and focus group responses indicated that some aspects of education, including instructor teaching methods and course materials, provided students with some measure of freedom. In particular, a few student responses attested to active learning methods that engage and empower students, including research, group work, reports, and presentations. The participants indicated that such teaching methods develop important work-related soft skills, such as problem-solving, critical thinking, collaboration, research, and innovation (Sawyer, 2008). Overall, however, the dominant paradigm at Makerere still emphasizes teacher-centered methods that involve lecturing, memorization, examinations, teacher power, and student compliance.

**Teaching Activities**

The final category, teaching activities, collected information about students' perceptions of common teaching activities used by their professors. Overall, the questionnaire responses indicate that the majority of students perceive that their instructors use mainly teacher-centered rather than student-centered activities. The first three activities shown in Table 3, lecture, handouts/slides/syllabus content, and teacher-directed reading/viewing, represent teacher-

centered activities. In all three activities, most students reported that these activities were sometimes, often, or always used, with far fewer responses indicating that such activities were never or rarely used. Specifically, the following percentages of students corresponded to each level of frequency for the lecture: never used, 4%; rarely used, 4%; sometimes used, 24%; often used, 40%; and always used, 28%. The data for handouts, slides, or syllabus content showed a similar pattern: never used, 0%; rarely used, 4%; sometimes used, 9%; often used, 50%; and always used, 37%. Teacher-directed reading or viewing elicited similar results: never used, 0%; rarely used, 9%; sometimes used, 28%; often used, 41%; always used, 9%; and no response, 13%. These statistics demonstrate that teacher-centered activities are sometimes, often, and always used from the perception of most participants.

The next seven activities resemble student-directed learning tasks: student-directed reading/viewing, real-life activities/assignments, practical applications, community involvement, collaborative group work, student-directed research assignment or project, and interactive presentation or debate. The general trend for student-centered activities show that the majority of responses are concentrated among the frequencies of rarely used and sometimes used, thus showing that student-centered activities, occur, on the whole, less frequently than teacher-centered learning tasks, whose frequency occurred mainly in the sometimes, often, and always used categories. For student-directed reading or viewing, the following percentages of students corresponded to each level of frequency: never used, 0%; rarely used, 27%; sometimes used, 50%; often used, 10%; always used, 7%; and no response, 6%. The task of real-life activities/ assignments revealed a similar trend: never used, 7%; rarely used, 17%; sometimes used, 52%; often used, 17%; and always used, 7%. Students' perceptions of tasks involving practical applications were less frequent in comparison to the previous two activities, as the respondents reported the following frequencies: never used, 0%; rarely used, 43%; sometimes used, 20%; often used, 20%; always used, 7%; and no response, 10%. Tasks based on community involvement where students are assigned to real-world problems in the community occur even less frequently in the following proportions: never used, 13%; rarely used, 47%; sometimes used, 30%; often used, 10%; and always used, 0%.

The next three student-centered activities, collaborative group work, student-directed research assignment or project, and interactive presentation or class debate, all demonstrate the highest frequency among the activities designated as student-centered, with the bulk of the responses concentrated in the sometimes, often, and always used categories. However, these activities still occurred slightly less frequently than the three teacher-centered tasks. Students' perceptions of tasks involving collaborative group work broke down into the following percentages: never used, 0%; rarely used, 3%; sometimes used, 40%; often used, 30%; always used, 23%; and no response, 4%. A similar pattern occurred for student-directed research assignments or projects: never used, 0%; rarely used, 3%; sometimes used, 53%; often used, 23%; always used, 13%; and no response, 8%. Finally, the interactive presentation or class debate displayed the highest amount of usage among all seven student-centered activities, with numbers similar to the three teacher-centered methods. Students reported the following frequencies based on their perception of interactive presentations or class debates: never used, 0%; rarely used, 0%; sometimes used, 40%; often used, 37%; and always used, 23%. **Table 3** provides an overview of the way in which students perceive their instructors' use of teaching activities.

**Table 3**
***Teaching Activities***

| Teaching Activity | Never Used | Rarely Used | Sometimes Used | Often Used | Always Used | No Response |
|---|---|---|---|---|---|---|
| Lecture | 2 (4%) | 2 (4%) | 13 (24%) | 22 (40%) | 15 (28%) | 0 (0%) |
| Handout/Slides/Syllabus Content from Teacher | 0 (0%) | 2 (4%) | 5 (9%) | 27 (50%) | 20 (37%) | 0 (0%) |
| Teacher-Directed Reading/Viewing | 0 (0%) | 5 (9%) | 15 (28%) | 22 (41%) | 5 (9%) | 7 (13%) |
| Student-Directed Reading/Viewing | 0 (0%) | 15 (27%) | 27 (50%) | 5 (10%) | 4 (7%) | 3 (6%) |
| Real-life Activities/ Assignments | 4 (7%) | 9 (17%) | 28 (52%) | 9 (17%) | 4 (7%) | 0 (0%) |
| Practical Application (Learning by Doing) | 0 (0%) | 23 (43%) | 11 (20%) | 11 (20%) | 4 (7%) | 5 (10%) |
| Community Involvement (Activities that Solve Community Problems) | 7 (13%) | 26 (47%) | 16 (30%) | 5 (10%) | 0 (0%) | 0 (0%) |
| Collaborative Group Work | 0 (0%) | 2 (3%) | 22 (40%) | 16 (30%) | 12 (23%) | 2 (4%) |
| Student-Directed Research Assignment or Project | 0 (0%) | 2 (3%) | 29 (53%) | 12 (23%) | 7 (13%) | 4 (8%) |
| Interactive Presentation or Class Debate | 0 (0%) | 0 (0%) | 22 (40%) | 20 (37%) | 12 (23%) | 0 (0%) |

The responses from the focus group discussion indicate that students have observed their instructors using a wide range of activities that fall along the spectrum ranging from teacher-centered to student-centered. The comments of many students indicated their beliefs that instructors use teacher-centered methods that emphasize the direct transmission of knowledge from instructor to student through organized and systematic methods, such as lecturing. In particular, several of the respondents related the dictation of information to the objective of memorizing data garnered from lectures and handouts in order to pass examinations.

> *Talk and chalk is the commonest method in my course. Lecturers follow the course outline and give some handouts to teach. The measure that effective teaching occurred is the passing of semester examinations.*
>
> *Some lecturers prepare handouts at the beginning of a semester. The role of the students is mastering the different parts of the handout. In one way, this eases the lecturer's work as they no longer dictate notes. And for students, even if you miss a lecture, you are safe since you already have the notes.*
>
> *Our teachers are always engaged in lecturing. Here, one just lectures and goes away. It appears to be stress-free as it puts less obligation on the lecturer.*

> *Academic achievement is measured on how best learners are able to give back what they were taught. It is about satisfying the examiner.*
>
> *One of the key activities is undertaking tests and examinations. My lecturers devote a lot of time to prepare us for end-of-semester examinations*

Despite the overwhelming consensus that instructors use lectures and handouts as their main modes of teaching, some of the respondents indicated that instructors use interactive or student-centered methods such as collaborative group work, student-directed assignments, presentations, and projects.

> *Our lecturers usually lecture to us only in the first two or three weeks of the semester. After giving the general overview of the course, we are put in groups of ten students and then given different assignments to research. Each group is given a specific time to present while the rest of the students listen. Later, questions can be asked from the audience before the lecturer gives feedback.*
>
> *It is only a few lecturers that still lecture in our course units. We are given projects to do for the whole semester and we are encouraged to share every step with our teachers.*
>
> *Lecturers that use the teacher-centered model often have low attendance as it seems to bore students.*
>
> *We are given coursework and group work that makes students creative and innovative.*
>
> *Common activities include coursework to do research, class discussions, and in-class presentations from the projects assigned.*

In sum, the qualitative and quantitative data suggests that although the majority of learning still takes place via teacher-centered methods, some student-centered methods are implemented at Makerere. The dominant teacher-centered activities seem to revolve around lecturing, or "talk and chalk" or handouts. Student responses at the focus group discussions emphasize the importance of memorization, the stress on passing examinations, and the ease of teacher-centered methods for instructors. In contrast, some of the students mentioned that lecturing rarely occurred in their courses and instead, instructors used methods identified as student-centered. Specifically, they mentioned collaborative group work, student-directed research assignments or projects, and interactive presentations or debates. These three oft-mentioned methods coincide with the quantitative data showing that these methods generate the most frequent use among all student-directed learning activities. Amongst the students that mentioned student-centered learning, a few of these participants mentioned that lecturing still occurs albeit infrequently. One interesting observation stated that instructors using teacher-centered methods suffer from low attendance in their class, which suggests that students prefer student-centered methods. Future studies can investigate the preferences or learning outcomes of students by comparing teacher-centered and student-centered learning methods.

## Discussion

While in a few cases, students report that their instructors make attempts to implement student-centered learning, the vast majority of instructors still use teacher-centered pedagogical

modes. The first part of the study, course content, measured course completion, examinations, and potential skill development. As shown by the results of surveys and focus group discussions, students reported that instructors prioritized the completion of course content as specified on the course outline over the development of soft skills, such as problem-solving, collaboration, creativity, and communication (Sawyer, 2008). Based on Wright's second dimension of content function, these responses pointed much more heavily to the perpetuation of teacher-centered learning rather than the introduction of student-centered learning. According to Wright (2011), "the need to 'cover' the content of the course has led…to memorization rather than conceptualization, using a 'binge and purge' approach to examinations" (p. 93). This mentality, which Wright associates with a teacher-centered approach to PSE, impedes the development of soft skills that correspond to a student-centered learning paradigm. Since the majority of students similarly indicated the relatively low importance of skill development, these responses not only align with the teacher-centered tendency to complete and subsequently memorize all of the course content, but also clearly mark the instructional approaches at Makerere as falling under the teacher-centered end of the pedagogical spectrum based on Wright's (2011) dimension of content function. Furthermore, Wright's fifth dimension, the purpose and processes of evaluation, corresponds to the role of assessment. This dimension, in addition to the "'binge and purge' approach to examinations" discussed above, maintains that teacher-centered learning conceives evaluation solely as a means of determining grades, while student-centered learning uses assessment as a means of promoting rather than merely measuring learning (Wright, 2011). The results of the study show that students prioritize the passing of examinations over the importance of potential skill development, thus conforming to Wright's model of teacher-centered learning according to the dimension of assessment. Therefore, the topic of course content clearly indicates that students perceive Makerere instructors as adhering to a teacher-centered rather than a student-centered model of instruction.

The second main topic of interest, educational philosophy, provided information about the extent to which students' perceived education as either preparing compliant citizens or preparing independent and self-reliant individuals. The first educational aim, the preparation of compliant citizens, aligned with the teacher-centered paradigm, while the second objective, the preparation of independent and self-reliant individuals, corresponded to the student-centered paradigm. The vast majority of results from the qualitative and quantitative data indicate that students view the main goal of education as preparing compliant citizens. Although a few responses indicated that occasional teaching moments foster the development of student independence, the majority of students believed that instructors aimed to mold them into a pre-existing social structure rather than nurturing their unique talents. The assessment of educational philosophy at Makerere University corresponded to two of Wright's dimensions: role of the teacher and responsibility for learning. Under a teacher-centered paradigm, instructors assume a dominant role in education, which situates the students as "empty vessels to be filled with knowledge," while the student-centered approaches seek to involve the student in decisions and activities (Wright, 2011, p. 93). The metaphor of the empty vessel, referred to as the "banking system" by Freire (2008), where educators make "deposits" of information in students, adheres to the preparation of students as compliant citizens, "who rely on the teacher to make all the decisions" (Wright, 2011, p. 94). Students' survey responses, in addition to their qualitative responses from the focus group discussions, indicate their role as subordinate and compliant students under the direction and authority of the instructors. Hence, based on Wright's dimension of the teacher's role, the students at Makerere University clearly perceive their compliance in a

teacher-centered model of education that seeks to reproduce such subservience in society. Another of Wright's dimensions, the responsibility for learning, envisions teachers assuming responsibility under a teacher-centered paradigm and students taking control of their own learning under a student-centered paradigm (Wright, 2011). The results of the study demonstrated students' perceptions that instructors clearly took control over all aspects of student learning. Although a few students indicated that teachers provided "some room" for student independence, most of the data aligned with Wright's conception of teacher-centered learning, where instructors set clear rules and enforced students to follow such guidelines. Overall, students viewed Makerere's educational philosophy as adhering to a teacher-centered rather than a student-centered paradigm based on Wright's dimensions of the role of the teacher and the responsibility for learning.

Finally, this study collected and analyzed data pertaining to the type of learning activities in which instructors engaged students. The results demonstrated that the majority of students believed that learning occurred through teacher-centered rather than student-centered methods. Although a small number of qualitative and quantitative responses suggest that some student-centered learning activities take place at Makerere, most students seem to believe that teacher-centered learning represents the dominant paradigm at the university. The type of learning activities corresponds to two of Wright's five dimensions: power balance and course content. In teacher-centered approaches, "decisions about the course are made by the instructor" (Wright, 2011, p. 92), which indicates that the balance of power clearly lies with the teacher. The instructors' heavy use of lecturing, handouts, and other teacher-directed material shows the way in which Makerere instructors assume power over their students, also reflected in their emphasis on student compliance as discussed in the previous section. Conversely, student-centered approaches provide students with more opportunities for decision-making and control (Wright, 2011). A minority of student responses indicated their perception that instructors provided them with activities that enabled them to control their own learning. These results signified that although students viewed teaching and learning activities as beginning to shift towards student-centered methods, such as collaborative group work, the vast majority of students believed that teachers still held the balance of power, thus aligning with Wright's definition of teacher-centered learning. The other dimension that applies to the topic of learning activities, course content, helps to establish the type of learning activities that students undertake. Under the teacher-centered paradigm, teachers focus on activities or delivery methods that aim to provide a comprehensive coverage of all course content, thus forcing students to "resort to memorization rather than conceptualization" (Wright, 2011, p. 93). The delivery methods that achieve this objective include instructor-led lectures and the provision of material chosen and "required by the teacher" (p. 93). The majority of students perceived that instructors emphasized these methods over other, student-centered methods, such as those that focus on the development of skills including communication, critical thinking, problem-solving, and collaboration (Sawyer, 2008; Wright, 2011). Thus, the qualitative and quantitative findings showed that although instructors have made some efforts to incorporate student-directed activities, teachers still mainly assign activities that require students to learn comprehensive content chosen by the instructor. According to the dimensions of course content and power balance, students perceive that Makerere University features a teacher-centered rather than a student-centered model of learning.

## Implications

An analysis of the study results clearly demonstrates that along all five of Wright's dimensions, Makerere education students perceive teacher-centered learning as the dominant paradigm at the university. Several implications emerge from these findings. The first and most obvious implication maintains that Makerere University remains in outdated methods of teaching and learning, which supports the majority of literature results (Nsereko-Munakukaama, 1997; Vavrus et al., 2011). Although a minority of the responses indicate that the university has begun to shift towards the incorporation of some student-centered activities, philosophies, and content, the vast majority of data strongly signifies that teacher-centered content functions, beliefs, and delivery methods still reign supreme. In contrast to the perpetuation of teacher-centered ideals, some of the education students demonstrated their awareness of the need to incorporate a greater emphasis on student-centered learning. Specifically, teacher trainees realized the necessity of recognizing individual learner differences, connecting education to society, and preparing students with adequate skills for the job market. These results support research findings that emphasize the importance of linking education to real-life to teach necessary skills and elevating the social condition of students (Freire, 2008; Sawyer, 2008). Similarly, study participants realized that traditional forms of learning, such as syllabus completion, memorization of theoretical information, compliance with the instructor, and standardized examinations ultimately impede student learning, which subsequently hinders the social mobility of impoverished populations and the development of third-world countries (Education Global Access Program, 2016; Freire, 2018). This implication reveals a glaring disconnect between the way that teacher trainees learn and the way in which they believe that they should learn and subsequently teach their future students. The understanding that students acknowledge the weaknesses of a teacher-centered system suggests that perhaps students can take a more active role in serving as a crucial educational stakeholder and advocating for the need to change the instructional processes towards a student-centered paradigm.

Along with students, other stakeholders can initiate conversation to change the way in which students receive instruction at Makerere University and other SSA PSE institutions. As the supporting literature reveals, teacher training institutions in SSA remain inadequate due to their reliance on teacher-centered pedagogies and resource limitations (Marphatia et al., 2010; Otaala et al., 2013; Vavrus et al., 2011), which this study reinforced through the solicitation of student perspectives. The results of this study will ideally stimulate new research directions that provide consistent proof of the need for a wholesale transition from teacher-centered to student-centered learning paradigms in SSA, starting with the development of government policies and standards pertaining to the knowledge, pedagogical approaches, and credentials required for teacher training. Additionally, governments and other stakeholders can make provisions for addressing gaps in infrastructures and resources (Alidou et al., 2006; World Bank, 2011) to improve the implementation of student-centered learning. Finally, curriculum developers can use these research findings to include student-centered teaching methods (Jaffer et al., 2007; Vavrus et al., 2011). In sum, these findings can alert powerful stakeholders, such as national and regional governments, policymakers, curriculum developers, educational managers, university administrators, and instructors about the lack of meaningful learning that takes place under teacher-centered approaches and thus mandate policies that prioritize the development of student-centered learning initiatives. By creating meaningful learning, these initiatives will ideally address the skills gaps in the workforce of Uganda and other SSA regions, which not only

fills crucial needs in vital industries but also provides students and graduates with job-ready skills that employers seek. Based on Freire's (2018) conception of student-centered learning as an anti-oppressive measure, its implementation and hence improvement of SSA economies will help to free Uganda and other SSA countries from the colonial shadow of their past.

**Strengths and Limitations**

The main strength of this study involved the fact that this investigation represented the first of its kind, constituting a groundbreaking foray into the examination of pedagogical methods in SSA universities. While substantial literature documents teaching approaches used by instructors in SSA post-secondary institutions (Bunoti, 2010; Kandiero & Jagero, 2014; Otaala et al., 2013; Traxler & Dearden, 2005; Vavrus et al., 2011), this body of research neglects the perspective of students, who, according to Wright (2011) represent "the center of the educational enterprise" (p. 93). To this extent, this study explored a new direction previously neglected by the wide body of research. Despite its novel perspective, the findings of this study concurred largely with the supporting literature, demonstrating that SSA post-secondary institutions continue to prioritize teacher-centered pedagogical approaches (Bunoti, 2010; Jaffer, et al., 2007; Otaala et al., 2013; Vavrus et al., 2011). The strong degree of conformation between the results of this study and the existing research ultimately strengthens the case for making changes, especially given the fact that outdated teacher-centered approaches not only harm students' employment prospects but also deprive SSA economies of needed human capital (Kasozi, 2003; Mamdani, 2001; Nganga, 2014: UWEZO, 2015) and enhance social oppression (Freire, 2018).

Another major strength of this study concerns its use of the mixed methods research approach. By utilizing both qualitative and quantitative data collection methods, the results demonstrated both breadth and depth (Schoonenboom & Johnson, 2017), overcoming the limitations associated with the use of either method in isolation (Neuman & Robson, 2015). In addition, the conformation between the results of both qualitative and quantitative results attests to the success of the mixed-methods design in this particular study. The use of a student as a research facilitator during the focus group discussions eliminated any potential power imbalance between the research team and the participants, which decreased the likelihood of the social desirability bias, "an external bias caused by [the desire] for social desirability or approval" (Althubaiti, 2016). Finally, the use of a mixed methods approach increased the sample size through the survey or questionnaire method (Neuman & Robson, 2015). In fact, the response rate on the questionnaires exceeded the recommended survey rates. Given the size of the university, with 82 third-year students, the return rate of 54 useable questionnaires represented a 66% return rate, which surpassed the average of 60% (Fincham, 2008). Consequently, the large return rate of the questionnaires mitigates against the typically small sample size associated with surveys.

Despite its strengths, this study contained a few limitations. First, the sampling methods and study location limit the transferability of findings to the general population. The use of convenience sampling, and more generally, non-probability sampling methods, lacks the ability to transfer to the general population, especially since the participants chosen demonstrate experience with a particular phenomenon that a higher proportion of the general population lacks (Martinez-Mesa et al., 2016). In addition, the study location of Makerere University limits the ability of the results to transfer to the general population. Since the study was restricted to Makerere University, an elite and reputable institution that attracts instructors and scholars from

all over SSA and even other parts of Africa (Makerere University, 2016), the findings from this institution may not apply to other post-secondary schools in the area. As an elite university, Makerere may use advanced teaching methods, such as student-centered learning, more readily than other less-known schools. The convenience sampling method, along with the reputation of Makerere, indicates that even within Makerere University, the results may not apply to the rest of the education students. In order to mitigate this limitation, future studies should investigate larger sample sizes from other SSA universities and post-secondary institutions to determine the ability of the results to transfer to other populations and other areas of SSA.

Accordingly, the last set of limitations relate to the potential for various biases, including self-report bias. Althubaiti (2016) defines self-reporting biases as biases that affect the accuracy of the information reported by the subjects. In particular, she discusses two types of self-report biases: social desirability and recall. Social desirability bias, previously mentioned, potentially influenced the results of this study, since, due to the sense of compliance with authority continually reported in the study, students may have felt pressured to provide socially appropriate or acceptable responses that supported prevailing institutions for fear of academic retribution. In fact, many students reported the need to comply with the instructor and administration in order to achieve academic success, which strongly suggests their conscious or unconscious manipulation of the information. Although the use of student researchers mitigated the power imbalance, students may have worried that the results would undergo dissemination to instructors or school administrators. The second bias, recall bias, occurs when "participants…erroneously provide responses that depend on his/her ability to recall past events" (Althubaiti, 2016). Although the study participants were asked to report on relatively recent events, thus shortening the recall period, students may have attempted to remember previous instances of pedagogical methods earlier in their education or may lack attentiveness to their teacher's instructional approaches, thus resulting in inaccurate data. Therefore, the possible presence of self-report biases may have influenced the data collection process.

**Future Work**

In order to overcome the limitations associated with this study, future work should incorporate several aspects. First, future studies should include larger sample sizes not only within Makerere University but also throughout other universities across SSA. These investigations will not only mitigate the disadvantages associated with small sample sizes but also provide a cross-case approach that compares the pedagogical paradigms in different SSA institutions. Researchers can also replicate this study within different Ugandan and SSA institutions to determine the way in which students' perceptions of pedagogical approaches differ across universities. The use of mixed methods research for this initial, groundbreaking study paves the way for researchers to take a variety of different directions in their methodologies, including the use of large-scale questionnaires and surveys, case studies, or longitudinal designs. In addition to the manipulating the sizes, locations, and study designs, future studies should aim to minimize, or ideally eliminate, the presence of self-report biases such as social desirability and recall bias. By removing students from the location of the school, away from the system and from other students, participants may feel sufficiently comfortable in other environments to truthfully report their perceptions of pedagogical approaches. The choice of a probabilistic sampling method will provide more generalizable results by randomly selecting students to report on their instructors' pedagogical methods as well as overcome limitations associated with

self-report biases (Althubaiti, 2016; Driscoll et al., 2007). Finally, future studies should branch out to further explore the implications of pedagogical methods, including student preferences, learning outcomes, and labor market connections.

## Conclusion

This study investigated the perceptions of the pedagogical methods used in SSA post-secondary institutions. Using Wright's (2011) five dimensions that differentiate teacher-centered pedagogies from student-centered approaches, this study used a mixed methods approach that investigated three topics: course content, educational philosophy, and learning activities. In alignment with current research, the study results confirmed that the vast majority of students believe that their instructors still use teacher-centered approaches. The area of course content demonstrated that instructors prioritized course completion and examination results at the expense of skill development. Moreover, the section on educational philosophy demonstrated that instructors focused on preparing compliant citizens rather than independent and self-reliant individuals. Finally, the topic of learning activities revealed that although some efforts to implement student-centered learning approaches occurred at Makerere, the vast majority of instructors still relied on teacher-centered methods such as lectures and supplementary, teacher-directed reading material. The implications of the study suggest the need to conduct further research by replicating this investigation using other contexts, methods, and approaches as well as larger sample sizes. These researches will not only overcome the limitations associated with the present study design but also confirm the study results, strengthening the conviction that educational stakeholders should engage in at least preliminary discussions concerning the need to implement student-centered methodologies in SSA institutions.

## References

Alidou, H., Boly, A., Brock-Utne, B., Diallo, Y. S., Heugh, K., & Wolff, H. E. 2006). *Optimizing learning and education in Africa: The language factor*. Proceedings from ADEA Biennial Meeting. Libreville, Gabon, March 27-31, 2006.

Althubaiti, A. (2016). Information bias in health research: Definition, pitfalls, and adjustment methods. *Journal of Multidisciplinary Healthcare, 9*, 211-217. doi:10.2147/JMDH.S104807

Barron, B., & Darling-Hammond, L. (2008). *Teaching for meaningful learning: A review of research on inquiry-based and cooperative learning*. Stanford, CA: Stanford University.

Bloom, D., Canning, D., & Chan, K. (2006). *Higher education and economic development in Africa*. Boston, MA: Harvard University.

Bray, B., & McClaskey, K. (2015). *Make learning personal: The what, who, wow, where, and why*. Thousand Oaks, CA: Corwin.

Bunoti, S. (2010). The quality of post-secondary education in developing countries needs professional support. *Center for Education Innovations: An Initiative of Results for Development Institute,* 1-10.

Campbell, R. J., & Robinson, W., Neelands, J., Hewston, R., & Mazzoli, L. (2007). Personalised learning: Ambiguities in theory and practice. *British Journal of Educational Studies 55*(2), 135-154.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.

Driscoll, D. L., Appiah-Yeboah, A., Salib, P., & Rupert, D. J. (2007). Merging qualitative and quantitative data in mixed methods research: How to and why not. *Ecological and Environmental Anthropology*, *3*(1), 18-28. Retrieved from: https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1012&context=icwdmeea

Education Global Access Program. (2016, September 13). Towards student-centered learning in the developing world. Global Campaign for Education. Retrieved from: http://campaignforeducationusa.org/blog/detail/toward-student-centered-learning-in-the-developing-world

European Commission. (2013). *Improving the quality of teaching and learning in Europe's higher education institutions.* Retrieved from: http://ec.europa.eu/dgs/education_culture/repository/education/library/reports/modernisation_en.pdf

Fincham, J. E. (2008). Response rates of responsiveness for surveys, standards, and the *Journal*. *The American Journal of Pharmaceutical Education, 72*(2), 43.

Freire, P. (2018). *Pedagogy of the oppressed* (50th Anniversary Edition). New York, NY: Bloomsbury Academic.

Froyd, J., & Simpson, N. (2008). *Student-centered learning: Addressing faculty questions about student-centered learning*. Texas A&M University. Retrieved from: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.738.1395&rep=rep1&type=pdf

Fry, H., Ketteridge, S., & Marshall, S. (2009). *A handbook for teaching and learning in Post-secondary education: Enhancing academic practice* (3rd Ed.). New York and London: Routledge.

Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research* (6th Ed.). White Plains, NY: Longman Publishers.

Government of Uganda. (1992). *White Paper on Education for Sustainable National Development*. Kampala, Uganda.

IUCEA. (2014). Report from a study establishing the status of higher education qualifications systems and their contributions to human resources development in East Africa. Kampala, Uganda: Inter-University Council for East Africa.

Jaffer, S., Ng'ambi, D., & Czerniewicz, L. (2007). The role of ICTs in higher education in South Africa: One strategy for addressing teaching and learning challenges. *International Journal of Education and Developing Using Information and Communication Technology, 3*(4), 131-142.

Kandiero, A., & Jagero, N. (2014). Leveraging emerging technologies to address specific learning challenges and derive authentic learning in mathematics for business at Africa University – Zimbabwe. *International Journal of Academic Research in Progressive Education and Development, 3*(1), 172-181.

Kanuka, H. (2010). Characteristics of effective and sustainable teaching development programs for quality teaching in higher education. *Higher Education, Management and Policy, 22*(2), 1-14.

Kasozi, A. B. K. (2003). The African universities capacity to participate in global higher education for supply and production: A case of Uganda. *Uganda Journal of Education, 4*(2), 45-63.

Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

Makerere University. (2016). Historical background. *Makerere University*. Retrieved from: https://www.mak.ac.ug/about-makerere/historical-background

Makerere University. (n.d.). College of Education and External Studies. *Courses*. Retrieved from: https://courses.mak.ac.ug/colleges/college-education-and-external-studies

Mamdani, M. (1976). *Politics and class formation in Uganda*. New York: Monthly Review Press.

Mamdani, M. (2001). Keynote speech. Proceedings from Social Sciences in the 21st Century Conference. Faculty of Social Sciences. Makerere University, Kampala, Uganda. October, 2000.

Marphatia, A. A., Legault, E., Edge, K., & Archer, D. (2010). The role of teachers in improving learning in Burundi, Malawi, Senegal, and Uganda: Great expectations little support. *The improving learning outcomes in primary schools (ILOPS) project: Research report on teacher quality*. ActionAid and Institute of Education, University of London.

Marshall, C., & Rossman, G. B. (1999). *Designing qualitative research*. (3rd Ed.). Thousand Oaks, CA: Sage.

Martinez-Mesa, J., Gonzalez-Chica, D. A., Duquia, R. P., Bonamigo, R. R., & Bastos, J. L. (2016). Sampling: How to select participants in my research study. *Brazilian Society of Dermatology, 91*(3), 326-330. doi:10.1590/abd1806-4841.20165254

Mazrui, A. (1975). The African University as a multinational corporation: Problems of penetration and dependency. *Harvard Educational Review, 45*(2), 191-210.

McCowan, T. (2014). *Can post-secondary education solve Africa's job crisis? Understanding graduation employability in Sub-Saharan Africa*. British Council.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: A sourcebook of new methods* (2nd Ed.). Thousand Oaks, CA: Sage.

Muwagga, M. A. (2005). *The philosophical implications of liberalization of university education in Uganda* (Unpublished Doctoral Dissertation). Makerere University, Kampala, Uganda.

NCHE Report. (2018). *The state of higher education and training in Uganda 2015/16*. Kampala, Uganda: The National Council for Higher Education.

Neuman, W. L., & Robson, K. (2015). *Basics of social research: Qualitative and quantitative approaches* (3rd Ed.). Toronto, ON: Pearson.

Nganga, G. (2014). Survey finds most East African graduates 'half-baked'. *University World News, 321*. Retrieved from: http://www.universityworldnews.com/article.php?story=20140523130246934

Nsereko-Munakukaama. (1997). *Secularization of post-independence education in Uganda and its significance for moral education in public primary and secondary schools, 1963-1985* (Doctoral Dissertation). Makerere University, Kampala, Uganda.

Otaala, J., Maani, J. S., & Bakaira, G. G. (2013). Effectiveness of university teacher education curriculum on the secondary school teacher performance in Uganda: The case of Kyambogo University. *Journal of International Cooperation in Education, 15*(3), 95-112.

Sandelowski, M. (2000). Combining qualitative and quantitative sampling, data collection, and analysis techniques in mixed-method studies. *Research in Nursing & Health, 23*, 246-255.

Sawyer, R. K. (2008). *Optimising learning: Implications of learning sciences research*. CERI: Centre for Educational Research and Innovation.

Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *Cologne Journal of Sociology and Social Psychology, 69*(2), 107-131.

Stake, R. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.

Stull, J. C., Varnum, S. J., Ducette, J., Schiller, J., & Bernacki, M. (2011). The many faces of formative assessment. *International Journal of Teaching and Learning in Higher Education*, *23*(1), 30-39.

Tariq, S., & Woodman, J. (2013). Using mixed methods in health research. *Journal of the Royal Society of Medicine Short Reports*, *4*(6). doi:10.1177/2042533313479197

Traxler, J., & Dearden, P. (2005). The potential for using SMS to support learning and organization in Sub-Saharan Africa. Proceedings from the *Development Studies Association Conferences*, Milton Keynes.

UNESCO. (2012). *Sub-Saharan Africa: 2012 EFA Report*. Proceedings from the *Global Education for All Meeting*. UNESCO Paris. November 20-13, 2012.

United Nations. (2011). Education challenges in Africa and LDCs. *Economic and Social Council High Level Segment: Special Policy Dialogue*. United Nations Department of Economic and Social Affairs. Retrieved from: http://www.un.org/en/ecosoc/julyhls/pdf11/concept_note_special_policy_dialogue_africa_and_ldcs.pdf

United Nations University. (2008). *Revitalizing higher education in Sub-Saharan Africa*. A United Nations University Project Report. Retrieved from: http://archive.unu.edu/africa/files/UNU_RevitalizingHigherEducation.pdf

UWEZO. (2015, June 18). *Are our children learning? Uganda report.* UWEZO Publications. Retrieved from: http://www.twaweza.org/go/uwezo-ea-2013-report

Vavrus, F., Thomas, M., & Bartlett, L. (2011). *Ensuring quality by attending to inquiry: Learner-centered pedagogy in Sub-Saharan Africa*. Fundamentals of Teacher Education Development. Addis Ababa, UNESCO.

Watkins, K. (2013). Narrowing Africa's education deficit. *Foresight Africa: Top Priorities for the Continent in 2013*. The Brookings Institution: Africa Growth Initiative.

World Bank. (2011). *Rwanda education country status report: Toward quality enhancement and achievement of universal nine year basic education*. Washington, DC: The International Bank for Reconstruction and Development.

Wright, G. B. (2011). Student-centered learning in higher education. *International Journal of Teaching and Learning in Postsecondary Education, 23*(1), 92-97.

Yin, R. K. (1993). *Applications of case study research*. Newbury Park, CA: Sage.