Professional Development Programmes and Academic Staff Pedagogical Practices in CHUSS and COVAB at Makerere University

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Declaration

I, John Kalule, declare that this thesis titled "*Professional Development Programmes and Academic Staff Pedagogical Practices in CHUSS and COVAB at Makerere University*" is a product of my own effort, and to the best of my knowledge, it has never been produced and submitted for any other award elsewhere.

Sign ..... Date 24th/07/2022

John Kalule

Approval

This Thesis titled "*Professional Development Programmes and Academic Staff Pedagogical Practices in CHUSS and COVAB at Makerere University*" has been produced under our supervision and is submitted for examination with our approval:

Signature.....

Prof. Anthony Mugagga Muwagga

Date: 24-03-22

Signature.....

Dr. Gyaviira Musoke Genza

Date: 24/March/2022

Dedication

I dedicate this work to my mother Eseza Nalubwama, my wife Pamela Komujuni Kalule, my children, Mischelle Kisembo Christiana, Dara Mackenzie Kalule, and Dario Mugasho Kalule.

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May God bless you all richly.

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List of Abbreviations and Acronyms

AAS	- Academic Administrative Staff
ALT	- Adult Learning Theory
AIMS	- Academic Information Management System
AS	- Administrative Staff
CAES	- College of Agriculture and Environmental Science
CHUSS	- College of Humanities and Social Sciences
CKP	- Content Pedagogical Practices
CMP	- Classroom Management Practices
COP	- Course Organization Practices
COVAB	- College of Veterinary Medicine, Animal Resources and Bio-Security
CVI	- Content Validity Index
GCHE	- Gadsden Christian Home Educators
ICT	- Information Communication Technology
KPA	- Knowledge of Pedagogical Approaches
MoES	- Ministry of Education and Sports
FGDs	- Focus Group Discussions
MUELE	- Makerere University Electronic-Learning Environment
NCHE	- National Council for Higher Education
OECD	- Organisation for Economic Co-operation and Development
PCK	- Pedagogical Content Knowledge
PDP	- Professional Development Programmes
PPs	- Pedagogical Practices
SAQs	- Self-Administered Questionnaires
SLT	- Situated Learning Theory
SOPs	- Standard Operating Procedures
SPSS	- Statistical Package for Social Scientists
UK	- United Kingdom
UNESCO	- United Nations Educational, Scientific and Cultural Organization
USA	- United States of America
USAID	- United States Aid

Abstract

The study examined the extent to which Professional Development Programmes (PDP) influence academic staff pedagogical practices in CHUSS and COVAB at Makerere University. Basing on Adult Learning and Situated Learning theories, four objectives were derived namely; to establish the influence of PDP on content knowledge practices; course organization practices; knowledge of pedagogical approaches; and classroom management practices. The study employed an embedded research design with a dominant quantitative and minor qualitative approaches. The study respondents and participants comprised of academic staff, academic administrative staff, administrative staff, and undergraduate students in CHUSS and COVAB at Makerere University (Mak). These were sampled using stratified random and purposive sampling. Data were collected using a survey questionnaire, interview guides, FGDs, observation checklists, and a document review guide. Quantitative data were analyzed using frequencies, percentages, means and standard deviations at descriptive level. The study hypotheses were analyzed using Pearson Correlation Co-efficient and Simple Linear Regression analysis technique while qualitative data were thematically analysed. Findings revealed that PDP significantly influence content knowledge; course organization; and knowledge of pedagogical approaches. On the other hand, findings revealed that, PDP insignificantly influence classroom management practices. On the basis of this evidence, it was concluded that PDP significantly influence content knowledge; course organization; and knowledge of pedagogical approaches only, but PDP do not influence academic staff classroom management practices. It was recommended that the Directorate of Human Resources at Mak should organize continuous need-based PDP laying emphasis on practices that address content focus, active learning, coherence, collective participation in a bid to improve on content knowledge, course organization and knowledge of pedagogical approaches. However, the aforementioned university administrators should not over emphasise organisation of PDP with expectation of improving classroom management practices.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

Academic staff are the greatest asset universities have in the execution of their mandates but the relentless changes may need serious development consequences (Murphy, 2014; Knight, 2014). The increasing demand for high performance gives a pressing urgency to the need for a tangible return on the university's investment in Professional Development Programmes (Kakembo & Barymak, 2017). In many African countries, academics are largely prepared for their role as researchers and discipline experts, but not as facilitators of teaching and learning (Ssempebwa, Teferra, & Bakkabulindi, 2016; Teferra, 2017). Despite growing role of professional development programmes for academic staff in universities, teaching is still perceived as an activity that any academic staff can do (Cameron & Woods, 2016; European Higher Education Area, 2018; European University Association, 2019; European Science Foundation, 2019; Inamorato et al., 2019).

World over, the quality of university teaching has come under focus in recent years, and the need to improve teaching skills and pedagogical thinking is now acknowledged to be essential (Zadravec & Kocar, 2015; Ssempebwa et al., 2016; Short, 2017; European Science Foundation, 2019). Some European countries like United Kingdom, Ireland, and Nordic countries have already embraced the use of classroom teaching for quality higher education (Simon, Murphy, Quinlan, & Roxa, 2012; European Higher Education Area, 2018). These countries have established teacher development programmes for academic staff and graduate students, and professional associations for effective teaching and learning in higher education (Simon, Murphy, Quinlan, & Roxa, 2012; European University Association, 2019). To succeed in the

highly competitive and changing environment in higher education, universities need to ensure that requisite capabilities are developed in their academic staff. Therefore, Professional Development Programmes for academic staff is necessary in order to improve on their pedagogical practices.

1.1 Historical Background to the Study

Higher education institutions engage in advancing good teaching for various reasons. First and foremost, they pay more attention to demonstrating that they are consistent providers of quality higher education, while serving a multitude of stakeholders with diverse expectations (Alhija, 2017). Second, they are mandated to respond to the increasing desire for purposeful and relevant teaching (Henard & Roseveare, 2012). Students as well as employers and policy makers want to assure that education would prepare students for rewarding employment and for professional growth over a lifespan. Lastly, universities concentrating on research only is not adequate enough to maintain the acceptable higher education standards (Alhija, 2017).

Globally many countries, including the USA, Australia, Canada, UK, Ireland, Nordic countries, The Netherlands and Belgium have already established institutional practices aimed at improving the quality of teaching and learning in higher education. However, this is not the case across all higher educational institutions in the world (Pesce, 2015; Aheisibwe & Ntunguka, 2015; Short, 2017; Kobayashi, Dolin, Soborg, & Turner, 2017; Odalen, Brommesson, Erlingsson, Schaffer & Fogelgren, 2019). According to the European University Association (2019), for the past 20 years, the Bologna Process has been promoting the enrichment of learning and teaching, with ministers committing in the 2018 Paris Communique` to promote and support institutional, national and European initiative for pedagogical training. Also the process aimed at ensuring continuous professional development of higher education lecturers and explore ways for better

recognition of high quality and innovative teaching in their career with a deep emphasis on pedagogical practices as a key aspect of teaching and learning (European University Association, 2019).

In this study, there are valuable lessons to be drawn from European University Association and USA experiences of this particular kind of professionalization of teaching, especially since the issue of making teacher training in higher education mandatory is, or has been, under discussion especially in this era where pedagogical practices are underestimated (Odalen et al., 2019). "Excellent academics are made and not born; they become excellent through investment in their teaching abilities" (European Science Foundation, 2010:10 in Short, 2017:1).

Kabayashi and Dolin (2019) showed that in UK, pedagogical practices among academic staff had been the focus of government and sector bodies since the late 1990's. Alternatively in all these historical accounts of pedagogical practices no single account was based on the Situated Learning Theory and Adult Learning Theory. Relatedly, a number of European countries such as the United Kingdom, Ireland, and Nordic countries have already recognized the importance of PDP that are geared towards improving academic staff pedagogical practices for quality higher education. The aforementioned countries have put in place professional development programmes for academics and doctoral students. Similar initiatives are taking place globally, with notable progress in the United States, Australia, Japan and Canada (ESF, 2019). Karimi (2014) observed that African countries were taking cognizance of the need for quality assurance and improvement at tertiary levels of education with key emphasis on pedagogical practices of faculty, an observation that is supported by the fact that at least most countries in Africa had national agencies for quality assurance (Association of African Universities, 2012). However,

this was not particularly on academic staff in the realm of Makerere University rendering it imperative for this study to be carried out to establish whether similar situations prevail.

African Universities are encountering a plethora of challenges which among others include academic staff who are not well tutored in university pedagogy and andragogy (Alemdjrodo, 2018). In addition, African universities suffer from a shortage of qualified academic staff and high student-teacher ratios, thus effective faculty and staff development is critical to improving institutional capacity (USAID, 2014). The implication of this was that even pedagogical practices cultivation in teaching and learning was not effective enough. Whereas, Mendonca (2014) showed pedagogical challenges among university lecturers in Mozambique universities. Lecturers were presented as lacking ownership of the curriculum and the instructional approaches used were insufficient. Thus students have highly criticized this curriculum and the instructional approaches that do not promote the aspect of competitiveness. Such a curriculum was identified as far distanced from the real life of citizens. However, pedagogical revival in Africa has shown that the conventional teaching practices are prevalent in many higher education institutions including universities. Such practices are always interpreted as teacher centered, lecture-driven, rigid and authoritarian in nature. Students are seen as a tabula rasa with no role to play during the teaching and learning process, their activities are limited to memorizing facts and reciting them to the teacher (Atinyelken, 2010). Meanwhile this analysis was based on literature reviewed and was not empirically established as the current study did.

Whereas, Shava (2015) studied professional development as a strategy for higher education student success from the University of Zimbabwe. Findings revealed that professional development teaching enhances greater academic success. This study also established that the development of pedagogical skills in university academics in Zimbabwe and entire Sub-Saharan

region cannot be addressed simply by running workshops at university level, more sophisticated, integrated models like discipline specific an authentic PDP were considered most appropriate in the current study.

It was hence relevant to ascertain how PDP influence academic staff pedagogical practices in general that is content knowledge, course organisation, knowledge of pedagogical approaches and classroom management practices in CHUSS and COVAB at Makerere University in Uganda.

Askerc and Kocar (2015) in a study about teaching and the pedagogical training of university teaching staff practice and opinions under Slovenian Higher Education legislation. Results showed that university teachers attribute significant importance to pedagogical work. However, half of the study respondents had never been involved in any kind of pedagogical courses. The other half had participated in various kinds of pedagogical courses i.e. adult education or in higher education pedagogical training. Alternatively, this participation in pedagogical training was not related with CPK, course organization, CMP, KPA. Locally, Kasule, Wesselik and Mulder (2016) investigated professional development status of teaching staff in a Ugandan public university. Using descriptive analysis methods, findings showed that university teaching staff in the university where the study was done rarely participate in professional development activities. However, the activities available involved university teacher and training, symposia, workshops professional networks all oriented on contemporary teaching and learning, research and innovation and community development activities are perceived to be important in improving teaching staff job performance.

In Uganda, academic staff pedagogical practices in public and private universities has become a serious concern thus Makerere University (Mak) was not in any way different. For instance, NCHE (2020) revealed the first challenge that Uganda's higher education sector faced was that of content knowledge. This is because education is much more than buildings and students but it is more about content and modes of delivery. Unfortunately, almost sixty years after Uganda attained its independence more of what is taught in the system has remained Eurocentric, justifying the qualification of Ugandan universities as European universities in Africa. Also, because of the aforementioned claim Uganda's higher education teaching is always blamed as training a black man in a white setting. Relatedly, there is more heavy reliance on theory-based than hands-on training leading to knowledge and skills gaps as well as low productivity among fresh graduates (Omaswa, 2014).

Furthermore, the NCHE (2020) revealed that Ugandan universities are characterized as largely teaching entities, and minimally emphasizing research which is far away from the provision of competency based education. This means that the country does not generate enough knowledge and/or innovations to drive its aspirations to middle-income status. This challenge has two negative consequences. First, Ugandan universities are producing low-quality graduates most of whom are ill-prepared for the labor market, and are incapable of generating their own employment. Secondly, most university staff are minimally productive in terms of research output, publication and innovation (NCHE, 2020). However, this failure to effectively cultivate pedagogical practices was not explained basing on PDP as was the case in this current study. Baryomuntebe (2019) studied the effects of staff development policy on the quality of pedagogy in Ugandan universities using Pearson's Correlation Coefficient Index and revealed that the staff development policy undermined the quality of academic staff pedagogy.

In Makerere University, several reports indicate deficiencies in academic staff pedagogical practices despite some of them having content knowledge in their subject areas, (Ezati & Mugimu, 2010; Omaswa Report, 2014; Rwendeire Report, 2017; Makerere University Fact Book, 2018). There was evidence of gaps in academic staff pedagogical practices at Mak such as; failure to integrate e-learning, issues to do with teachers' ethics and code of conduct in teaching, research and supervision skills, and student support (Nakabugo, 2008; Ezati et al., 2010; Ezati et al., 2014; Ssempebwa & Bakkabulindi, 2016). With the intent to become a 'Centre of academic excellence, providing world class teaching, research and service to sustainable development for Uganda, Makerere University in its strategic plan 2008/2009 – 2018/2019, committed itself to; (1) Shift from teacher-centered instruction to learner-centered pedagogy in order to produce graduates with problem solving skills and reflective ability. (2) Place more premium on research so as to focus on knowledge production as a research driven university. (3) Replace the outreach paradigm with its patronage connotation and instead embrace knowledge transfer partnership and networking in order to take cognizance of the knowledge that resides in the community, private, governmental and non-governmental organizations (Mak Strategic Plan, 2020).

Since 2006, Makerere university has been offering pedagogical training to lecturers. The duration of pedagogical training ranged between 4-5 days (Nakabugo, 2008; Ezati et al., 2010; Ezati et al., 2014). Data was gathered on the experiences of academics with pedagogical training according to out of the 15 academics who were interviewed, only four had received pedagogical training. The four lecturers voiced mixed experiences. Only two respondents were satisfied with the training and took the trouble to implement what they learnt (Ezati et al., 2014). This implied that despite the efforts to offer training to academic staff, this training was not done with a

critical reflection on the Situated Learning and Adult Learning Theories which were used to arrive at content focus, active learning, coherence, collective participation, and duration as key sub-dimensions of Professional Development Programmes.

Studies on the problem of pedagogical practices were scanty and not many particularly point at Professional Development Programmes as an influencing factor. Some of these studies arrived at included; Badri, Alnvaim, Mohaldat, Yang and Rashedi (2016) who studied perception of teacher professional development needs impacts and barriers. Findings revealed that professional development of teachers highly constructed to student's evaluation and assessment (84.5%), pedagogical competences in teaching subjects 79.9% subject behavior and classroom management 78.1%. However, the impact of PDP on course organisation and knowledge of pedagogical approaches were not ascertained as was the case in this completed study. In another study, Ningtisas and Jailani (2018) studied the effect of teacher training on pedagogical competence of mathematics teachers and revealed that training has a positive significant effect on pedagogical skills.

The establishment of Makerere College (1922-1934) as a technical college to serve students from the British East African territories of Kenya, Tanganyika, and Uganda marked the beginning of higher education in Uganda (Musisi, 2003; Jacob et al., 2009; Bisaso, 2010; Nabayego et al., 2015; Bisaso, 2017; Mugizi, 2018). Makerere College became a Centre for Higher Education in East Africa during the years (1935 – 1948). Upon the independence of Uganda, in 1963, Makerere was reconfigured into one of the three Colleges constituting the University of East Africa joining its infant sister Colleges in Dar es Salaam and Nairobi (1963 – 1970). Until 1988 when Islamic University in Uganda came on board (Ssengendo, 2012), higher education in Uganda was entirely a public venture and Makerere University as the only public university at

the time almost had monopoly over the higher education market. However, since liberalization became part of the structural adjustment programmes of the 1990s, Uganda has witnessed a rapid expansion of university education both in terms of students' enrolments and the number of public and private universities in the recent past. For instance, the country now has eleven (11) public universities and over thirty-seven (37) private universities (NCHE, 2018).

Currently, Makerere University comprises of nine colleges and one independent school. The process of forming Colleges started 10 years back and through a gradual process in 2011 the system was put in place. Colleges are structured into schools and teaching departments. College of Humanities and Social Sciences (CHUSS) consists of 5 schools, 5 Centers and one Institute while in 2007 College of Veterinary Medicine, Animal Resources and BioSecurity (COVAB) upgraded from the Faculty of Veterinary Medicine with two schools (Makerere University Fact Book, 2018). However, basing on (Omaswa, 2014; Rwendeire Report, 2017 and NCHE, 2020) academic staff in CHUSS and COVAB were identified as having inappropriate pedagogical practices. Thus this current study was carried out in the two aforementioned colleges.

1.2 Conceptual Background

In this section, the study conceptualizes the following concepts namely; Professional Development Programmes which consisted of five sub-dimensions that is to say content focus, active learning, coherence, collective participation, and duration. On the other hand, pedagogical practices as another concept was operationalised into four sub-dimensions namely; content knowledge, course organisation, knowledge of pedagogical approaches and classroom management. The definitions of these terms was done by first defining those which are the main concern of the study.

Pedagogical practices which was the main concept was defined by Ningtiyas and Jailani (2018) as the ability of teachers in managing learning that includes ability to interact or manage learning process and ability to perform assessment. The term 'Pedagogy' comes from "pedagogue," which is derived from the Greek word "paidagogus," meaning a boy's tutor. Some scholars claim that a pedagogue was not even a tutor but simply the attendant who led the child to school (Hadidi & Kirby, 2016). Kedraka and Rotidi (2017) consider university pedagogy as a multi-dimensional process that deals with specific teaching practices and approaches concerning the design, implementation and evaluation of learning processes that academics should follow within their role. It is plausible to emphasise that teaching is not an end in itself but a process of fostering high quality student learning (Nabaho, Oonyu & Aguti, 2016).

This main concept was conceptualised into four sub-dimensions which were also operationalised one by one showing how they were understood in the empirical part of the study. The first sub-dimension under pedagogical practices was content knowledge defined as knowledge that teachers possess about subject matter they are teaching (Ball, Thames & Phelps, 2008). Content knowledge can as well be defined as the specialized knowledge of teachers for creating effective teaching and learning environments for all students (Ningtiyas & Jailani, 2018). This same concept is conceptualised by Phelps, Weren, Croft and Gitomer (2014) as comprising the most useful forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations, and demonstrations in a word, the ways of representing and formulating the subject that makes it comprehensible to others. Basing on these three aforementioned definitions, content knowledge was conceptualized as course content, course objectives, ability to identify appropriate reading materials and academic staff research capabilities.

The second concept under pedagogical practices was course organization which refers to processes, strategies and techniques of planning and implementation of teaching and learning (Hudson, 2013). In this study it was conceptualized as course structure, reflecting on the course preparation, time tabling, classroom space, assessment and feedback.

The third concept under pedagogical practices was knowledge of pedagogical approaches as a way of representing and formulating the subject that makes it comprehensible for others (Shulman, 1986 in Hudson, 2013). This concept was as well defined by Roscoe (2010) as a combination of knowledge, skills and attitudes that foster development of the teachers' conceptions of teaching and learning. In this study, knowledge of pedagogical approaches covered reflecting on teaching methods, course objectives, planning of teaching methods and teaching resources/aids, learning styles and collaborative learning.

The fourth concept under pedagogical practices was classroom management defined as the actions that teachers use 'to establish and sustain an orderly environment so that students can engage in meaningful academic learning to enhance their social and moral growth (Kwok, 2021). These are practices and procedures teachers apply to keep students organized, orderly, focused, attentive on tasks and academically productive (Roscoe, 2010; Oliver, Weliby & Reschly, 2011). In this study, classroom management covered class requirements, interaction with students, setting classroom regulations, making purposeful movements in class, reinforcement, and managing time effectively.

The second part of the conceptual background is about Professional Development Programmes and its corresponding sub-dimensions. The term professional development is often used interchangeably with terms like continuing professional development, continuing professional learning, staff development and teacher development (Mundy et al., 2012). These terms are often

defined with great variability and no single definition is universally accepted (Mitchell, 2013; Mccarthy, 2016; Machingambi, 2016).

Professional Development Programmes (PDP) on the other hand are institutional activities that academic staff engage in so as to develop and expand their content knowledge, mode of delivery, course organization and classroom management practices (Desimone & Pak, 2017). In the empirical part of the study, Professional Development Programmes covered content focus, active learning, coherence, collective participation, and periodic learning (duration).

Content focus the first sub-dimension under Professional Development Programmes is defined by Desimone, Porter, Garet, Yoon & Birman, (2012) as what teachers are supposed to learn in the professional development activities. In this study content focus involved content selection and critical focus on knowledge and teaching practices. Active learning the second sub-dimension was defined as an act of teachers to fully engage in meaningful discussion, planning, and practice in PDP (Desimone & Garet, 2015). It is also referred to as the act of observing other teachers, practicing what has been learned and receiving feedback, reviewing and analyzing student work, leading and participating in discussions, applying their new knowledge to lesson plans, or participating in activities as students (Desimone & Garet, 2015). In this study, active learning meant continuous training of new staff, mentorship, observation of colleagues in the classroom while teaching and coaching. It also involves academic colleagues giving and receiving feedback on their teaching practice and its effectiveness in promoting student learning (Nabaho, Aguti & Oonyu, 2016). Collective participation is defined as an integral process that encompasses peer interaction in the professional development activity (Bishop, 2016). In the current study it was defined as consulting one another and making joint discussions in PDP. Coherence is defined as the extent to which teachers build on what they have already learned,

emphasize content and pedagogy, aligning it with what they are supposed to be teaching in educational institutions (Desimone & Garet, 2015). Coherence in the current study meant the relationship between what is taught in PDP and what lecturers teach in the classroom. Duration is defined as the total number of contact hours spent on professional development activity, including all components of activities involved following time frames (Desimone & Garet, 2015). Duration in the current study meant the frequency in the provision of PDP to academic staff.

1.3 Study Theoretical Background

This study was guided by the following theories: Situated Learning Theory and adult learning theory.

1.3.1 Situated Learning Theory

The Situated Learning Theory developed by Lave and Wenger (1991) is generally understood as the learning that occurs when the learner sets out to acquire the necessary skills, knowledge, and attitudes that would enable him/her to be part of a community of practice (Down, 2004). This community of practice could be domestic, social, or vocational. This theory assumes that learning represents the acquisition of objective knowledge. Further, it states that learning is best achieved during educational training/sessions that are separate from the settings in which learning would be applied. It views learning and knowing as processes which are integral to every day practice in work place, family and social settings.

According to Lave and Wenger (1991), this theory is premised on three core issues namely; participation, identity and practice. Participation requires one to understand, take part and subscribe to social norms, values and behaviours of the community they participate/operate. It is

what Lave and Wenger (1991) describe as legitimate peripheral participation (Besar, 2018), which:

> Provides a way to speak about relations between newcomers and old-timers, and about activities, identities, artefacts and communities of knowledge and practice. It concerns the process by which newcomers become part of the community of practice. And person's intentions to learn are engaged and the meaning of learning is configured through the process of becoming a full participant in a sociocultural practice. This social process includes, indeed it subsumes, the learning of knowledgeable skills (Besar, 2018).

In line with this tenet of participation as a concept of Situated Learning Theory, the current study had it that when academic staff actively participate and collaborate in the process of administering PDP there is a direct positive influence on PPs in general. This might be reflected in terms of acquiring relevant content, course organization skills, knowledge of pedagogical approaches and classroom management.

Whereas identity is concerned with developing new ways of knowing in practice but also with understanding who we are and what potential we have. This concept under SLT resonates well with coherence as dimension of PDP. This accounted for in the sense that academic staff should know who they are as key agents of teaching and should coherently identify themselves with various PDP organised in the university to improve on their PPs. Practice in situated learning is a social practice that provides structure and meaning of what we do. It always builds in a social, historical context and relates with the use or language, role definitions, behavioural scripts and other explicit artefacts. Practice as a concept of SLT, relates with content focus dimension of PDP since through engagement in PDP one acquires the relevant content that enables academic staff to enhance their PPs.

Lave argues that learning is situated; that is, learning is grounded in the actions of everyday situations. Likewise learning is not distanced from the world of action but exists in robust, dynamic, social surroundings of its actors, actions, and situations. Lave and Wenger refers to it as a process of "legitimate peripheral participation" (Besar, 2018).

In line with this Situated Learning Theory, effective teaching and learning in form of pedagogical practices was deemed possible through training of academic staff laying emphasis on content focus, active learning, coherence, collective participation and duration as key components of Professional Development Programmes. Once these are put into consideration academic staff pedagogical practices in form of content knowledge, course organisation, knowledge of pedagogical approaches, and classroom management would improve and the reverse is true. The theory of situated learning is often criticised for its inability to be generalised because of the particularity of the context and the uniqueness of the context's role in shaping the learning. With this weakness, it was prudent for this study to be anchored by a second theory differing from the context uniqueness of Situated Learning Theory.

1.3.2 Adult Learning Theory

Given the nature of university academic staff and their respective age levels; the study adopted Adult Learning Theory of Andragogy. This theory was developed by Malcom Shephard Knowles in 1968. This theory is based on six assumptions for instance self-concept, past learning experience, readiness to learn, orientation to learning, practical reasons to learn and driven by internal motivation (Mezirow, 1996; Merriam, 2001; Gregson & Sturko, 2007; Caruth, 2014; Reichert, 2016). The first assumption of self-concept states that adult learners have more self-concept than children thus they should directly take part in their learning. The second assumption

is that of past learning experience which postulates that adults have a vast array of experiences to draw on as they learn as opposed to children who are in the process of gaining new experiences. The third assumption is that of readiness to learn which assumes that many adults have reached a point in which they see the value of education and that they are ready to be serious and focused on learning. The fourth assumption is that of practical reasons to learn which states that adults are looking for practical, problem based approaches to learning. Hence, many adults return for continuing education for specific practical reasons such as entering a new field. The fifth aspect is orientation to learning; where teachers take on new learning challenges to address a problem that exists. They seek learning opportunities when they perceive a deficiency in their own knowledge (Gregson & Sturko, 2007). Finally, this theory assumes that adult learners are driven by internal motivation (Caruth, 2014; Reichert, 2016).

Basing on this Adult Learning Theory, the first concept of self-concept concurs with active learning and collective participation aspects of PDP in the sense that once these are considered, academic staff use appropriate PPs. The second concept of ALT which was past learning experience tallied with content focus dimension of PDP whereby through emphasizing academic staff teaching professional areas in PDP directly impacts on their appropriate use of PPs.

The third and fourth concepts of ALT which were readiness to learn and practical reasons to learn were in agreement with active learning dimension of PDP which emphasises when academic staff actively participate in PDP, they are able to transfer what they learnt in PDP to their learners in form use of appropriate PPs. Meanwhile, the fifth concept of ALT was orientation to learning which collaborated well with coherence as a dimension of PDP whereby academic staff take on new learning challenges to improve their PPs.

The last concept of ALT was internal motivation. Internal motivation concept explained collective participation dimension of PDP. As academic staff develop an internal drive to learn, they get acquainted with the appropriate use of PPs and the reverse is true. It was on the above basis that ALT was considered as one of the relevant theories on which this study was anchored.

1.4 Contextual Background

The study was carried out at Makerere University in the colleges of CHUSS and COVAB. Makerere University being the first and oldest university in Uganda established in 1922 as a technical college. In 1949, it became a university college affiliated to the University of London. Under the affiliation arrangement, it offered academic programmes leading to the general degrees of the University of London. Later on, it became one of the three Constituent Colleges of the University of East Africa in 1963 and this marked the end of the affiliation arrangement with the University of London. In 1970, by an Act of Parliament, Makerere became an independent university of the Republic of Uganda.

Currently, Makerere University comprises of nine colleges and one independent school. The process of forming Colleges started 10 years back and through a gradual process in 2011 the system was put in place. Colleges are structured into schools and teaching departments. College of Humanities and Social Sciences (CHUSS) consists of 5 schools, 5 Centers and one Institute while in 2007 College of Veterinary Medicine, Animal Resources and BioSecurity (COVAB) upgraded from the Faculty of Veterinary Medicine with two schools (Makerere University Fact Book, 2018). However, basing on (Omaswa, 2014; Rwendeire Report, 2017 and NCHE, 2020) academic staff in CHUSS and COVAB were identified as having inappropriate pedagogical practices. Thus this current study was carried out in the two aforementioned colleges.

As a flagship African university (Teferra, 2017), Makerere University is a focal point on issues of research and pedagogy in higher education. Flagship universities in the African context are described as among those first higher education institutions established prior to and post-independence and have been considered as the leading institution, in their respective countries at the present time (Teferra, 2016). These 'mother' institutions would typically have the largest number of academic programs, senior academics, as well as enrollments (Teferra, 2017). Flagship universities in Africa bring together a range of scholars to celebrate the impact, influence and contributions of African universities. They are also by the process of isomorphism trend setters in their respective countries in terms of curriculum content, academic culture, and policy issues. Therefore, in this study Makerere University is held with highest national esteem – as a mother institution from where the social, political, and economic elites graduate and maintain high clout and influence (Teferra, 2017).

Alternatively, the appropriate use of pedagogical practices in CHUSS and COVAB at Makerere University was a challenge in the delivery of quality higher education. Several reports and authorities have reported deficiencies in the pedagogical practices of academic staff. Among these included (Mamdan, 2007; Mak Teaching and Learning Policy, 2010; Ssentamu, 2014; Ezati et al., 2014; Nakabugo, 2008; Ezati et al., 2010; Ezati et al., 2014; Ssempebwa & Bakkabulindi, 2016; NCHE, 2020). For instance, some lecturers in Makerere were identified as lacking adequate knowledge of what they teach, delivering content using the conventional teaching approaches which seem not to align with the current trends. Furthermore, the NCHE 2020 has reported serious concerns on academic staff pedagogical practices more in this flagship university which should be a role model to other universities in Uganda and beyond. Some of these concerns were related with poor course organisation where by some lecturers teach without

up-to-date course outlines and course structure. In addition, teaching and experience according to the university promotion policy is not highly rated as per the information provided in Table 1.1:

Table 1.1: Points Promotion Criteria of Makerere University

No.	Criterion	Maximum Points
1.	Academic and Professional qualifications	20
2.	Publications	25
3.	Teaching ability and experience	13
4.	Research	8
5.	Supervision of students' research	10
6.	Other core academic activities	8
7.	Service to the university and community	5
8.	Membership of professional bodies	2
9.	Conduct	5
10.	Professional practice/outreach services	2
11.	Innovation	2

Source: Makerere University Fact Book (2019).

From Table 1.1, we can infer that the three missions of the university (teaching, research and community service) are not given equal weight as far as the evaluation criteria for promotion are concerned. Teaching and the third mission (community service) hold a subordinate position to research and account for 13 points and 8 points, respectively, while research (and publication) accounts for 33 points. This corroborates the perception of academic respondents regarding lack of parity of esteem between teaching and research. The celebrity status accorded to research by

the university did not come as a surprise. First, the university seeks to reposition itself as a research-led university where research and teaching are mutually reinforcing. This strategic repositioning is well-articulated in the strategic plan. Secondly, Makerere University is preoccupied with improving her ranking and research forms the bulk of the input into most regional and international ranking schemes. Finally, good teaching, compared to research, is not easy to measure. This Table 1.1 thus reveals that failure to accord respect to teaching ability and experience denies academic staff opportunity to work towards improving their pedagogical practices.

Several attempts have been done to improve on of professional competencies of academic staff. For instance, Makerere University Fact Book 2016-2017 showed that Makerere University offers trainings to academic staff as a main professional development strategy. Basing on college level, the largest number of staff benefiting from staff development 2016/17 were from college of CHUSS, computing and information science, natural sciences and business, and management. However, it was not indicated whether these PDP were in line with all the PPS studied. Further, Omaswa's Report (2014) indicated that induction of academic staff is rarely done. This leaves many not fully aware of the core functions of academic staff. Training in form of study leaves available but these others were revealed as inadequately offered to academic staff. In the same vein, Rwendeire Report (2017) showed that although academic staff are allowed to attend conferences, workshops. The university does not provide any form of support towards staff travels to these conferences and workshops. More still, McGregor (2007) showed that study leaves were the main form of professional development in Makerere university. A reasonable number of junior staff had been granted with this professional career development opportunity to boost on their levels of competency. Despite all these efforts, the problem of poor pedagogical

practice was recurring warranting an investigation on how these PDP influence on academic staff PPs.

Consequently, it was hoped that once this scenario remains unaddressed the realization of Vision 2040 of transforming Uganda from a peasant to a modern and prosperous society and NDP three together with the achievement of other national development frameworks would be far from reality. However, all studies and attempts to explain this pedagogical practices dilemma had concentrated on other factors like poor remuneration, university management practices as the likely factors contributing to poor pedagogical practices ignoring the role of professional development programmes. Also the aforementioned did not use the situated learning theory and adult learning. It was on this premise that this study was carried out to ascertain the extent to which PDP influence the pedagogical practices of academic staff in CHUSS and COVAB at Makerere University.

1.5 Statement of the Problem

University lecturers are expected to use appropriate pedagogical practices in the execution of their teaching mandate (Murphy, 2014; Walder, 2017). This is realised when academic staff have adequate content knowledge, course organisation skills, can select appropriate teaching approaches and above all manage their classrooms effectively. In line with policy frameworks, CHUSS through the established Centre of Excellence in Research, Teaching and Learning to orient early career academic staff and to organize blended workshops had not helped to deal with the issue of inappropriate PPs (CHUSS Annual Report, 2020). Similarly, efforts by COVAB to offer pedagogical-related workshops for medical educators/lecturers had not yielded positive results in terms of academic staff using appropriate PPs (COVAB Annual Report, 2019). However, there are serious deficiencies in the use of appropriate pedagogical practices in the

execution of the teaching mandate. This was manifested in reports and authorities like (Mamdan, 2007; Nakabugo, 2008; Ezati et al., 2010; Mak Teaching and Learning Policy, 2010; Macgregor Report, 2010; Ssentamu, 2014; Ezati et al., 2014; Omaswa, 2014; Ssempebwa & Bakkabulindi, 2016; NCHE, 2020) who identified serious deficiencies in the way academic staff pedagogical practices were handled at Makerere University and specifically in CHUSS and COVAB. For instance, some lecturers in CHUSS and COVAB were identified as lacking adequate knowledge of what they teach and deliver content using the conventional teaching approaches which seem not to align with the current trends (Nabaho, Aguti & Oonyu, 2016; NCHE, 2020). Also course organisation and classroom management were done without following the pedagogical organization requirements with some lecturers failing to track student attendance, leading to non-attendance by many students. Likewise, Rwendeire Report (2017) indicated serious loopholes related with examination leakages, negligent invigilation, misplacement of marks either due to negligence or deliberate alteration of marks, soliciting money or sex from students who fail papers/examinations and offering to change the results. Furthermore, Makerere University Fact Book (2019) identified slow pace of transforming pedagogical approaches from generic teacher-centered approaches to authentic/practitioner-related approaches. These scenarios once left to continue the way they are, Makerere University contribution to the National Vision 2040 and National Development Plan three which emphasize national transformation, innovations and development would be curtailed. Although several factors may be partly responsible for failure by academic staff to effectively use appropriate pedagogical practices, literature to date shows that a few studies have been conducted on pedagogical practices of academic staff but do not show the extent to which Professional Development Programmes influence academic staff pedagogical practices in the context of CHUSS and COVAB at Makerere University as guided

by SLT and ALT which this study did. Therefore, findings in this study would inform and have implications on the earlier Makerere university teaching and learning policy and the new ICT policy (ODEL) and later on to teaching and learning policies of other universities in Uganda.

1.6 Purpose of the Study

The purpose of this study was to examine the extent to which Professional Development Programmes (PDP) influence academic staff pedagogical practices in CHUSS and COVAB at Makerere University.

1.7 Specific objectives

The study was guided by the following specific objectives;

i. To establish the influence of PDP on academic staff's content knowledge practices.
ii. To establish the influence of PDP on academic staff's course organisation practices.
iii. To examine the influence of PDP on academic staff's knowledge of pedagogical approaches/practices.
iv. To ascertain the influence of PDP on academic staff's classroom management practices.

1.8 Study Hypotheses

The study was guided by the following hypotheses;

i. PDP positively influence academic staff's content knowledge practices.
ii. PDP positively influence academic staff's course organisation practices.
iii. PDP positively influence academic staff's knowledge of pedagogical approaches/practices.
iv. PDP positively influence academic staff's classroom management practices.

1.9 Scope of the Study

In terms geographical scope, the study was conducted at Makerere University which is in the heart of Kampala City in Uganda. As flagship university (Teferra, 2017), Makerere University was selected since it is the largest and oldest out of the eleven Public Universities in Uganda (Makerere University Annual Report, 2018). It is located in the north eastern part of Kampala in Kawempe Urban City Authority. Makerere University is in a distance of around three kilometres away from Kampala along Makerere Hill Road. At the same time, Makerere University is a focal point on issues of research and pedagogy in higher education in the Sub-Saharan Africa with some deficiencies in pedagogical practices identified.

The study was conducted at Makerere University in two Colleges that is to say; College of Veterinary Medicine, Animal Resources and Bio-Security (COVAB) and College of Humanities and Social Sciences (CHUSS). I purposefully selected COVAB and CHUSS given their background as one college being for sciences (COVAB) and the other representing humanities (CHUSS). In addition, most of the academic staff in these colleges do not have a background in education (experience in pedagogical practices). At the same time CHUSS was second in terms of highest number of academic staff (majority being junior staff: Assistant lecturers) and with highest number of undergraduate students (Mak Fact Book, 2019). However, basing on (Macgregor Report, 2010; Omaswa, 2014; Rwendeire Report, 2017 and NCHE, 2020) academic staff in CHUSS and COVAB were identified as having inappropriate pedagogical practices. Thus this current study was carried out in the two aforementioned colleges.

The study content scope was limited to Professional Development Programmes of academic staff with content focus, active learning, coherence, collective participation and duration as its sub-dimensions. Pedagogical practices of academic staff were also conceptualised into content

knowledge, course organisation, knowledge of pedagogical approaches and classroom management. These concepts were considered for the study because there were limited studies carried out to ascertain the extent to which PDP influence academic staff pedagogical practices. Similarly, other studies which dealt with PDP and pedagogical practices did not have all the indicators as reflected in the current study.

This study was conducted within a period of three years (2017 – 2021). This time scope was chosen because it was the time when serious deficiencies in the way academic staff pedagogical practices were handled at Makerere University (Ezati et al., 2014; Omaswa, 2014; Ssempebwa & Bakkabulindi, 2016; Rwendeire Report, 2017; NCHE, 2018). This time period coincided with the time frame of the study programme.

1.10 Study Significance

The Ministry of Education and Sports (MoES) would benefit from the study, because the findings might guide them in prioritizing higher education in terms allocating enough resources for staff development programmes to enhance effective implementation of policies that are geared towards improving academic staff pedagogical practices. To NCHE, the findings of this study would inform the NCHE policy framework on teaching and learning.

To policy making organ of the university (university council), the study findings would contribute towards operationalization of the earlier teaching and learning policy and the new ICT policy which can be done through the professional development intervention strategies. Further, an implementation pedagogical practice guideline might be established to enable academic staff to effectively transfer the acquired knowledge during the pedagogical trainings This might be effectively done basing on the direction of the study findings.

The findings of this study would also be used by the Human Resource Development department at Makerere university and the Directorate of Quality Assurance, where special emphasis would be placed on discipline specific and practitioner-based PDP geared towards improving academic staff PPs and student learning.

To academic staff, the findings of the study would spark debate and institutional conversations on the Professional Development Programmes that are likely to improve their pedagogical practices. In so doing academic staff would be offered an opportunity to engage in PDP to improve on their pedagogical practices (those that were significantly influenced).

To the researcher the study findings would be essential in informing him about how PDP influence PPs in CHUSS and COVAB at Makerere University. In so doing possible recommendations on how to improve academic staff PPs would be drawn in line with implementation frameworks of PDP.

To the students the findings might be useful, since through effective administering and organisation of PDP basing on the direction of the study findings, academic staff would use appropriate PPs thus carrying out effective teaching and learning to the benefit of students' learning.

The study might also motivate future researchers to establish how PDP are conducted in CHUSS and COVAB to influence academic staff pedagogical practices. Hence they would use these findings as a source of reference in their suggested studies, allowing to create gaps to carry on with their suggested studies.

1.11 Justification of the Study

It is frequently argued that Professional Development Programmes have potential to empower university academics with the necessary pedagogical skills for them to cope with educational challenges encountered in higher education (Quinn, 2012; Chabaya, 2015; European University Association, 2019). Carrying out this study would enable academic staff to improve on their pedagogical practices in form of content knowledge, course organisation, knowledge of pedagogical approaches and classroom management which are core in effective teaching and learning as one of the mandates of academic staff in higher education. This study validated the belief that PDP is a critically important lever for ensuring institutional excellence through enhancing academic staff pedagogical practices.

By undertaking this study, it would significantly contribute to operationalization of the earlier Makerere University teaching and learning policies, and ODEL policies to match with the national development policy frameworks like NDP 3, Vision 2040, national ICT policy among others which are aimed at transiting Uganda from a developing country to a middle income status.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter is composed of three segments; one is theoretical review, two is conceptual framework, and three is related literature review. The purpose of this chapter was to review the scholarly literature that informs this research on Professional Development Programmes and their influence on academic staff pedagogical practices. I conducted a review on Professional Development Programmes to situate the study in the literature relevant to pedagogical practices of academic staff.

2.1 Theoretical Review

The aim of this section is to provide a brief outline of the theoretical underpinnings, which shape the Professional Development Programmes and the academic staff pedagogical practices. The study was guided by two theories that is: Situated Learning Theory of Jean Lave and Etienne Wenger (1991), and Adult Learning Theory of Malcom Shephard Knowles (1980).

Adult learning theory was initially developed in the 1920s and more recently Malcom Knowles is associated with using the term andragogy which refers to the art and science of supporting adult learners to learn (Knowles, 1984). Knowles (1970) espouses six assumptions about adult learning (andragogy) that is; self-concept, past learning experience, readiness to learn, orientation to learning, practical reasons to learn and driven by internal motivation (Mezirow, 1996; Merriam, 2001; Gregson and Sturko, 2007; Caruth, 2014; Reichert, 2016). In fact, this theory is at the heart of Professional Development Programmes in which academic staff are in

control of learning, including what, when and how in relation to their teaching experience and their needs.

These six assumptions can be related to academic staff as they are expected to learn through Professional Development Programmes and change as directed (Reichert, 2016; Caruth, 2014). Below, each of the assumptions were examined as they apply to academic staff/lecturers and learning new knowledge and skills that can be utilized in classrooms to enhance teaching and learning process (Gregson & Sturko, 2007; Caruth, 2014; Reichert, 2016; Branham, 2018).

2.1.1 Self-Directed (Self-Concept)

Knowles (1970) defined self-directed learning as when learners take control of their learning through planning, carrying out, and analyzing their learning experience. Being a self-directed learner is accepting responsibility for the learning that needs to occur (Reichert, 2016). The learner is the one making decisions about the content, methods, resources, and evaluation (Caruth, 2014). Since academic staff have their own needs and wants, having the opportunity to be a self-directed learner allows for individual needs to be met (Gregson & Sturko, 2007). Academic staff/teachers create lessons on a daily basis to respond to the needs of students. A daily expectation is for teachers to create the lessons independently and implement strategies for students to achieve academically (Murphy, 2014). Teachers also get to select what further formal education they wish to pursue given their own needs and desires. They do not need explicit directions in order to accomplish a goal as they direct the learning and steps it takes to accomplish a task or learning something new (Caruth, 2014). Teachers enter professional development as self-directed learners with previous experience, defined expectations for their learning outcomes, and a willingness to collaborate with teaching colleagues (Reichert, 2016).

2.1.2 Need to Know

Caruth (2014) noted that adults have a desire to know why new knowledge or skills are necessary to learn. Adults need to know the reasoning behind the need to learn. Knowing why new learning is needed helps teachers decipher what they already know and the current gap that exists creating the need for learning (Gregson & Sturko, 2007; Kelly, 2017; Weir, 2017; Branham, 2018). As teachers perceived value or importance, their attitudes and willingness to participate increased. Adults will invest considerable time and energy into learning they deem necessary (Phillips, 2008; Wall, 2013; Vanassche & Kelchtermans, 2016; Svendsen, 2016).

2.1.3 Life Experiences

Academic staff have previous learning experiences as they were once exposed to classroom learning similar to their students (Vanassche & Kelchtermans, 2016). Another advantage academic staff have is the experience gained after graduating from the university to the point of delivery of instruction (Weir, 2017). Academic staff/teachers utilize life experiences to enhance their teaching (Gregson & Sturko, 2007). Life experiences and skills help transform information as it is learned into meaningful, applicable information (Reichert, 2016). However, as they learn, they have preconceived notions based on their life experiences that may either enhance or cause questioning of the content being presented (Merriam, 2001). Mezirow (1996) argued that learning as an adult is not just facts added into an adult's information database, it is also "the process of using a prior interpretation to construe a new or a revised interpretation of the meaning of one's experience in order to guide future action" (p. 162).

2.1.4 Readiness to Learn

As maturation happens, a person's readiness to learn is altered to developmental goals of social roles (Caruth, 2014; Weir, 2017). Adults tend to recognize when they need to learn something new (Murphy, 2014; Branham, 2018), therefore timing of new learning is critical for adults as adults do not value learning if they do not feel they need to know (Caruth, 2014; Branham, 2018). Within teaching, the novice/early career academic staff and veteran/experienced academic staff often have different needs (Gregson & Sturko, 2007; Caruth, 2014; Reichert, 2016). For example, the learning of classroom management and disciplinary procedures have more value for early career/novice academic staff (Gregson & Sturko, 2007).

As academic staff progress in their teaching careers and extend their formal learning, the social roles within the university evolve (Gregson & Sturko, 2007; Caruth, 2014; Reichert, 2016). Academic staff/lecturers typically have opportunities for promotion by being heads of department, deans, principals, and other administrative roles (Kelly, 2017).

2.1.5 Orientation to Learning

Teachers take on new learning challenges to address a problem that exists. They seek learning opportunities when they perceive a deficiency in their own knowledge (Gregson & Sturko, 2007). Teachers strive for new knowledge and skills that address a problem immediately (Kelly, 2017). When expectations change for what teachers are asked to do, Knowles (1990) conveys that learning will occur and be more effective if teachers are able to approach the learning through a problem-solving approach instead of a delivery through a lecture or handout (Reichert, 2016). Caruth (2014) found investing time into learning for adults who were not receptive was ineffective and wasteful. Teachers wanted professional development to be directly applicable for practice in instruction (Gregson & Sturko, 2007).

2.1.6 Internal Motivation

Telling teachers/academic staff something is important is not nearly as effective as teachers seeing a need to solve a problem according to Knowles. Eyal and Roth (2011) defined internal motivation as performing an activity because it was deemed as interesting. Internal motivation comes from the teacher as opposed to a leader or outside pressure (Gorozidis & Papioannou, 2014). Although external factors can be a motivator, such as keeping a job or getting a promotion, long term application and staying committed to a vision and mission occurs more readily with internal motivation (Gregson & Sturko, 2007). Gorozidis and Papioannou (2014) found that teachers participated in selected professional development as an opportunity to improve instruction and student achievement at a higher percentage due to internal motivation versus external motivation. Teachers who proclaim their job to be intrinsically rewarding and enjoyable were found to provide more support to students (Eyal & Roth, 2011).

Relatedly, Gregson and Sturko (2007) studied teachers as adult learners and applied the Adult learning theory of knowledge. Findings revealed that adult learning informs and shapes professional development knowledge with their peers and also allows the development of collaborative relationships with fellow teachers. However, this knowledge was not aligned on academic staff content knowledge, course organization, knowledge of pedagogical approaches and classroom management which this completed study did.

Basing on this Adult Learning Theory, it was assumed that academic staff engagement in Professional Development Programmes (formal and informal) based on their self-concept as they feel more secure participating in them (Branham, 2018). Also they decide to engage in Professional Development Programmes basing on their past experience in the profession that drastically changes now and again in terms of pedagogical practices. Thus, they were ready to

learn and acquire new pedagogies that were highly demanded on the job market that is the conventional and modern learning methodologies (blended learning methods applications). Once they follow this theory, pedagogical practices applied were favorable and the reverse is true.

The study of adult learning should be about creating environments where adults can thrive. Consequently, for this study, the focus is limited to professional development and academic staff pedagogical practices. Considering the six key assumptions, adult learning theory is better suited for this study as evaluating Professional Development Programmes within universities was focused more on the connectedness of characteristics of effective Professional Development Programmes with the six assumptions of Adult Learning Theory (Gregson & Sturko, 2007; Caruth, 2014; Reichert, 2016).

Arghode, Brieger and Mclean (2017) studied Adult Learning Theory and its implication on on-line instruction. Findings revealed that Knowles Adult Learning Theory was much applicable on online instruction of teachers. However, this study was not in a higher education setting and in addition, it emphasized only one aspect of pedagogical practices that is; online approaches while this current study covered four aspects of the pedagogical practices.

However, critics of Knowles' adult learning theory disagree with the idea that all adult learners are different from children (Merriam, 2001). Teachers already in the profession are not starting at a base point when undertaking new learning (Gregson & Sturko, 2007). However, Caruth (2014) and Reichert (2016) questioned andragogy as a theory proposing the six assumptions were merely descriptions of good practice. Caruth and Reichert also noted general ambiguity and lack of clarity as a theory. They also argued that a theory is a "combination of different factors or variables woven together in an effort to explain whatever the theory is about.

Another concern with the Adult Learning Theory (Andragogy is that, not all adults are self-directed because some may need help to become more self-directed. Some adult learners need some type of structure to assist them in becoming more self-directed. Doing this may cause some adult learners to express negative opinions, especially those adult learners who would rather remain passive than to become actively involved in the learning process (Cercone, 2008; Loeng, 2013). And this is why this current study found it prudent to compliment adult learning with situated learning theory.

Situated learning is generally understood as learning that occurs when the learner sets out to acquire the necessary skills, knowledge, and attitudes that would enable him/her to be part of a community of practice. This community of practice could be domestic, social, or vocational. It is what Lave and Wenger (1991) describe as legitimate peripheral participation, which:

> provides a way to speak about the relations between newcomers and old-timers, and about activities, identities, artefacts and communities of knowledge and practice. It concerns the process by which newcomers become part of a community of practice. A person's intentions to learn are engaged and the meaning of learning is configured through the process of becoming a full participant in a socio-cultural practice. This social process includes, indeed it subsumes, the learning of knowledgeable skills (Lave & Wenger, 1991).

Situated Learning Theory assumes that learning represents the acquisition of objective knowledge (Lave & Wenger, 1991). Further, it states that learning is best achieved during educational/training sessions that are separate from the settings in which learning would be applied. It views learning and knowing as processes which are integral to every day practice in work place, family and social settings. According to Lave and Wenger, (1991), this theory is premised on three core issues namely; participation, identity and practice.

Participation requires one to understand, take part and subscribe to social norms, values and behaviours of the community they participate/operate. Whereas identity is concerned with developing new ways of knowing in practice but also with understanding who we are and what potential we have. Practice in situated learning is a social practice that provides structure and meaning of what we do. It always builds in a social, historical context and relates with the use or language, role definitions, behavioural scripts and other explicit artifacts. In line with this theory effective teaching and learning in form of pedagogical practices is possible through training of academic staff using the authentic/practitioner-related PDP. This allowed them apply these methodologies as the university social teaching environment demands.

Lave and Wenger (1991) have studied learning as a situated activity and deduced that its main characteristic is the idea of legitimate peripheral participation. In this model learners participate in communities of practice where newcomers acquire the skills and knowledge that allow them to become full participants. The key point is that this learning occurs in and is part of a socio cultural environment.

The sociocultural environment allows for these newcomers or novices to interact with experts in activities that include various "identities," "artifacts," and the knowledge within a certain sociocultural environment or "community of practice" (Lave & Wenger, 1996, p.29). The goal is for these peripheral newcomers to eventually become a part of the "community."

Lave and Wenger have also differentiated situated learning from the traditional notion of apprenticeships by claiming that it is more than "learning by doing." Instead they posit that learning is an "integral and inseparable" aspect of social practice (p.31). They have theorized that situated learning emphasizes the relationship between knowledge and learning because it

concerns itself with the "negotiated" character of meaning and the "concerned" nature of learning activity among all participants (Lave & Wenger, 1991, p.33).

Lave and Wenger (1991) argue ‘that transparency of the socio-political organisation of practice, of its content and of the artefacts engaged in practice is a critical resource for increasing participation’ (Down, 2004, p.42). They argue that learners are inevitably part of a community of practice whether it is an occupational community or a family or a common-interest group and that the development of knowledge and skills requires them, as newcomers to the community, to move towards full participation in the socio-cultural practices of that community. Wenger and others have elaborated on the concept of a community of practice (Wenger, 1998, 2002; Wenger; McDermott & Snyder, 2002), describing their value, their structural elements and their cultivation. Korthagen (2009) studied the situated learning theory and pedagogy of teacher education, and revealed that the situated learning theory is used as a friction between teacher behavior in practice and the wish to ground teachers’ pedagogical practices.

Other studies which benefited from the situated learning theory this study identified included Oluer, Herrington and Sparrow (2003) in a study about towards a new tradition of online instruction and with use of Situated Learning Theory, revealed that the Situated Learning Theory has greatly helped to design online instructional websites. Thus, it has greatly served as a linkage between the tradition and online teaching approaches. However, this was (online instruction) one component of pedagogical practices that the theory used. This served as a gap to ascertain how it influences PDP as they appear in the current study on all PPS. Meanwhile, Risku (2016) studied Situated Learning Theory in translation research training academic research as a reflection of practice. Findings in this study showed that explicit use of situated approaches has so far not

been the centre of attention in translation of theory teaching and training. However, this theory was not directly related on PDP aspects considered in this current study.

Basar (2018) studied the Situated Learning Theory as a key to effective teaching. Findings revealed that this theory lays more emphasis on content/knowledge acquisition which is essential in effective teaching and learning. However, it was criticized for failing to account for individual differences in learning. Besides, the current study hoped that this Situated Learning Theory application to learning of academic staff through PDP influences other pedagogical practices like course organization, classroom management and pedagogical approaches.

The concept of situated learning is often criticised for its inability to be generalised because of the particularity of the context and the uniqueness of the context's role in shaping the learning. Lave and Wenger (1991, p.33) counter with the argument that generalization means that data is abstracted from its context and that the way this is done is dependent on the context of the abstraction. Secondly, a generalisation is only useful if it can be applied to a particular context. The test of a generalisation is its application to 'a specific event in specific circumstances' (1991, p.33-34). The power of abstraction 'is thoroughly situated, in the lives of persons and in the culture that makes it possible' (1991, p.34). Jeanin (2006) studied professional development needs of faculty members in an international university in Thailand and with use of adult learning theory revealed that engaging in professional development programs is relevant and authentic in influencing teachers learning and change in the execution of their services.

2.2 Conceptual Framework

This section shows how the variables were operationalized in the empirical part of the study. The framework tries to conceptualize the influence of Professional Development Programmes on academic staff pedagogical practices.

Conceptual framework

IV: Professional Development Programmes

- Content focus
- Active learning
- Coherence
- Collective Participation
- Periodic learning (Duration)

DV: Pedagogical practices

Content knowledge
- Course content
- Course objectives
- Reading Materials
- Research Capabilities

Course organization
- Course structure
- Reflecting on the course objectives
- Preparation
- Classroom space use
- Assessment
- Feedback

Knowledge of pedagogical approaches
- Reflecting on teaching methods
- Reflecting on objectives
- Planning for teaching methods
- Learning styles
- Collaborative learning

Classroom management
- Course requirements
- Classroom guidelines
- Identification of students
- Teacher-student interaction
- Re-enforcement
- Time management

Figure 2.1: Conceptual framework showing the influence Professional Development Programmes and pedagogical practices

Source: Vereijken and Van der Rijst, (2021); Liu and Liao (2019); Desimone and Garet, (2017)

Professional Development Programmes in form of content focus, active learning, duration, coherence and collaborative learning are considered in PDP. Once these PDP are effectively managed and appropriately administered to academic staff, their pedagogical practices would improve. This would be achieved in form of effective application of content knowledge, course organization, knowledge of pedagogical approaches and classroom management practices. However, this could only be achieved if there are good university management practices, organizational motivation and availability of a resource envelope for the Professional Development Programmes.

2.3 Review of the Related Literature

The literature concerning higher education is consistent in its depiction of a landscape that is undergoing transformation which is driven by the dramatic changes in its environmental, social, political and economic context. Commonly cited forces of change in higher education institutions include marketization and consumerism, massification, widening access, internationalization, globalization, rapid development of technology, increased diversity of provision, democratization of knowledge and shrinking public financing (Mamdani, 2007; Ezati & Mugimu, 2010; Mundy et al., 2012; Murphy, 2014; Nguyen, 2017; Inamorato et al., 2019).

2.3.1 Professional Development Programmes and content knowledge practices

Studies into teaching and teacher education suggest that teacher knowledge is closely related to teachers' experiences and contexts and includes teachers' knowledge about the content and beliefs about their own teaching practice (Vereijken & Van der Rijst, 2021). To understand the knowledge that is needed for the science of teaching, the concept of pedagogical content knowledge (PCK) was introduced as a unique form of knowledge for teaching that makes a

content domain understandable for learners (Shulman, 1986) in (Vereijken & Van der Rijst, 2021). Recent studies have suggested that lecturers, like teachers, use an integrated set of conceptions and knowledge based on subject matter and pedagogical knowledge in university teaching (Nabaho, Aguti & Oonyu, 2016; Lopes & Cunha, 2017; Nguyen, 2017; Short, 2017; Liu & Liao, 2019; Vereijken et al. and Van der Rijst, 2021).

Biku, Demas, Woldehawariat, Gatahun and Mekonnen (2018) studied the effect of pedagogical training on teaching in St. Paul's Hospital Millennium college, Addis Ababa and semi-structured open-ended items to collect qualitative data which was analysed using thematic analysis technique. Findings obtained revealed that most instructors practiced their personal teaching methods which was huge, with no lesson plan, no clear objectives, poor time management and overlapping content. Besides, this study was purely qualitative while the current study will use some quantitative information. Also the earlier reviewed study did not have dimensions like active learning, collaborative learning, coherence and active learning related on pedagogical practices as was the case with this completed study.

More still, Phelps et al. (2014) studied developing content knowledge for teaching assessments for the measures of effective teaching. This study revealed that emerging theories about what constitutes content knowledge for teaching have received interest from teacher educators, policy makers, and teachers themselves, because these ideas draw a direct connection between the work of teaching a subject and the content knowledge needed in order to carry out this work. Although teachers need to understand the content that their students are learning, evidence that teaching this content can require forms of content knowledge that go far beyond more conventional

content proficiency strengthens arguments that teaching is professional work with its own unique professional knowledge base. These views also point to the potential and need for assessments that addresses forms of content knowledge used in teaching that differ from what is measured on conventional knowledge tests. Alternatively, these views are general in nature and not aligned to any level of education as the current was on academic staff. In addition, the earlier reviewed study was not influenced by PDP as this current study did. Further, it was not indicated whether the earlier study adopted methodologies like the ones this completed study used.

Terrell, Furey and Scott-Evans (2007) studied teachers' perceptions of the impact of CPD in Angilia Polytechnic University school. With use of data collected using a questionnaire and interview revealed that through PDP teachers acquire confidence in acquisition greater knowledge of educational disciplines they teach. As these teachers engage in PDP they master concepts thus making them more proficient. However, this study did not have aspects like active learning, collective learning of PDP which were also part of the current study. In addition, Bartleton (2018) in a case study of teachers' perceptions of the impact of continuous professional development on their professional practice in further education college on the West Midlands. Using descriptive analysis, results revealed that PDP had a positive influence on updating subject knowledge which is acquired through sharing knowledge in PDP. However, this study used descriptive analysis while this current study used correlational and regression analysis and thematic analysis.

Meanwhile, Ssemuwemba (2017) studied the effect of professional development practices on teacher performance in public secondary schools in Kigali, Rwanda. Using Pearson's Correlation

Co-efficient index, findings revealed that teachers' professional development at all levels (pre-service, induction and continuous learning) immensely help teachers to gain best practices in teaching coupled with relevant knowledge and skills. However, content wise, this current study considered PDP basing on active learning, collective participation, content focus, coherence and periodic learning differing from the aforementioned study. Also the performance of teachers was considered basing on content ignoring classroom management, course organisation and pedagogical approaches.

Shah, Madhavaram and Laverie (2018) in a theoretical study established that faculty need to be able to understand and present subject matter knowledge using theories, conceptual frameworks and analytical skills. However, the extent to which this is true on academic staff at Makerere University is not empirically established using PDP as a predicting variable. In addition, Emily, Allen and Gregory (2017) revealed that engaging in professional development programs can provide opportunities for faculty members to learn from each other through the establishment of networks that encourage and support sharing of knowledge, ideas and resources. In so doing, teachers content knowledge in the discipline enhances. However, Emily et al. (2017)'s study did not have situated learning theory.

Penuel, Sun, Frank and Gallagher (2012) showed that well-designed professional development can change teacher knowledge and practice. Professional development enhances teacher knowledge and improves practice when sustained over it enhances teachers' knowledge of the curriculum implementation. Normally, active learning PDP enables teachers to master what they are supposed to offer to learners. However, this was a theoretical review while the current study

will be empirical in nature. Meanwhile, Vanassche and Kelchtermans (2016) showed that professional development aims at a more refined and effective repertoire of educational practices and strategies as well as a more grounded (validated) knowledge based teacher educated, professional responsivities and situation whereas Svendsen (2016) indicated that collaborative countries professional development approaches are effective in bringing about positive changes in teachers' practice, attitudes and knowledge. This study showed that weekly collaborated studies or Professional Development Programmes were offered leading to acquisition of knowledge and skills in the course. This study was not based on regression analysis as the current study did.

On the other hand, Smeby and Heggen (2012) studied coherence and development of professional knowledge and skills, using data acquired from a self-administered questionnaire revealed that the three types of Professional Development Programmes (biographical, pre-enrollment and programmes) have significant impact on newly qualified teachers teaching work in terms of offering theoretical and practical knowledge taught. However, this study was carried out in a European country perspective while the current study was in Uganda, a developing country where professional development of academic staff which might improve their pedagogical practices is limited. Also, Liu and Liao (2019) studied professional development and teacher efficacy using descriptive results revealed that professional development of teachers improved their knowledge, curriculum in the discipline significantly. These results were not directly relating PDP on all the four aspects of academic staff pedagogical practices as this current study did.

Kafyulilo (2014) studied professional development through teacher collaboration as an approach to enhance teaching and learning in Science and Mathematics in Tanzania. Findings revealed that teachers' collaboration as an approach to professional development enhances effectiveness of teachers masterly of content and following the curriculum as expected in science related disciplines. Teachers are the ones who implement the curriculum by selecting and combining the various aspects of knowledge contained in the curriculum or syllabus document. Hence they ought to be acknowledged and acquainted about the components of curriculum content and the different ways through which the curriculum content can be effectively delivered to learners. Slightly differing from the current study, this collaborative PD practice influence was ascertained on humanities like (CHUSS) not science disciplines where the modes of teaching in the two scenarios differ.

Curwood (2014) studied continuity and change identities and narratives within professional development of teachers. Findings revealed that the traditional forms of professional development did not allow space for teachers' narratives. Hence the traditional professional development was ineffective at engaging teachers as learners, promoting critical reflection or encouraging new understandings about content and pedagogy. This study was carried out in the western world differing from the current study which focused on Makerere University in Uganda.

Garet, Porter, Desimone, Birman and Yoon (2009) studied what makes professional development affective and revealed that there were significant effects on teachers self-reported increases in training knowledge acquired from development activities focusing on content knowledge,

opportunities for active learning and coherence with other learning activities on knowledge of content required during instructional process. Meanwhile, Darling-Hammond, Hyler and Gardner (2017) revealed that content focused PD generally treats discipline specific curricula such as Mathematics, Science and Literacy. This type of PD can provide teachers to study their students work, test out new curriculum with students or a study of a particular element of pedagogy or student learning in the content area.

Meanwhile, Driel and Berry (2012) studied teacher professional development focusing on pedagogical content knowledge and in a desktop review of literature revealed that professional development programs aimed at development of teachers' PCK cannot be limited to supplying teachers with input such as examples of expert teaching of subject matter. Instead, such programs should be closely aligned to teachers professional practice. Kultsum (2017) studied the concept of pedagogical content knowledge among English teachers in Indonesia and revealed that the training offered to teachers had not fully equipped them with pedagogical content knowledge that would allow them excellently teach learners. However, some few teachers who attend PDP had acquired PCK that led them in solving students' misconceptions about the subject that they learn. However, this study was carried out in Malaysia while this current study was in Makerere University in Uganda.

Empirically, Soine and Lumpe (2011) measured characteristics of teacher professional development using correlational analysis technique, findings revealed that there was a slight but significant correlation between active in classroom and teachers use of new knowledge and skills as measured by classroom observation scores. However, this study was more quantitative,

relying on statistical data while this current study was mixed incorporating qualitative and quantitative data. Kafyulilo (2014) showed that collaborative professional development offers teachers with a possibility to alter the curriculum and pedagogy within their subjects and also make connections between subjects and pedagogy. Further, this collaborative professional development stimulates new ideas and promotes coherence in a school's curriculum and instruction. All these depicts that collaborative professional development has a potential to enhance the acquisition of content knowledge. However, these observations were arrived at using a review of literature (desktop) reviews while this current study was empirical with field findings.

Further, Penuel, Sun, Frank and Gallagher (2012) argues that professional development that employees active learning strategies can support teachers in making changes to their practice. Like other learners, teachers learn best when they have an opportunity to construct knowledge using new tools for thinking, reflection and revising of ideas. Thus with active learning teachers can construct and acquire new knowledge in their areas of specialization.

Lara-Alecio, Tang, Sutton-Jones and Irby (2021) studied teachers' pedagogical and content knowledge after participation in virtual professional development, with use of chi-square analysis revealed that a significant improvement in teacher knowledge after completion of professional development training. This consequently had a positive influence on the way teachers show knowledge of content during the instructional processes. However, a divergence in methodologies used was noticed with the earlier reviewed study benefiting from chi-square while this current study benefited from regression and Pearson correlation. Ribers, Balslev and Jensen,

(2021) studied teacher learning, context knowledge, practical knowledge and professional learning. Using qualitative data collection methods revealed that teachers involved in professional development positively improves on teachers' knowledge of the subject, are more effective in terms of knowledge acquisition and transmission to learners. However, this study was qualitatively done while this current study was quantitative in nature. Oliveira (2021) studied pedagogical knowledge of pre-service teachers from a Brazilian virtual university. With use of quantitative and qualitative analysis revealed that lack of time to study denies pre-service teachers chance to acquire pedagogical knowledge and skills required on the job. This finding further suggests that without adequate time for training academic staff cannot acquire the knowledge required on the teaching job. However, the quantitative methods were descriptive in nature that is relying on percentages while current study was also inferential in nature.

Wolf (2020) studied classroom management in lieu of teachers' experiences and established that novice teachers have limited hours of teaching experience. Hence, they need more in-service trainings to acquire more skills in classroom management. Recognizing the differences in classroom management approaches novice teachers ought to be supported through professional development for the career-long process linked to the teaching experiences in classroom. However, this study was not in a developing world context as the current study was in Makerere University in Uganda. In another empirical analysis, Noben, Deinu, Ark and Hofman (2020) studied how professional development programme was related to the development university teachers, self-efficacy beliefs and teaching conceptions. Results showed that through professional development university teachers acquire more skills of managing students in classrooms. As mature students, this professional development equips teachers with knowledge

of dealing with them. However, this study was qualitatively done while this completed study was more quantitative in nature. Effective classroom management according to Kwok (2020) allows teachers to focus more on academic content rather than quelling misbehavior, which then leads to better student outcomes of achievement and socio-emotional growth.

2.3.2 Professional Development Programmes and course organization practices

Studies on PDP and course organization were scanty, available ones included; Shah, Madhavaram and Laverie (2019) who showed that excellent teachers should have course management capabilities which include planning the course and assessing students' performance. However, this was a theatrical observation as opposed to the current study which will be empirical. Empirically, Aheisibwe and Ntunguka (2017) studied equipping university academic staff with pedagogical competence at Bishop Stuart University and with use of a chi-square analysis technique revealed that there were statistically significant differences between teacher trained lecturers and non-teacher trained lecturers in management of learning at Bishop Stuart University. Teacher trained lecturers were revealed as having high course organization, content masterly and effective classroom management skills as these are acquired during professional training. However, this study applied chi-square analysis while this current study used Regression Analysis techniques.

Atteberry (2011) showed that long-term teacher professional development is coordinated by creation of multiple opportunities for teachers to reflect on their own teaching, to talk about their observations of children with an expert or with, a more expert coach. Under this training, the key steps in instructional process are reflected on that is, the teacher preparations, introduction lesson

development, assessment procedures. Thus through PDP these can be effectively implemented. However, this was a study carried out in the diaspora while this current study was carried out in Uganda a developing country.

Meanwhile, Svendsen (2016) distinguishes between traditional skills, knowledge approach and professional development approaches which are more sensitive to the context in which teachers work and which are grounded in a coherent view of teacher learning and professionalism. Thus, professional development is viewed as complex which systems and subsystems that can easily be mastered through effective course organization practices. Kaynardag (2017) studied pedagogy in higher education and the extent to which it matters and revealed that the assessment dimension under pedagogical competence is highly essential in instructional process. Without professional training, fairness in evaluation ad providing reliable and accurate feedback is not possible. Besides this study did not use regression and Pearson's Correlation Co-efficient techniques' as was the case in this completed study.

Munir, Jabeen and Nader (2021) studied continuous professional development and performance of primary school teachers. With use of descriptive results mentoring done during continuous professional development fairly improved on the performance of teachers during lesson planning. However, under Professional Development Programmes, active learning, coherence and collaborative learning were not emphasized. Also lesson planning was the only aspect course organization considered. Thus, other aspects like assessment were not considered which the current study did. Further, Jacob, Xiong, Ye, Wang and Wang (2019) studied strategic best practices of flagship university professional development. Findings revealed that faculty

professional development offer appropriate knowledge, skills and course organization practices in teaching and learning practices. However, this reviewed study was carried out in a foreign world context differing from that of academic staff course organization practices in Makerere University a flagship university in Uganda.

Noben et al. (2021) studied how professional development programme is related to the development of university teachers' self-efficacy beliefs and teaching conceptions. Findings obtained showed that through professional development, with focus on teaching, teachers acquire ways of preparing for teaching, widening their knowledge about content selection, scheme of work drawing, assessments and other course organization skills. This sharpens them in the way they discharge their services. Alternatively, this study was qualitatively done. Further, it did not use theories (Adult learning and situated learning theories) as was the case in the current study. Esterhazy, Lange, Bastiansen and Wittek (2021) in a study about moving beyond peer review teaching and collegial faculty development, revealed that when academic staff study as a group in professional development programmes, they acquire the systematic ways of sequencing their content and presenting it before learners. This is normally learnt through sharing experiences from fellow academic staff. Besides, this reviewed study did not use adult learning and situated learning theories as was the case in this current study.

Empirically, Powell-Terrell et al. (2007) studied teachers' perceptions of the impact of PDP and revealed that PDP have a greater impact on teachers' reflective knowledge of evaluation of students' academic works. This shows that as teachers do participate in PDP they acquire skills on how to assess and grade students work. However, this study was not in the context of

COVABS and CHUSS, Makerere University. Whereas, Thurston, Christe, Howe, Tulme and Topping (2008) investigated on the effects of continuous professional development on group work practices in Scottish primary schools using pre-post observation scores revealed that there was a high significant impact between PDP and teacher evaluation of pupils. This was highly witnessed among science teachers than do teachers in other subjects of primary schools. Besides, the earlier reviewed study was on primary teacher leaving room for the current study to ascertain whether similar situations prevail among university staff. The methodologies applied in the earlier study differed from the ones this completed study adopted. In terms off course organisation this reviewed study covered only one aspect that is assessment unlike the completed which had course structure, classroom space among others.

Guzman (2009) studied developing craft knowledge in university teaching with key emphasis on how beginning teachers learn to teach. Following a qualitative analysis, results revealed that through training programmes like workshops, seminars, inductions, teachers are able to display profound knowledge of subject matter and how to organize its content, including writing, grammar, forms of oral expression and appropriate use of language. Alternatively, this reviewed study was qualitatively done while the current study was quantitatively done. Theoretically, Kwok (2021) showed that it is disheartening that many teachers cannot adequately prepare despite the fact they had received teacher education. In the afore mentioned study, it is exposed that through professional development trainings, teachers are able to develop ways to help students understand and commit to behavior standards and routine procedures that ensure a safe supportive classroom environment behavior.

2.3.3 Professional Development Programmes and Academic Staff Knowledge of Pedagogical Approaches

Biku et al. (2018) empirically showed that there were pedagogical training gaps among medical college instructors in St. Paul's hospital millennium. This consequently affected negatively on the standardization of methods used in instruction. Meanwhile, this study did not benefit from the situated learning theory and adult learning theory which will be adopted in this current study. Theoretically, Shah, Madhavaram and Laverie (2018) noted that professors should be able to use pedagogical approaches and be in position to understand the merits and demerits of each. On the other side, this observation was not based on field findings as this current study will do.

Further, Aheisibwe and Ntunguka (2015) studied equipping university academic staff with pedagogical competence and chi-square results showed that trained and non-trained teacher lecturers were more using demonstration pedagogical approaches. However, this current study will deal with all pedagogical approaches in addition to demonstration methods. Ezati, Opolot-Okurut and Ssentamu (2014) studied addressing pedagogical training needs of teaching staff in Makerere University and with use of data collected from interviews and end of workshop evaluation questionnaire for a four-year period training 2006-2010 revealed that academic staff appreciated workshop methodology, the co-teaching approach and sharing of experiences. Emilly et al. (2017) showed that it is the responsibility of faculty developers to educate participants on principals of adult learning, instructional pedagogies and classroom management. Besides, this was a theoretical observation not a field study finding as the current study was.

Penuel et al. (2012) revealed that active learning strategies in which teachers practice new pedagogical skills and receive feedback from others, creates opportunities for one to use most applicable teaching pedagogies in class. Alternatively, this was not a field study finding as this current study was in the context of Makerere University. Further, Fairman, Smith, Pullen and Lebel (2020) studied the challenge of keeping teacher professional development relevant and PDP plays a central in aligning accountability needs and teachers' professional needs, technology using a hybrid and online methods. Meanwhile, Hontvedt, Silseth and Wittek (2021) studied professional collaboration in teacher support teams and with use of interactive analysis methodology revealed that sharing solutions to teaching related problems, creative and problem solving pedagogy was a right pedagogical approach in the teaching of students. Besides, this study was not based on activity theory and too did not use Pearson's correlation and regression analysis as the current study did.

Liu and Liao (2019) showed that professional development had enhanced participating teacher's efficiency and beliefs for using technologies in their future practices, many of the respondents showed technology related content offered in classes allows one to use these teaching pedagogies effectively. Similarly, the length of the professional development positively enhances ones effectively in application of pedagogical strategies. For instance, adding a one-year online course to a 5day face-to-face professional development programme had efficiency in use of pedagogical practices. Besides this study did not benefit from situated learning theory of Knowles.

Universities are in the knowledge business, and apart from producing or manufacturing knowledge through research, they disseminate or retail knowledge through their teaching

function (Madhavaram & Laverie, 2010). However, across the world there is the outstanding challenge of academic staff pedagogical practices. Madhavaram and Laverie (2010) opine that it is unconscionable that faculties at universities put so little emphasis on teaching doctoral students how to teach. And this based on the argument that not all PhD students are destined to teach and therefore, the onus of training academic staff is on the institutions that hire PhDs and not the institutions that produce them. For all the reasons, higher institutions of learning must be ready to move beyond the comfort zone of the traditional and familiar.

In this study, there are valuable lessons to be drawn from European University Association and USA experiences of this particular kind of professionalization of teaching, especially since the issue of making teacher training in higher education mandatory is, or has been, under discussion. "Excellent teachers are made, not born; they become excellent through investment in their teaching abilities" (European Science Foundation, 2010 in Short, 2017). In recent years, governments and international organizations have been promoting the assurance of quality institutions of higher education and guidelines and frameworks have emerged to support the same. International guidance, such as the OECD-UNESCO Guidelines for Quality Provision in cross-border Higher education, the European Standards and Guidelines for the Bologna Process for higher education institutions are examples of non-prescriptive and but incentivizing tools which are meant to improve the quality and the accountability of all kinds of Higher Education Institutions (Short, 2017).

A case in point, USA, Australia, Canada, UK, Ireland, Nordic countries, The Netherlands and Belgium have already established institutional practices aimed at improving the quality of teaching and learning in higher education. However, this is not the case across all higher

education institutions in the world (Aheisibwe & Ntunguka, 2015; Short, 2017; Odalen et al., 2019). For the past 20 years, the Bologna Process has been promoting the enhancement of learning and teaching, with ministers committing in the 2018 Paris Communique` to promote and support institutional, national and European initiative for pedagogical training, continuous professional development of higher education teachers and explore ways for better recognition of high quality and innovative teaching in their career (European University Association, 2019). Being complementary to the Bologna Process, the European Commission has stressed multiple times the importance of continuous professional education. European University Association's position paper on learning and teaching in Europe's Universities released in January 2018, also underlines the need to promote staff development and recognize teaching as central to the academic profession (The European Higher Education Area, 2018).

This is now the case, for instance, in Norway, where the Ministry of Education decided that as of September 2019 all newly appointed university academic staff would need to prove basic pedagogical competences, worth 200 hours of a course standardized by the National Council for Higher Education (European University Association, 2019). In the Netherlands, all university teaching staff are expected to receive a university Teaching Qualification. Relatedly in Latvia, national regulations oblige academic teaching staff to undergo continuous professional development during their academic appointment (European University Association, 2019; The European Higher Education Area, 2018).

Research shows that continuous professional development is needed to maintain staff efficacy several researchers have sought to develop comprehensive lists that outline the principles for

effective professional development (Huang & Cho, 2010; Suwaed & Rahouma, 2015; Ssempebwa et al., 2016; Mccarthy, 2016; Hasan & Parvez, 2017). Not all academic staff are expected to train as teachers and neither do they have to produce evidence that they are proficient teachers (Marsh, 2011; Marsh & Martin, 2011). Therefore, they tend to teach the way they were taught regardless of differences of institutional context, student diversity and numbers.

The literature reviewed thus far reveals that the movement towards a scholarship of teaching and learning has fueled numerous professional development initiatives in higher education. Some studies (Ezati & Mugimu, 2010; Mundy et al., 2012; Ezati et al., 2014; Murphy, 2014; Nguyen, 2017; Inamorato et al., 2019) have demonstrated that professional development can in fact improve academic staffs' teaching, and others have examined academic staffs' perceptions of their own teaching and self-efficacy (Chabaya, 2015; Bisaso, 2017; European Commission, 2018). However, very few studies exist that focus on academic staffs' perceptions of and attitudes towards professional development for teaching. Therefore, to fully understand the role of professional schemes in a university, it is important to examine how academic staff feel about these initiatives.

There are considerable gaps in the literature concerned with the professional development of academic staff. One such gap is the tendency to focus on the development of just one aspect of the academic's role (Research). The scholars that are writing about professional development in higher education are usually looking at professional development in terms of enhancing research (Mamdan, 2007; Mizell, 2010; Marsh, 2011; Murphy, 2014; UNESCO, 2017; Kedraka & Rotidi, 2017; World Bank, 2017). The literature review carried out for this study hardly revealed any

research that is focused on pedagogical practices of academic staff. Neither did it find any research that is focusing on professional development from the perspective of academic staff pedagogical competencies. (Murphy, 2014; Walder, 2017).

The few studies that do exist on academics' attitudes all accept the notion that academic staff Professional Development Programmes will increase teaching effectiveness. Most studies indicate that academic staff have a greater desire to participate in formal Professional Development Programmes (Phillips, 2008; Baryomuntebe, 2012; Hefnawi, 2012; Murphy, 2014; Mushemeza, 2016; Qureshi, 2016; OECD, 2018; Weir, 2018; Malunda & Atwebembeire, 2019). However, academic staff in different higher institutions of learning did not believe they received enough mentoring or institutional support for teaching. The results from different studies demonstrate that most of the academic staff did not participate in formal university Professional Development Programmes. Those who show an interest in participating would hope to improve their teaching, research and the overall quality of their work. The authors argue that higher education as a whole does not prepare and support academic staff in their dual roles as educators and researchers, echoing sentiments from Murphy (2014) and Pesce (2015).

Pesce (2015) undertook a study examining data from fourteen countries in order to see if teaching-oriented academics had different opinions than research-oriented academics. Forrest found that, internationally, research-oriented academics demonstrated significant similarities on topics such as the assessment of teaching and international dimensions of higher education. The implications of this study, he asserts, are that there is a need to improve Professional Development Programmes for academics so that they can enhance the preference for teaching.

Professional development of academics has become a necessary condition for the competitiveness of the HEI as well as for an academic as an individual in the modern context of higher education (Inamorato et al., 2019). Staff development is effected through Professional Development Programmes which are the activities through which academic staff/lecturers enhance their knowledge, skills, values and attitudes to be more effective and efficient on improvement of learners' learning experiences through appropriate methods such as workshops, seminars, conferences, induction and orientation (Qureshi, 2016; OECD, 2018; Weir, 2018; Malunda & Atwebembeire, 2019). However, a considerable number of academics lack the necessary skills and competences, and are unable to introduce modern technologies in the courses that they teach (Haywood et al., 2015). As such, this study aimed at making a contribution towards filling this gap. Professional Development Programmes for academic staff in universities is intended to improve pedagogical practices of academic staff. Academic staff are in need of the staff development programs that would enable them to adapt easily to the changing university needs and PDP should be an on-going process (Mundy et al., 2012; Ezati et al., 2014; Murphy, 2014; Nguyen, 2017; Inamorato et al., 2019; Malunda & Atwebembeire, 2019).

Carlos-Guzman (2018) studied best teaching practices in higher education professors and in a review of literature and qualitative interviews that were thematically analyzed revealed that professors enjoy and develop good interpersonal relationships with students, master pedagogical aspects creating an atmosphere conducive for teaching and learning. However, this study benefited from qualitative while the completed study was more quantitative with use of statistical methods emphasized. Othman and Dahari, (2011) studied professional development among academic staff at selected Malaysian public universities. Using descriptive methods findings

revealed that in service professional training helps the academic staff improve their teaching techniques. This was possible with academic staff learning new pedagogies which would make them better. Besides, this finding was descriptively arrived while this current study was correlational in nature. Owens, Daddow, Clarkson and Nulty (2020) studied the price of excellence in learning and teaching; costs and benefits to diverse academic staff studying online for GCHE. Finding revealed that GCHE has significant benefits to academic staff as they acquire experiences of teaching and assessing students using online methods.

Milistetd, Salles, Backes, Mesquita and Nascimento, (2019) studied learner-centered teaching in a university based coach education using data from reflective journals, reflective conversations and focus groups revealed that with use of university based coaching approach, student centered teaching approach was effectively applied in the university. The coaches were viewed as senior staff experienced in teaching and would guide junior teachers with knowledge about use of student centered methods. This reviewed study was based on reviews and focus groups interviews while this study was embedded with a questionnaire, interviews, observations and focused group interviews.

Meanwhile, Antunes, Armellini and Howe (2021) studied beliefs and engagement in an institution-wide pedagogic shift. Basing on qualitative method revealed that engagement in PDP highly promoted pedagogical shift of academic staff away from the traditional methods to blended learning methods with high emphasis on electronic methods. Also the beliefs of teachers have changed through engaging in professional development programmes thus adapting online

pedagogical training methods. Besides this study was qualitatively done while this current study be quantitatively done with use of more statistical analysis techniques.

Cook-Sather (2020) studied respecting voices and how co-creation of teaching and learning can support academic staff following a qualitative methodological approach revealed that through training co-creative works, teachers acquired and were positioned to use pedagogical approaches more friendly to learners at a given moment. However, this study did not use situated learning and adult learning theory of Knowles as was done in this current study. Further, Esterhazy, Lange, Bastiansen and Wittek (2021) studied moving beyond peer review of teaching and collegial faculty development. Results showed that through collegial faculty development there are high chances for university faculty to teach more using collegial and peer methods. This allows to vary the methods of teaching especially when academic staff work as a team. Thus, professional development empowers academic staff to teach using peer methods away from the traditional individual teaching approaches. However, this study rotated on one method of teaching (peer review as influenced by professional development) while this current study had other methods like online teaching methods.

Mahmood (2020) studied instructional strategies for online teaching in Covid-19 pandemic. Findings from this study showed that online instructional methodologies were to a large extent challenged by inflexible teaching and assessment policies, slow rate of getting feedback from students and finally, teachers and students low readiness to adapt to these online instructional methodologies. This presupposed that these teachers were lucking adequate training. However, PDP influence on the same was not established as was the case with this current study.

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The previous review was almost in agreement with Lessing and Witt (2007) who studied the value of continuous professional development of teachers. Using data from the self-administered questionnaire that was descriptively analyzed, Findings showed that continuous professional development of teachers had a direct relationship on pedagogical approaches used by teachers. As teachers train, they acquire new ways of teaching away from those already known. However, the current study did not have descriptive data alone, it was also based on inferential results. In

another empirical study, Qablan, Mansour, Alshamrani and Sabbah (2015) studied the impact of professional development in Saudi science perspective. Using quantitative technique, responses revealed that 87% of the teachers who had participated in CPDP programs learned about instructional strategies better in teaching of science. For instance, role play, cooperative and project learning were acquired from attendance in PDP leading to their use in instruction. However, this study was more of a descriptive analysis while this current study applied inferential statistics.

In more less the same way, Vereijken and Rijst (2021) studied subject matter pedagogy in university teaching with specific on how lecturers use relations between theory and practice. Results revealed that orientation towards teaching is relevant to teaching subject matter. Also results revealed that pedagogy is informed by specific subjects rather than the discipline. Nonetheless, Kim, Raza and Seidman (2019) showed that competences such as self-awareness, collaboration and critical thinking continue to be emphasized as competences of sustainable development evolving from 21st century teaching pedagogies. Besides these 21st century pedagogical practices narrowly view the study concern of PPs and yet this current study had it in a broader perspective.

In addition, Tan, Choo, Kang and Liem (2017) studied educating for twenty-first century competencies and future ready learners in Singapore and showed that many of the commonly referenced 21st century pedagogical practices include creativity, critical thinking, collaboration, communication, social-emotional and lifelong learning aptitudes such as self-concept and resilience. However, these 21st century learning pedagogies were not studied in relation to

professional development practices as this current study did. Whereas, Jansen and Merule (2015) studied teaching practice in the 21st century with focus on emerging trends, challenges and opportunities. Findings teachers revealed their lack of confidence in digital technology skills and this can implicitly affect their attitudes towards the use of digital technology in their teaching. This presupposes that these teachers training was on adequate when it gets to use of digital pedagogies. Besides, this study did not benefit from ALT and SLT as will the case with this current study.

Likewise, Jacobson-Lundeberg (2013) studied pedagogical implementation of the 21st century skills. Results revealed that embedding 21st century skills such as communication and collaboration is necessary and timely, meeting the requirements of the CCSS English – language arts listening and speaking standards are essential components in teaching and learning effectiveness. The key finding also revealed that communication skills lead into the more sophisticated, complicated skills of critical thinking, problem solving stress management and risk taking. Hence communication holds immense power in development of successful teaching. It was also revealed that communication skill allows collaboration to occur during teaching and learning. At the time communication allows credibility to be offered as a sign of effective teaching. Alternatively, these findings were not established in a developing world context as this current study did.

2.3.4 Professional Development Programmes and classroom management practices

Shah, Madhavaram and Laverie (2019) revealed that professors need to have skills to create an environment that encourages student learning. Such an environment should be noise free to allow

learners concentrate for effective learning to occur. Alternatively, this was an assertion not a field study finding. Alghamdi (2017) studied the relationship between lecturers' professional competence, teaching environment and classroom teaching practices at Al-Baha University and with use of Pearson correlation and regression analysis technique revealed that class size, support from faculty and teaching environment were significant determinants of classroom teaching practices among lecturers in the university. However, the extent to which these classroom management practices were directly influenced by professional development training had not been established as was the case in the current study.

In another empirical study, Vilppu, Sodervik, Postareff and Murtonen (2019) studied the effect of short online pedagogical training on university teachers' interpretations of teaching-learning situations and with use of qualitative techniques established that online training programmes have a potential to affect participants' interpretations of teaching and learning situations especially when participants are not very experienced in teaching. However, this study was not in a developing world context as this current study will be in Uganda (Makerere University). Ezati et al. (2014) indicated that identified challenges of managing large classes assessment and grading of students. However, these findings were based on cascade, transitional and award bearing models not on situated learning theory which the current study adopted.

Vanassche and Welchtermans (2015) revealed that collaborative learning in PDP and collaborating with a trained researcher who has the necessary theoretical and technical - methodological expertise can help in finding that the distance in pedagogical applications in research and teaching activities are improved. Meanwhile, this observation was not guided by

adult learning theory and situated learning theory as this completed study did. On the other hand, Lankford (2010) examined the pedagogical content knowledge and practice of experienced secondary biology teachers for teaching diffusion and osmosis. Findings revealed teachers lacking professional skills could not effectively teach osmosis and diffusion. However, those teachers who were provided with professional development trainings could teach it better. Besides this reviewed study was limited on only one topic from Biology while this study covered all lecturers handling various disciplines in CHUSS and COVAB.

Klink, Kools, Auissar, White and Sekata (2017). Development of the Dutch teacher educators has been shifted from teacher personal educators focus to personal classroom management capability, personal abilities to grow as teacher and person in the management of the course. Whereas Soine and Lumpe (2014) studied measuring characteristics of teachers' professional development and with use of confirmatory factor analysis revealed that active learning in professional development programme enabled teachers to effectively management students' assessment. Besides this current study did not use confirmatory factors analysis.

Liu and Liao (2019) showed that statistically PD programme and one's active participation in the same, helps to bold teacher's effective classroom management. Instruction and student's engagement classroom instruction. However, this was not an empirical finding arrival at with use of mixed data analysis methods. Similarly, Kafyulilo (2014) indicated that participating activity in professional development programs is virtue for good time and course management, good student's assessment, organized instructional practices, good attention to learners' problems and

risk taking abilities. Besides this finding was base desktop review of documents while the currents study was empirical with field findings.

Desimone, Porter, Garet, Yoon and Birman (2012) showed that professional development experiences and the duration of professional development training offers academic staff with knowledge of classroom management strategies especially in classes where students are mature. Munir, Jabeen and Nadir (2021) studied continuous professional development and performance of primary school teachers and showed that interaction with student and classroom management remained fair in the early months of April, May and June. It slightly increased and became good in October. Meanwhile, this study was descriptively analyzed while this current study was inferentially analyzed.

Wolf (2020) studied classroom management in lieu of teachers' experiences and established that novice teachers have limited hours of teaching experience. Hence, they need more in-service trainings to acquire more skills in classroom management. Recognizing the differences in classroom management approaches novice teachers ought to be supported through professional development for the career-long process linked to the teaching experiences in classroom. However, this study was not in a developing world context as the current study was in Makerere University in Uganda. In another empirical analysis, Noben, Deinu, Ark and Hofman (2020) studied how professional development programme was related to the development university teachers, self-efficacy beliefs and teaching conceptions. Results showed that through professional development university teachers acquire more skills of managing students in

classrooms. As mature students, this professional development equips teachers with knowledge of dealing with them. However, this study was qualitatively done.

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Likewise, Mahlese (2014) studied the influence of a continuing professional development program on the classroom practices and professional development of technology teachers. With use of data collected from semi-structured interviews, classroom observations and document

analysis. Findings showed that even with the provision of PDP, there was still lack of effective classroom management among technology education teachers. This study was however qualitatively done while this current study was more quantitatively done.

2.5 Summary of Gaps

In the reviewed literature there were gaps identified. These gaps were methodological, content, contextual, theoretical and empirical. For instance, on the first objective on Professional Development Programmes and CKP, a study by Biku, Demas, Woldehawariat, Gatahun and Mekonnen (2018) was purely qualitative while the current study used some quantitative information. Also the earlier reviewed study did not have dimensions like content focus, active learning, collective participation, coherence and duration related on pedagogical practices as was the case with this current study. On the second objective about PDP and COP one of the reviewed studies Esterhazy, Lange, Bastiansen and Wittek (2021) did not use adult learning and situated learning theories as was the case in this current study.

On the third objective about PDP and KPA one of the reviewed studies by Emilly et al. (2017) was not an empirical study with field findings as was the case with this current study. On the last objective on the influence of PDP on CMP a study Wolf (2020) was carried out in a developing world context differing from the current study which was carried in Makerere University Uganda a developing country.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This section presents the study philosophical orientation, research approach, design, population, sampling strategies, data collection methods, instruments, procedure, data quality control, data analysis and ethical considerations that were considered in the study.

3.1 Philosophical Orientation of the Study

The study was guided by Auguste Comte's post-positivism philosophy whose ontological view is that reality is neither purely objective nor purely subjective in nature. It is rationalistically determined, that is, at times it is objective whereas at other times it is subjective, depending on a viewer's feelings, perceptions and predetermined assumptions and individual judgments (Hammersley, 2019). Thus, for post-positivism, reality lies between a continuum of objective and subjective reality. Reality being both objective and subjective implies that reality is on the one hand out there in its original form, and on the other hand can be constructed basing on one's constructive view. This philosophical stance was adopted in the study to represent the different perspectives and views of the study respondents and participants regarding what and how PDP influence PPs of academic staff in CHUSS and COVAB at Makerere University. Basing on post-positivism assumption that reality is within a continuum between positivism and non-positivism/Interpretivism. The epistemological view of the current study was that to arrive at this objective and subjective truth, a survey as the main research method was complemented with minor qualitative method.

The cross-sectional survey design used a consistent benchmark of indicators of effective PDP to collect aggregated quantifiable data from two colleges, on the variables of interest simultaneously at a single point in time. This enabled the determination of variations and associations between the study variables, in terms of how PDP influence PPs of academic staff. Minor qualitative methods such as the interviews, observation and FGDs enabled the triangulation of data collection methods. It also allowed getting a complementary view of the study concepts, data patterns, and explanations of the association of the study variables.

On one hand, qualitative data was presented verbatim, as it was collected from the field. Thus, the current study had it that reality about how PDP influence PPs is out there in its original form and this truth cannot be measured with pre-defined instruments, but should be constructed and presented in the participants' voice. Qualitative data was constructively collected on participant's interpretations of how PDP influence PPs of academic staff. The need to collect data from more than one variable, two colleges (CHUSS and COVAB), and a cross-section of respondents at a single point in time, to establish the influence of PDP on PPs, necessitated use of a cross-sectional survey. The study was guided by theories from its inception and development of hypothesis. As a rule of the thumb, all studies with hypothesized aspects are more inclined to a post-positivist paradigm. Likewise, to arrive at the subjective reality qualitative data collection methods were used to collect qualitative data for triangulation purposes and the associations of the variables of the quantitative data, as well as provide scenarios of how PDP influence PPs of academic staff, hence the use of a post-positivist paradigm.

3.2 Research Approach

This study adopted an embedded research approach with a dominant quantitative and minor qualitative approaches. An embedded research approach was selected in order to broadly examine the Professional Development Programmes and their influence on academic staff pedagogical practices. This embedded research approach was applied in the sense that it was more quantitative hence in this line it involved use of the cross sectional survey design.

As an embedded approach, the study involved use of limited qualitative approaches. This was considered essential as a way of triangulating results. The main unit of analysis for this study were the academic staff in the two colleges because these are the ones responsible for implementing the pedagogical practices in the university. The two colleges at Makerere University that is to say; CHUSS and COVAB were selected for the investigation using stratified random sampling. Basing on Reports like (Macgregor Report, 2010; Ezati et al., 2014; Omaswa, 2014; Ssempebwa & Bakkabulindi, 2016; Nabaho, Aguti & Oonyu, 2016; Rwendeire Report, 2017; NCHE, 2018; NCHE, 2020) there was a serious dilemma in regard to academic staff PPs. However, these reports are problematizing PPs at Makerere University in all colleges, but this study went an extra mile to use simple and stratified random sampling to select the two colleges where this study was done.

In addition, two strata were created with one representing humanities and the other sciences in order to have a fair representation of the participants' experiences, views and opinions. After this categorization, simple random sampling technique was adopted in order to give equal chances/representation of all the colleges. Within simple random sampling, in each stratum,

names of colleges were written on different papers and after which the researcher randomly picked one paper using the lottery method from each stratum and the name that appeared on that paper picked was the college that was selected from that strata.

3.3 Research Design

This study employed a cross-sectional survey design. This design was considered more appropriate as it helped collect data on several variables from a large cross-section of respondents within a limited time frame and at one point in time. The cross-sectional survey design was used considering a cross section of respondents/participants like the academic staff, administrative academic staff, administrative staff and undergraduate students. Focusing on academic staff, as the main unit of analysis by considering their demographic aspects like gender, teaching experience and rank/designation was selected as these suggest that they have different perspectives when it gets to use of appropriate pedagogical practices. On the side academic administrative staff, a cross-section of college principals, deans, heads of department and course coordinators were considered to capture their diverse views on PDP and academic staff pedagogical practices.

A cross-sectional survey was as well done on administrative staff by considering their positions in university administration that is say, Deputy Vice Chancellor Academic Affairs (DVC AA), Director Human Resource and Director Quality Assurance. The justification for the cross-section of administrative staff is that these are the policy makers and pedagogical leaders in terms of planning and organisation of PDP in the university. For the case of undergraduate students, a cross section of students was determined basing on their undergraduate programmes, their

gender and year of study. This was accounted for in the sense that all these different categorizations had different views and experiences on how PDP influence academic staff pedagogical practices in CHUSS and COVAB at Makerere University. Creswell (2009) advises that the cross-sectional survey design is used majorly on a big number of respondents within a limited time frame. Thus, with a big number of early career academic staff (Assistant Lecturers and Lecturers) in the two colleges of CHUSS and COVAB.

3.4 Study Population

The study population consisted of 356 Academic Staff at different ranks of Professors, Associate Professors, Senior Lecturers, Lecturers and Assistant Lecturers from CHUSS and COVAB; Administrative Staff (Deputy Vice Chancellor Academic Affairs, Director Human Resources, and Director Quality Assurance), Academic Administrative Staff (College Principals; Deans, Heads of Department, and Course Coordinators) and undergraduate students in CHUSS and COVAB at Makerere University. Putting it succinctly, the Academic Administrative Staff (AAS) were considered for this study because they all have contact with the academic staff and they are in position to evaluate academic staff pedagogical practices. Besides, most AAS have teaching experience themselves or still have some teaching loads in some Colleges. Whereas on the other hand, the administrative staff were considered in the current study because they are the policy makers of the university, hence making them more informed of how the policies related with teaching and learning are undertaken at different colleges. Undergraduate students were considered in the study because these are the ones who interact with academic staff during the teaching and learning process putting them in position to know the pedagogical practices they apply during teaching.

Makerere University is made up of nine Colleges with one independent school of law however, this study was conducted in two colleges that is CHUSS and COVAB. These two Colleges were purposively selected due to the fact that academic staff were reported as having not effectively applied appropriate pedagogical practices as expected by the university (Nakabugo, 2008; Ezati et al., 2010; Omaswa, 2014; Ezati et al., 2014; Nabaho, Aguti & Oonyu, 2016; Ssempebwa & Bakkabulindi, 2016; Rwendeire Report, 2017; NCHE, 2020). The pedagogical practices at CHUSS and COVAB were not effectively done especially in terms of content knowledge and course organization, whereby lecturers were relying on yellow lecture notes and hardly reviewed their course units (Rwendeire Report, 2017; NCHE, 2020). In terms of knowledge of pedagogical approaches, some of the academic staff use traditional and authoritarian methods they are lacking adequate knowledge of what they teach, delivering content using the conventional teaching approaches which seem not to align with the current trends. Most of the academic staff seem to be reluctant to use appropriate pedagogical practices so as meet the changing trends in higher education.

In terms of selecting the science college (COVAB), the same reports indicated that sciences were being taught in a theoretical manner (NCHE, 2014; Rwendeire Report, 2017). This was a clear manifestation of ineffective pedagogical practices. Therefore, basing on the reports, I was able to consider the two colleges to represent the rest of the colleges at Makerere University in the study.

At the same time, these two colleges (CHUSS and COVAB) have unique characteristics in terms rank of academic staff, number of senior and junior staff. Therefore, their pedagogical practices would be informed by the Professional Development Programmes undertaken. The population of

academic staff in COVAB and CHUSS as per the available information from the Directorate of Human Resources Makerere University is provided in Table 3.1:

Table 3.1: Study Population, Sample Size and Sampling Strategy

Category	Population	Sample Size	Sampling strategy	Response Rate
CHUSS	262	152	Stratified Random	109(71.7%)
COVAB	94	76	Stratified Random	73(96%)
Total	356	228		83.9%

Source: Makerere University Annual Report (2018)

The population distribution in Table 3.1 shows that academic staff in CHUSS were 262 and for COVAB they were 94 as of 2018. In total the study population for academic staff the main unit of analysis in the current study were 356.

3.5 Sample Size determination

The sample size of academic staff was 152 from CHUSS and 76 from COVAB. This sample size was based on the Krejcie and Morgan's Table for Sample Size Determination (Krejcie and Morgan, 1970; Ref. Appendix 10). This was because the table provides sample sizes for finite populations as was the case of this study. However, the return rate was 109 (71.7%) and 73 (96%) of academic staff from CHUSS and COVAB respectively. On average the total response rate in the study was 83.9% meaning that it was justifiable to rely on the collected to enable data analysis to be carried out.

The study sample size for academic administrative staff involved six heads of Department from CHUSS, two heads of department from COVAB, one Dean from COVAB, two Deans from CHUSS, one deputy principal from CHUSS and COVAB respectively. In total the academic administrative staff were 13. These academic administrative staff were considered representative since they formed part of the study participants for in-depth interviews. Also the study had administrative staff (university management) who comprised of Deputy Vice Chancellor Academic Affairs, Director Quality Assurance and one official from the Makerere University Human Resource Staff Development Department. In addition, academic staff participants were categorized basing on their ranks and gender. However, since these were interviewed in a focused group, each college was represented by 8 participants. Academic staff participants were involved in the study to allow corroborate results collected from the other respondents and participants. This allowed to complement the quantitative and qualitative results.

Also the study involved student's participants, these student participants were in groups of eight undergraduate students for each of the colleges that is to say; COVAB and CHUSS respectively. These were mainly second and third year undergraduate students who were selected basing on their gender and course programmes. The study sample size for Academic Administrative Staff (AAS) was determined according to the number of departments in the colleges. However, for the Administrative Staff (AS) of the university were represented by four members to allow thick description of the qualitative data.

3.6 Sampling Techniques

The study used two sampling techniques that is stratified and purposive sampling techniques as discussed in the following sub-sections.

3.6.1 Stratified Random Sampling

The main sampling strategy was stratified random sampling strategy. Stratified random sampling is a process in which certain subgroups, or strata, are selected for the sample in the same proportion as they exist in the population (Fraenkel & Wallen, 2008). Stratified sampling technique with sample size proportionate to stratum size, was applied on academic staff. This was first done basing on the two colleges (COVAB and CHUSS) with CHUSS having a slightly higher number of academic staff as compared to COVAB. Further, in the respective colleges academic staff were stratified basing on their ranks for fair and proportionate representation in terms of appropriate use of pedagogical practices. For instance, ranks ranging from teaching assistants, assistant lecturers, lecturers, senior lecturers, associate professors and professors formed categories of academic staff that were sampled.

3.6.2 Purposive Sampling

This study used purposive sampling as a second sampling strategy. Purposive sampling technique was used on academic administrative staff, administrative staff and undergraduate students. Administrative academic staff were purposively selected because they monitor, supervise and manage academic staff thus they were considered to have adequate information about how academic staff use appropriate pedagogical practices. Administrative staff were selected purposively depending on the responsibilities they hold on academic staff in the university hence were deemed relevant to provide confidential information on how academic staff teaching mandate is fulfilled. The study as well purposively sampled academic staff participants in the focused group discussion to triangulate on findings provided in the self-administered questionnaire. This was done since the self-administered questionnaire did not give

them a chance to exhaustively give their views on the level of agreement and disagreement on the closed ended items.

Undergraduate students of the two colleges were sampled purposively in the focused group discussions because these are the beneficiaries of the pedagogical practices of academic staff. Furthermore, these undergraduate students were purposively selected that is to say; male and female year two and year three students doing different course programs and these formed a FGD of eight individuals since they interface with academic staff on almost a daily basis. Therefore, these students were deemed as having adequate knowledge on the pedagogical practices of academic staff inside and outside the classroom.

3.7 Data Collection Methods and Instruments

The study involved use of primary and secondary data collection methods. These are provided in the following sections.

3.7.1 Primary Data

Primary data collection methods involved; a survey questionnaire, in-depth interviews, focused group discussion and observation methods as elaborated in the following sub-sections.

3.7.1.1 Survey Questionnaire

A survey method was used to collect data for this study. The survey method was considered most applicable given the fact that it allows collection of data from a big number of respondents like that of academic staff for generalisation purposes. The corresponding data collection tool to this survey method was a Self-Administered Questionnaire which was developed basing on the indicators of pedagogical practices and Professional Development Programmes that were

generated from the literature study. In the construction of instruments, the aspects of Situated Learning Theory; participation and identity were considered under active learning and collective participation while practice as a theoretical construct covered the pedagogical practices. Meanwhile Adult Learning Theory in line with Desmond and Garet (2015) conceptualization of PDP had its constructs covered as provided below; self-directedness and internal motivation were covered under active learning and collective participation, past learning experiences and orientation to learning were covered under content focus. The Adult Learning Theory had a construct on practical reasons for adults to learn. This was covered under the pedagogical practices of academic staff which were the main concern for engaging them in PDP. From the afore mentioned theoretical constructs a self- administered questionnaire (SAQ) was designed with key section of the dependent and independent variables. The SAQ contained several items that were distributed among the four indicators of pedagogical practices. Section C of the SAQ with subsections, that is to say; Section C1 on Content knowledge; Section C2 on Course organisation; Section C3 on Knowledge of pedagogical approaches and section C4 on Classroom management. It also had Section, B on Professional Development Programmes. The constructs of this survey were closed-ended in nature. Items in this questionnaire were adapted from several instruments with reliabilities and validities above 0.7 (Pesce, 2015; Qureshi, 2016; Diaz, Gonzalez, Jara-Ramirez, & Munoz-Parra, 2018). The self- administered questionnaire had items Likert Scaled ranging from 1 = Strongly Disagree, 2 = Disagree, 3 = Non-committal, 4 = Agree and 5 = Strongly Agree. This self-administered questionnaire was used because academic staff in the colleges where the current study was done were adequately literate thus putting in position to read, interpret questions and give responses without external interference. Also given that the

academic staff were many in number, a SAQ allowed distributing these questionnaires within a limited time frame.

3.7.1.2 In-depth Interviews

In-depth interviews were the second primary data collection method. In-depth interviews were for two categories of participants namely; academic administrative staff and administrative staff Under academic administrative staff in-depth interviews were conducted on College Principals, Deans, Heads of Department and Course Coordinators in CHUSS and COVAB at Makerere University. On the side of administrative staff in-depth interviews were conducted on Deputy Vice Chancellor Academic Affairs, Director Human Resources and Director Quality Assurance at Makerere University.

The study was set out to interview two Principals, four Deans, 17 Heads of Departments and 22 Course Coordinators from CHUSS. However, the actual interviewed participants in CHUSS were one Deputy Principal, two Deans, four Heads of Department and four Course Coordinators. Meanwhile, from COVAB the study set out to interview two Principals, two Deans, six Heads of Department and 20 Course Coordinators. However, the actual interviewed participants in COVAB were one Deputy Principal, one Dean, three Heads of Department and five Course Coordinators. In total the in-depth interviews in CHUSS and COVAB were 21 in number.

The corresponding data collection instrument were the interview guides. Each of the study objectives and main concepts of the independent and dependent variables/concepts had guiding open ended questions. First, I introduced myself to relevant authorities in the two colleges. Secondly, I sought for permission from colleges authorities to carry out interviews with academic staff and undergraduate students. Thirdly, I also requested to have someone to

introduce me to each of the categories of participants from the two colleges. Lastly, after this introduction the actual interview opening protocol included thanking each participant for agreeing to share their experiences, views, story, time, and commitment to the study. The majority of the study participants were delighted to contribute to the study. The opening question was related to background information such as their designation, field of study (or major) and university teaching experience.

The discussion flowed into the area of the topics which was shared in the welcome message (see Appendix 2 & 3). As the interviewee's (study participant) narrative began to unfold, the interviewer further engaged the discussion by remaining flexible with the flow, open-minded, and ethical to help foster a rich conversational experience. These are the types of approaches that

helped the interviewer gain a deeper understanding of the unknown phenomenon. After the interview, the interviewer expressed gratitude to each participant and informed them about follow-up measures which allowed them the opportunity to review their input and engage in more discussion about their experiences. The initial interviews took 30 to 40+ minutes. The interviewer and interviewee reconnected after the first interview for purposes of member checking, clarifying, or expanding upon points raised in the first interview. Requests were honored to add new information or make corrections to the transcript.

Also as these interviews and discussions were going on the Interviewer would be writing down and recording key responses. In all the interview sessions the order was administrative staff first, followed by academic administrative staff, followed by academic staff and undergraduate students.

The second phase of interviews expounded on fewer areas that added to deeper narratives and analysis. It provided an opportunity to reflect on the first interview and then re-visit topics to make meaning of the experience. All the participants spoke with more depth and passion about their thoughts and life/collegiate experiences within the pedagogical practices of academic staff.

To manage the interview process, a research tracking chart (see Appendix 7) was developed to include participant research information. The chart served as an effective planning and tracking tool. This chart helped the researcher to manage timelines, track accounts, and follow the progress of each participant until the conclusion of the study. This chart also included a field for recording my own observations of the interview, which adds context to the interview transcript and aid in meaning-making.

The interview guide was used to get deeper perceptions participants had on the study concepts. Each interview was audio-taped and transcribed verbatim. In-depth interview guides were used to allow the researcher have an extended discussion of the study concepts with the key informants hence getting detailed responses that were not captured in the SAQ (Boyce & Neale, 2006). Likewise, the interview guide allowed participants to debate on issues under investigation which provoked deeper understanding of the influence of PDP on academic staff pedagogical practices.

3.7.1.3 Focused Group Discussion

A focused group discussion was the third data collection method. This FGD was targeting two categories of participants namely; academic staff and undergraduate students in CHUSS and COVAB at Makerere University. In of the two colleges studied one FGD was held with academic staff and undergraduate students hence giving a total of four FGDs. The corresponding

tools were Focused Group Discussion guide for academic staff and undergraduate students at CHUSS and COVAB. These FGD guides comprised of eight members for each category.

The eight members in the FGD of academic staff were purposively selected basing on their teaching experience and gender. Whereas on the side of undergraduate students the selection of the FGD participants was also purposive based on undergraduate programmes, gender and year of study. The data that was acquired in the FGD comprised of number of teaching methodologies, the extent to which academic participate in PDP, content focus in PDP, frequency of PDP, the knowledge of course organization, teaching approaches and classroom management practices. Each objective and the major section of the key study concepts had open ended items pertaining to it. Participants would be asked questions while the researcher was recording and taking down key responses. This tool was used as it allowed participants to discuss the issues under investigation hence getting detailed responses to complement the quantitative data. It also allowed analyse the discourse and arguments posed by the different participants especially by discovery of paradox, contradiction, and new perspectives about the study concepts under investigation.

3.7.1.4 Observation

Another primary data collection method was observation. This method was used to observe key issues under academic staff pedagogical practices. Its corresponding tool was an observation checklist. This instrument had specific issues observed during the teaching learning processes. Observed pedagogical practices included content-based activities, methods of teaching, teacher-student interactions, student-student interaction, time management and classroom control. Before actual observation, the researcher had to identify and inform heads of department to ascertain the lecturers handling different course units, their venue and timetable. These

observations were conducted right from the beginning of the lecture up to the end. The observation checklist was used in the current study as it allowed data collection without interfering with the study respondents.

The researcher bias was controlled by the researcher introducing himself as an academic staff in the College of Education and External Studies at Makerere University doing a study on PDP and PPs in CHUSS and COVAB. Also the observation checklist was objectively done following the guidelines to enable the researcher to observe the pedagogical practices of academic staff so as to make a report on issues under investigation. This report helped to deal with the researcher's bias before, during and after the observation of the participants. On the other hand, the researcher's observation effect was controlled by the researcher making several visits in the colleges understudy. These visits were in form of attending several lectures conducted by different lecturers to create familiarity and comfort on the side of the participants. In so doing the participants felt at ease without altering their attitudes and perceptions toward the presence of the researcher in their lectures.

3.7.2 Secondary Data

Secondary data collection methods/instruments were used for effective triangulation. This was mainly done using a document review method/instrument.

3.7.2.1 Document Review Method

A document review was the only method of secondary data collection in the study. This method was considered relevant to capture the already established information on PDP and PPs. Under this method the corresponding data collection tool was a document review checklist. Documents like Course outlines, Human Resource Manual, Reports, Curriculum Review Minutes and

Departmental Reports and minutes related with Professional Development Programmes and academic staff pedagogical practices were reviewed. The Human Resource Manual provided information on number of academic staff in the university, promotion procedure, teaching load and classroom size. Departmental reports were used to obtain detailed information on course allocation to different categories of academic staff, teaching resources/aids and support offered. Visitation committee reports were used to obtain detailed information on methods of instruction and teaching competencies of academic staff. Curriculum Review minutes were used to show content approved in each course. This helped to ascertain the influence of Professional Development Programmes to academic staff pedagogical practices as they already had information on the extent to which PDP are offered and also on the extent to which academic staff were effectively using appropriate pedagogical practices. Also since this information is already established, it was considered more authentic and gave a true picture of prevailing conditions as regards PDP and PPs in CHUSS and COVAB at Makerere University.

3.8 Data Quality Control

In order to ensure quality of the research instruments, the study established validity and reliability of these research instruments. This was done as in the following ways:

3.8.1 Validity

To ensure internal validity, the items in the instruments were adopted from already made tools with validities and reliabilities above 0.5 the standard alpha value (Pesce, 2015; Qureshi, 2016; Diaz, Gonzalez, Jara-Ramirez & Munoz-Parra, 2018). The self-administered questionnaires' validity was established with the use of content validity method. Here content experts that is to say the supervisors were offered with the instruments set to rate items as either relevant or irrelevant. After, a content validity index was computed using a formula where

CVI = Numbers of items rated relevant = 0.5
Total number of items

CVI = 47/53

CVI = 0.88

The content validity index value computed 0.88 greater than 0.7. This meant that the instrument was internally valid to give responses expected in the study as suggested by Sarantakos (2005). Hence the researcher went on to distribute the questionnaires to the study respondents for data collection purposes.

In as far as external validity was concerned, this study ensured it through population validity, that is to say; all key characteristics of the study population (such as gender, teaching experience and rank) were included in the study's final sample. This enabled this study to generalize the findings from the sampled to the entire target population within CHUSS and COVAB at Makerere University.

Validity of qualitative instruments was ensured through asking similar questions at different intervals to check the credibility of data. However, a number of interviews that is; in-depth interviews, focused group interviews, and observations were made to ascertain the credibility of data. Transferability of qualitative data was established through giving detailed descriptions, narratives and context of findings with reasons accounting to why PDP and PPs exist the way they are in the two colleges under investigation. This was done on all dimensions of the aforementioned concepts. For dependability of data' all qualitative research protocols were clearly followed. For instance, focused group discussion rules like those pertaining to a minimum of eight number of participants. Likewise, when it came to selection of academic staff

participants for the FGDs, the study considered; gender, teaching experience and rank/designation to have balanced views. On the other hand, the FGD for undergraduate students also considered the recommended minimum number of eight participants with due consideration of their gender, year of study and courses/undergraduate programmes offered in the two colleges under investigation. In addition, other protocols like the observation protocols which oblige the researcher to introduce himself and to inform the participants the purpose of the study beforehand were strictly adhered to. Even before the in-depth interviews, the participants were informed in advance, the purpose of the study and the duration for the interviews. Thus, a high degree of dependability of qualitative data was established.

3.8.2 Reliability

Reliability of instruments was established first by adopting questions with reliability values above 0.6 or 0.7 which indicates an acceptable level of reliability, and 0.8 or greater a very good level. However, the self-administered questionnaire was also subjected to pilot-test/pre-test analysis. A number of 10 instruments were piloted to academic staff in College of Health Sciences and in the School of Law at Makerere University. Data obtained was entered into SPSS programme of the computer where Cronbach Alpha Technique was used to ascertain whether the various sections of the key concepts were reliable. Findings arising from this are provided in Table 3.2:

Table 3.2: Cronbach Alpha Results on the different sections of the questionnaire

Concepts/Variables	Constructs/ dimensions	No. of items	Reliability
Concept One/dependent variable: Pedagogical Practices	Content Knowledge	4	0.814
	Course organisation	10	0.749
	Knowledge of Pedagogical approaches	12	0.784
	Classroom management	8	0.783
Concept Two/Independent variable: Professional Development Programmes	Professional Development Programmes	19	0.883

According to Table 3.2 the computed alpha values for the different sections of the questionnaire were above 0.7. This meant that the instrument was highly reliable to study academic staff pedagogical practices and Professional Development Programmes. Hence it was distributed to the study respondents for data collection.

Reliability of qualitative data was done by interviewing three study participants one from the academic administrative staff, another from the administrative staff and two undergraduate students from different colleges at two different intervals. This data was compared to ascertain the extent to which the findings were credible as way of establishing dependability and transferability of the results acquired at two different intervals. The magnitude to which the findings were similar at the two different intervals of interviews conducted allowed to ascertain the trustworthiness of the qualitative findings. Therefore, the results revealed that the participants' views did not vary so much and were consistent in the analysis of the study concepts. This signaled that interview guide and FGDs instruments were consistent and produced reliable data.

3.9 Study Procedure

Upon the approval of this research proposal by the panel, testing for reliability and validity of study instruments was done. Secondly, an introductory letter was sought from College of Education and External Studies specifically from the Dean of School of Education at Makerere University to introduce the researcher before the academic administrative staff, administrative staff, academic staff, and undergraduate students of CHUSS and COVAB at Makerere University. In addition, the researcher wrote a personal introductory letter requesting AAS, AS, and undergraduate students to give primary data and required responses. Afterwards, two research assistants from Makerere University were recruited and trained to help distribute questionnaires to the respondents. As research assistants were distributing questionnaires to the respondents, the researcher was actively making interviews with academic administrative staff, administrative staff, academic staff and undergraduate students. Finally, the questionnaires were collected back after two weeks. Thereafter, collected data was analyzed followed by writing of a final thesis ready for submission to graduate school for examination.

3.10 Data Analysis

Data analysis in this section was presented. This was done beginning with quantitative data analysis followed by qualitative data analysis as in the subsequent sub sections.

3.10.1 Quantitative Data

Quantitative data from the field was cleaned, coded and analyzed using Statistical Package for Social Scientists (SPSS Version 21). This program helped in the entering, editing, coding and processing of data. At univariate level, data was analyzed using descriptive analysis namely; frequencies, percentages, means, and standard deviations. Descriptive statistics were used to

summarize and describe the participant's responses regarding the extent of agreement or disagreement of the available PDP and academic staff pedagogical practices. Thereafter, Pearson's Correlation Coefficient Index and Simple Linear Regression Analysis Techniques were used to ascertain the influence of PDP on pedagogical practices. Pearson's Correlation Coefficient and Simple Linear Regression Analysis techniques were used in the current study because PDP and academic staff PPs were considered to be continuous and numerical in nature as variables, thus, to ascertain the influence of one continuous variable on another continuous variable Pearson's Correlation Coefficient and Simple Linear Regression analysis techniques were the most suitable techniques.

3.10.2 Qualitative Data Analysis

Qualitative data from the field was transcribed, coded according to themes and sub themes of the study concepts. Specifically, thematic analysis technique was performed to analyze set of words or phrases that would portray the knowledge and skills university academic staff have on PDP and pedagogical practices. Then, the researcher decided on the number of different concepts to be coded and how these concepts would be distinguished from each other. The researcher developed a coding pattern following the key themes and subthemes of the study conceptual framework. Qualitative thematic analysis is perceived as a systematic, replicable technique for compressing many words of text into fewer themes categories based on explicit rules of coding (Stemler, 2001).

Subsequently, thematic analysis was performed on qualitative data collected from in-depth interviews, document reviews, observations and focused group discussions. Hence the method of data analysis in this regard was thematic depending on how collected data matched with the concepts of the study conceptual framework (Schreier, 2014). Thematic data analysis was used

to eliminate unnecessary data that was not depicting Professional Development Programmes and pedagogical practices of academic staff as provided in the conceptual framework.

3.11 Ethical Considerations

The study was done in an ethical manner. Respondents in the university were requested to give data freely. Prior to data collection, the researcher introduced himself to relevant authorities in the university seeking authorization of the study respondents to give data. The selected respondents and participants were briefed about the intention of the study to ensure informed consent and participation. Anonymity of participants was done by allocating them pseudonyms/pen name. Cases of plagiarism were not acceptable in the study. Relevant authorities were acknowledged in the study through proper referencing of the entire work. Further, the entire instruments were anonymous to ensure confidentiality of findings. As an ethical issue, data collected was presented in its original form without any case of falsification. Findings were not altered to fit the researchers' demands and personal biases. At the same time the researcher acknowledged contributions from other studies. Since the study was carried out during COVID-19 period, SOPs were carefully followed. Sanitizer was frequently used before giving out and collecting questionnaires from respondents. Also the researcher ensured that face masks were frequently used when interacting with study respondents and participants. Further, during interviews social distancing was highly respected to avoid contracting the COVID-19 virus.

3.12 Study Limitations

The first limitation of this study was limited time and resources. Therefore, this study decided to take a cross-sectional survey design and this implied that the researcher collected the data at one

point at a time. Ideally this study should have been longitudinal in nature that is to say; offering pedagogical training to academic staff and establish its influence on their pedagogical practices over the years. However, due to the constraint of time and resources, the researcher undertook a cross-sectional study.

Secondly, this study relied on the findings from two colleges (CHUSS and COVAB) instead of the ten (10) at Makerere University. A survey of all colleges would be more interesting since this would allow this study to generalize the findings to other settings or situations. However, the study remained significant in the two colleges where it was done. This was because the study moved beyond a single college and incorporated two colleges at Makerere University.

Thirdly, some of the study respondents/participants were not cooperative enough due to the tight work programmes and schedules and fear of contracting COVID-19 virus. Therefore, some of the academic staff did not give adequate time to the self-administered questionnaires. This limitation was solved by explaining to them the intention of the study that is to say; the study was for academic purposes and its findings would be used to improve academic staff pedagogical practices. Also, all study respondents'/participants' views, opinions and responses were to be treated with utmost confidentiality. The academic staff that were skeptical of interfacing with the researcher due to fear of contracting COVID-19 virus were given assurance that the researcher would observe the Standard Operating Procedures (SOPs) in the process of distributing the questionnaires and interviews. In addition, the researcher gave assurance to the respondents/ participants that before interfacing with them, he/she had already undertaken a COVID-19 test. Also, other SOPs were followed such as sanitizing, wearing of face masks, and social distancing in the process of interfacing with the study respondents/ participants.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

In this chapter, presentation of findings obtained in the study, analysis and their interpretation is done. Also, in this chapter descriptive results on the independent variable (PDP) and the dependent variable (PPs) are offered. In the last part, findings arrived at from each of the study objectives are given.

4.1 Respondents bio-data

In this section, respondents' background information by gender, marital status, university teaching experience, college, qualification and designation are offered in Table 4.1:

Table 4.1: Respondents bio-data

Bio-data	Category	Frequency	Valid percent
Gender	Male	110	61.1
	Female	70	38.9
Total		180	100.0
Marital status	Single	28	15.6
	Married	142	78.8
	Others	10	5.6
Total		180	100.0
University teaching experience	Below 5 years	18	10.0
	Between 5 to 10 years	49	27.2
	Between 10 to 15 years	68	37.8
	20 years and above	45	25
Total		180	100.0
College	CHUSS	104	58.5
	COVAB	73	41.5
Total		177	100.0
Qualification	Bachelors degree	08	4.5
	Masters degree	67	38.1
	PhD	101	57.4
Total		176	100.0
Designation	Professor	3	1.7
	Associate Prof.	11	6
	Senior lecturer	41	22.5
	Lecturer	86	47.3
	Assistant Lecturer	34	19
	Teaching Assistant	7	3.5
Total		182	100.0

Descriptive results in Table 4.1 show that the majority of the study respondents 110(61.1%) were male compared to 70(38.9%) who were females. It suggests that distribution of the academic staff in higher education favors more of male which concurs with previous studies which shows that higher education is dominated more by male lecturers as compared to females in Uganda. The same finding depicts that the responsibility of teaching and learning lies more in the hands of male lecturers thus having more responsibility in terms of pedagogical practices.

Findings in Table 4.1 also show that the majority of the study respondents 142(78.8%) were married as opposed to 28(15.4%) who were single while 10(5.6%) were in the category of others. This finding implies that as mature and old people above 18 years, they are entitled to marry. Since many were married it means that they were likely to be more responsible when it gets to training and application of recommended pedagogical practices so as to improve students' learning.

Regarding university teaching experience, relative majority of the study respondents 68(37.8%) were having experience of between 10-15 years, followed by 49(27.2%) with experience between 5-10 years, followed by 45(25%) with experience of 20 and above years while 16(10%) were of experience below 5 years. These findings suggest that the academic staff's teaching experience was fairly high which might have acquainted them with pedagogical practices favourable in their career as academic staff.

Most of the study respondents 104(58.8%) were from CHUSS compared to 73(41.5%) from COVAB. This finding implied that most of the study respondents were from CHUSS a humanities college which has more student enrollment and more academic staff than COVAB a science college with fewer academic staff. However, the distribution of respondents would help give a fair comparison of how PDP influenced pedagogical practices applied by academic staff.

Findings in Table 4.1 also reveal most of the study respondents 101(57.4%) were PhD degree holders, followed by 67(36.1%) masters degree holders while 8(4.5%) were bachelors degree holders. These findings suggested that most of the academic staff were highly qualified to serve

as lecturers. Qualifications of academic staff suggest that they might have the ability to apply pedagogical skills (practices recommended) in execution of their teaching mandate.

Finally, most of the study respondents 86(47.3%) were at the rank of lecturer, followed by 41(22.5%) at the rank of senior lecturer, followed by 34(19%) at the rank of assistant lecturer. Least representation on designation was of 11(7.7%) for associate professors and 3(1.7%) for professors. These findings concurred with the current academic staff establishment in the university where majority are lecturers while other senior ranks are least represented. These findings implied that since majority of academic staff were at the rank of lecturer, it means that they were PhD holders as the university policy recommends and these are believed to have adequate skills in teaching and learning to enhance students' learning.

4.2 Description of the independent variable (Professional Development Programmes)

In this section, description of Professional Development Programmes/ programmes (PDP) is offered. PDP in the current study were studied using 19 quantitative items of the self-administered questionnaire and qualitative open ended items from in-depth interviews held with Academic Administrative Staff, Academic staff and undergraduate students. Furthermore, part of the findings were accessed from observations and document reviews. Descriptive results; namely: frequencies, percentages and means from the self- administered questionnaire are offered in Table 4.2:

Table 4.2: Frequencies, percentages and means academic staff on PDP

Items on PDP	SD	D	NS	A	SA	Mean	Std. Dev
In my department new academic staff are assigned at least one senior colleague for teaching and learning mentorship	5 2.7%	23 15.4%	50 27.5%	82 45.1%	17 9.3%	3.43	0.954
It is easy for me to obtain financial support from the university to attend international teaching and learning conferences/ pedagogical training conferences	10 5.5%	74 40.7%	74 40.7%	22 12.1%	2 1.1%	3.37	0.809
In my department, every newly appointed academic staff works hand in hand with colleagues for teaching and learning mentorship	10 5.5%	34 18.7%	64 35.2%	67 36.8%	7 3.8%	3.15	0.95
Prior to my lectures in a semester, I look for literature/ content that would add value to course content	31 17%	47 25.8%	22 12.1%	68 37.4%	14 7.7%	2.82	1.143
I invite a colleague atleast once in a semester to observe me while teaching to get feedback and improvement purposes	30 16.5%	42 23.1%	45 24.7%	60 33%	5 2.7%	2.25	1.008
I am invited by a colleague at least once in a semester to observe him/her while teaching for feedback and improvement purposes	51 28%	59 32.4%	48 26.4%	24 13.2%	00	2.47	1.22
I make an effort at least once in a semester to seek consent from a colleague to observe them while teaching to improve on my teaching and learning	35 30.6%	41 22.8%	31 17.2%	51 28.3%	2 1.1%	2.89	1.09
Content selection in PDP follows critical areas in my area of specialization	26 14.6%	36 20.2%	50 28.1%	63 35.4%	3 1.7%	3.10	1.17
Content selection followed in PDP meets training needs of academic staff	16 8.9%	35 19.6%	54 30.2%	66 36.9%	8 4.5%	2.91	1.17
Content followed in PDP is varied across topics I teach	20 11%	43 23.6%	31 17%	74 40.7%	14 7.7%	2.91	1.17
There is a strong link between the content offered in PDP and what I teach	25 13.8%	47 26%	38 21%	61 33.7%	10 5.5%	3.39	1.03
I received an invitation from the university directorate of human resources to attend atleast one teaching and learning seminar/ conference or workshop in academic year	9 5.1%	10 5.7%	16 9.1%	89 50.6%	52 29.5%	3.39	1.26
I am invited at least once in an academic year to attend a MUELE training	23 13.1%	23 13.1%	18 10.2%	86 48.9%	26 14.8%	3.52	1.26
I am invited by the department at least once in academic year to attend an AIMS training	14 7.7%	14 7.7%	39 21.4%	93 51.1%	22 12.1%	3.48	1.078
The directorate of human resources organises teaching and learning seminars for academic staff (pedagogical training courses at least) in academic year	13 7.2%	16 8.8%	50 27.6%	75 41.4%	27 14.9%	2.65	1.094
There is a policy recommending collective participation in PDP	37 20.4%	36 19.9%	66 36.5%	38 21%	4 2.2%	3.07	1.10
I receive invitations to participate in PDP organized in my department	25 13.7%	24 13.2%	54 29.7%	72 39.6%	7 3.8%	3.16	1.07
My department inducts newly appointed staff as a way of preparing them for teaching and learning activities	28 15.6%	36 20%	60 33.3%	50 27.8%	6 3.3%	2.83	1.101
I am consulted to contribute towards professional development organized in my college	30 16.4%	64 34.9%	62 33.9%	9 4.9%	18 9.8%	3.08	1.06

Key. In all the presentation on descriptive tables on the independent and dependent variables, strongly disagree and disagree were aggregated together, strongly agree and agree were also aggregated together while noncommittal remained intact for easy analysis and interpretation.

Findings in Table 4.2 reveal that most of the study respondents (54.4%) agreed that in their departments new academic staff are assigned with at least one senior colleague for teaching and learning mentorship compared to 18.1% who disagreed. These results suggest that senior colleagues are offered to academic staff for mentorship. This finding was supported by mean 3.43, which almost equal to code 4 agree. This finding hence meant agreement with offering of a senior colleague for teaching mentorship which may improve the way the faculty learn to acquire pedagogical practices needed on the job.

Participants were asked how active learning is catered for in PDP organized. On this question, study participants (academic administrative staff) indicated that active learning is catered for through preparing constant PDP and assessment forms provided to them at the end of the session. One of the academic administrative staff, participant 006 indicated that;

> *We ensure that all academic staff actively engage in PDP organized, questions are posed and academic staff are made to respond to them. Through these assessments made after each training programme offered, academic staff are made to fully concentrate and follow all that is taught. Through these assessments the concentration levels of academic staff are high. Indeed, this approach in PDP organized has helped academic staff to ensure that they follow what is taught in PDP.*

Similarly, another academic administrative staff 008 showed that,

> *Once we give someone a study opportunity abroad or within the university here, the first thing we do is to reduce the number of courses units one is supposed to teach. This is one of the strategies we use for them to fully concentrate on the study programme so that they*

can actively learn and achieve from the PD opportunity. This has benefited many of our young academic staff and it is within the policy that they should benefit from it.
Source; *academic administrative staff interview*

This finding implied that academic staff's active learning as a form of PD is catered for in the PDP organized in the university since academic staff are obliged to go and study away from work to achieve more.

In line with this, one of the Administrative staff 008 showed that,

We normally have to ensure that academic staff actively engage in the PDP to optimally benefit the university. So far, if we give a professional development opportunity to academic staff, it is restricted to a limited number of years. If these years exceed we have nothing to do apart from recalling back the offer, with punitive actions including termination of one's job employment offer and paying back the money that was offered.
Source; *academic administrative staff interview*

This further suggests that once one is offered a study leave opportunity one is obliged to be active and complete the course within the stipulated time.

Whereas participants from the lecturers' side showed that they also actively engage in professional development opportunities. For instance, academic staff participant 001 revealed that,

As an academic staff, I ensure that I attend atleast two professional training schemes/ programmes organized in my area of specialization. These PDP are considered essential and I feel I can't do my work diligently without them. Good enough they aid on one's curriculum vitae. After a training program, one is offered a certificate which certificate is used to enhance one's career life. Therefore, I actively attend and take key notice of all that is taught.
Source: Academic staff FGD.

This finding showed that even academic staff take PDP organized seriously and that they actively attend to all that is offered in these training.

Similarly, academic staff participant 003 showed that,

> *I at least attend one MUELE and AIMS training program organized in the university. I take these online teaching programs critical especially at this time when teaching and learning has been made more digital in the COVID era. Anything taught on these online platforms (MUELE) is not under estimated because it is now part and partial of teaching learning process.*
> *Source: Academic staff FGD.*

This finding shows that the study participants that is; academic staff, administrative staff, and academic administrative staff, consider putting more emphasis on the aspect of active learning which has to be embedded in online teaching and learning as a new normal. But all this can be achieved through PDP for academic staff. However, on the critical side some few respondents' showed that the aspect of active learning is interfered with during professional development training. One of these respondents showed that

> *When I went for professional training I was still offered work load on the time table. This interfered with my concentration on the study programme as I had to prepare learning materials for students and at the same time attend to the professional training course.*
> Source. *Academic staff FGD.*

This finding showed that the way how heads of department treat academic staff who are offered training opportunities in terms of workload limits their concentration levels which may at times deny them a chance to actively learn.

Most of the study respondents 45.7% disagreed that it is easy for them to obtain financial support from the university to attend international teaching and learning conferences (pedagogical training conference) as opposed to 13.2% who agreed. This finding suggests that respondents had confirmed that they receive financial support from the university to attend international teaching and learning conferences. The mean 3.37 was slightly below code 4 agree. This further implies that it is easy to receive financial support for academic staff to attend international

conferences. Also it meant that academic staff can actively, coherently and collaboratively learn at any time they want to improve on their pedagogical practices.

On the qualitative question about PDP academic administrative staff and administrative staff, were asked whether there is any staff development policy for teaching and learning in this university. Study participants on this question generally accepted that there is professional development policy in Makerere University. This policy according to participants has benefited many academic staff as they get chances to study while at campus and outside the university. Specifically, one of the academic administrative staff 001 said,

> *Actually as you said at the beginning, most of the staff development activities or programmes were geared towards further training or staff gaining higher academic qualifications. For example, when I joined this university as a teaching assistant with a bachelor's degree, staff development policy enabled me to grow in the ranks, and I was able to acquire masters degree and a PhD. Indeed, this policy allowed me to become a fully acknowledged academic staff with a PhD which is the requirement for one to serve in a university.*

This finding implies that academic staff used to be offered with study opportunities when the university was identifying the best undergraduate student to work as teaching assistants who would be mentored by the senior academic staff through their academic journey to study whether internally or externally. But currently most of the academic staff in the university have acquired PhDs following the new policy developments that require academic staff to have this qualification as a minimum requirement for one to teach in a university.

This finding was not far from that of academic administrative staff 002, who mentioned that,

> *Every staff is entitled to staff development support in form of a tuition waiver. But when I applied for it, I was not considered, yet other colleagues were given the tuition waiver. This disoriented me and I had to move from Makerere to South Africa. The policy of*

> *tuition waiver for academic staff is in place but it is unreliable due to the unnecessary red-tape involved in confirming academic staff that have to be considered for this waiver. Source*; *academic administrative staff interview*

This finding shows that although the staff development policy is in place at Makerere University, there are technical limitations and bureaucracies to confirm award of funds for this training. It may have a spillover effect where by some lecturers may fail to benefit from the program due to bureaucracy associated with the policy provision.

Academic administrative staff 005 noted that;

> *Induction is offered to academic staff and that there are funds allocated for this. Besides, these inductions are not specifically on pedagogical approaches. Thus, they are offered but at times they are not enriching as required and this is the reason why some staff ignore them or are selective when it gets to what PDP to engage in or not.*
> *Source*; *academic administrative staff interview*

This finding implies that despite positive moves by the university to organize PDP, the nature of content exposed to lecturers leaves pedagogical gaps on the side of academic staff thus many end up taking pedagogical training organised by the university for granted.

Meanwhile, interview results from academic staff on the same question revealed that lecturers are to some extent engaged in PDP offered at the university.

Academic administrative staff 003 indicated that,

> *I know very well that there is a professional development policy for academic staff. The university has a budget for this cause and many of our colleagues have benefited from this policy as they go for international conferences, seminars, workshops and study leaves. There are many who go abroad to attend these conferences and the university pays for all costs.*
> *Source*; *academic administrative staff interview*

The above qualitative findings revealed that although some academic staff receive tuition waiver fees as part of the staff development policy many other do not have access to this waiver which denies many an opportunity to acquire the competencies required on the job.

Majority of the study respondents, 40.6% agreed that in their department, every newly appointed academic staff works hand in hand with colleagues for teaching and learning mentorship (pedagogical mentorship). This was opposed to 24.2% who disagreed. This finding implied that newly appointed academic staff always work hand in hand with colleagues for teaching and learning mentorship. Such results meant that that as academic staff collaboratively learn, they have an opportune time to share pedagogical skills most relevant in the execution of their teaching mandate.

Most of the study respondents 45.1% agreed that prior to their lectures in the semester, they look for literature/content that would add value to course content. This was opposed to 42.8% who disagreed. These results revealed that prior to lectures, academic staff in the colleges where the study was done (COVAB) and CAES look for content of value to learners. It further meant that this was a positive move. to apply content needed during teaching and learning.

A big number of the study respondents 39.6% disagreed that they invite colleagues atleast once in a semester to observe them while teaching to get feedback and for improvement purposes compared to 35.7% who agreed. These results suggested that academic staff rarely invite colleagues to observe them while teaching so as to get feedback for improvement purposes. This

suggested further that there was limited invitation of colleagues to observe fellow lecturers during the teaching and learning with a view of getting feedback for improvement.

Most of the study respondents, 53.4% disagreed that they make effort to atleast once in a semester seek consent from colleagues to observe them while teaching in order to improve teaching and learning practices. This finding opposes 29.4% who agreed while 17.2% were non-committal. This finding showed that there was limited effort to seek consent of colleagues to observe them while teaching in order to improve the teaching and learning practices.

Findings in Table 4.2 revealed that majority of the study respondents 37.1% agreed that they follow critical areas during content selection in their areas of specialization. This is opposed to 34.8% who disagreed. It implied that academic staff follow critical areas while selecting content in their areas of specialization which is a sign of adhering to the principles of teaching and learning.

Results, 41.4% revealed that content followed in PDP meets the training needs of learners compared to 28.5% who disagreed. This implies that content followed in PDP meets the training needs of lecturers which means that they are empowered to be able to use better pedagogical teaching approaches through training offered.

Findings 48.4% showed that content followed in PDP is varied across topics they teach compared to 34.6% who disagreed. These results suggest that teaching content is varied across teaching topics, which allows them to acquire the knowledge and content of teaching the

discipline. Also these findings implied that during PDP content is varied allowing academic staff to have a broad knowledge of what they teach and can transfer it to learners during actual teaching.

Most of the study respondents 39.8% disagreed that there is a strong link between content offered in PDP and what they teach compared to 39.2% who agreed. These findings meant that there is coherence between what academic staff are taught and what they teach. This implies further that they can easily translate what they teach in class. With this coherence academic staff may practically teach what is worthy to learners in their areas of specialization.

Alternatively, majority of the study respondents 80.1% agreed that they have ever received invitation from the university Directorate of Human Resources to attend atleast one of teaching and learning seminar/conference/workshop in an academic year. This was opposed to 10.8% who disagreed while 9.1% were non-committal. This suggests further that academic staff have atleast received an invitation from HRM department to attend a teaching, learning seminar/workshop in an academic year.

Most of the study respondents 63.7% agreed that they have been atleast been invited to attend a MUELE training session compared to 26.2% who disagreed while 10.2% were non-committal. This meant that academic staff in the colleges where the study was carried out are invited to attend a MUELE training session which might equip them with the online training pedagogy.
Participants were asked how coherent are PDP organized for academic staff career in Makerere University.

Findings on this question showed that PDP offered to academic staff are coherent and are in line with professional needs of academic staff. Administrative academic staff participants showed that before they approve one's request to attend a PDP programme, it must be in line with one's area of specialization. Academic administrative staff participant 004 showed that,

> *Before I acknowledge one's request for a PhD professional development study, I consider coherence with the earlier professional qualifications and the current area of teaching. If there is any mismatch with what one specialized in at earlier levels and what he has requested to study at PhD program, this tantamount to nullification for study approval.*
> *Source*; *academic administrative staff interview*

This implies that coherence in PDP programmes offered to academic staff is highly considered as a strategy to ensure that what is offered for training matches with what they teach.

Another participant 002 from the academic administrative staff side showed that,

> *We ensure that seminars and workshops offered are in line with what academic staff teach. It would be irrational to combine science discipline workshops, conferences and seminars with lecturers from humanities side. Likewise, once these PDP are in humanities, it would be irrational to bring on board science lecturers. This gives an opportunity for the primary beneficiaries to attend in big numbers and master their disciplines.*
> *Source*; *academic administrative staff interview*

This finding implied that normally PDP organized in Makerere University follow specific disciplines to equip academic staff with adequate skills. Such skills can be coherently transferred in their lectures for the benefit of students.

Similarly, academic staff on coherence of PDP in their disciplines revealed that they are also selective and would always prefer those that are in line with their specialties. Academic staff Participant 009, showed that;

> *I selectively choose which professional development activity to engage in. Although the university sends invitations for academic staff in various disciplines. Normally, I participate in those related with what I teach so that it can add value on what I offer to my learners. Some of the courses that were designed in the colonial and in the first*

> *decades of the post-colonial era have changed. Thus, it is essential to attend some of these PDP to guide students better especially when it comes to pedagogical practices. Source; Academic Staff FGD.*

These findings implied that to some extent there is coherence of what academic staff study in PDP and what they teach. Hence this coherence gives them chance to diligently teach the learners.

However, there is a participant academic staff 004 who showed that, there are some PDP that are coherently comprehensive to all academic staff and that all academic staff should engage in. This participant said;

> *Research funded professional development PDP are comprehensive in nature and non-discriminatory. Research norms are always the same and that the university has one research guide. Whenever there is a training session on the same, all academic staff choose to attend. This is because we are all supposed to supervise, assess, and give feedback to students' research projects. In addition, we are all supposed to publish in this academic world and once an academic staff is weak in supervision, assessment, and in giving feedback, the possibilities of lifting one's career ladder is limited.*
> *Source: Academic staff FGD.*

This finding shows that with such universal PDP, coherence of what is offered and what is taught should be reflected in academic staff pedagogical practices. For instance, currently in the COVID period more emphasis is put on instruction which is online with the PDP programmes offered.

However, on the critical part participants showed that PDP are offered in a short period of time which does not allow one to master all the concepts that are related with one's teaching specialties and needs.

Majority of the study respondents, 63.2% agreed that they are invited by the department to at least once in an academic year to attend AIMS training. This finding differed from 14.4% who disagreed while 21.4% were non-committal. Hence, it suggests that academic staff attend AIMS

training at least once in an academic year which enables them to input/feed in students' examination marks/results.

A big number of the study respondents 56.3% agreed that the Directorate of Human Resources organises teaching and training seminars for academic staff (pedagogical training course atleast once) in an academic year. This was different from 16% who disagreed while 27.6% were non-committal. This suggests that the directorate of human resources recognizes teaching and training seminars for academic staff in an academic year.

Majority of the study respondents 36.5% were non-committal that there is a policy recommending collective participation in PDP compared to 30.3% who disagreed while 23.2% agreed. This finding suggested that in Makerere University there is a policy recommending collective participation in PDP. This thus means that they have opportunities to participate in PDP in the university.

Study participants were asked were asked how collaborative are the professional development programmes? Majority of the participants showed that professional development programmes are at times collaborative in nature. One administrative staff 02 mentioned that.

> *We have been organizing collaborative professional development programmes as a university. In these programmes especially those dealing with methodologies of teaching all academic staff across colleges are invited to share experience. In so doing all of them have to enjoy from one another competence.*
>
> *Source: Administrative staff Interview.*

This finding suggested that academic staff are allowed and invited to attend in collaborative leaning in professional development activities organized.

Besides another participant from the academic staff interview noted that,

> *Many academic staff are highly proud and whenever we invite them to attend professional development programs in the university they don't attend. Some feel that they know all and would not like to learn from others. This individualistic tendency had denied professional growth and skill acquisition from many academic staff in the university.*
> *Source: Administrative staff Interview.*

This finding meant that academic staff at times may not want to share ideas with others which may prohibit them to acquire competencies relevant on the job.

Majority of the study respondents 43.4% agreed that they receive invitations to participate in PDP organized in their department compared to 26.9% who disagreed while 29.7% were non-committal. This implies that academic staff in Makerere University receive invitations to participate in PDP organized in the department.

Respondents 35.6% disagreed that their departments induct newly appointed staff as a way of preparing them for teaching and learning activities, compared to 31.1% who agreed while 33.3% were non-committal. These results implied that new staff are not adequately inducted as a way of preparing them for teaching and learning activities.

Majority of the study respondents 51.3% disagreed that they are consulted to contribute towards professional trainings organized in their college. This is opposed to 14.7% who agreed while 33.8% were non-committal. These findings implied that majority of the study respondents are no adequately consulted to contribute towards professional trainings organized in their college.

To get a general view of how respondents rated on PDP, a histogram and curve were generated as in Figure 4.1:

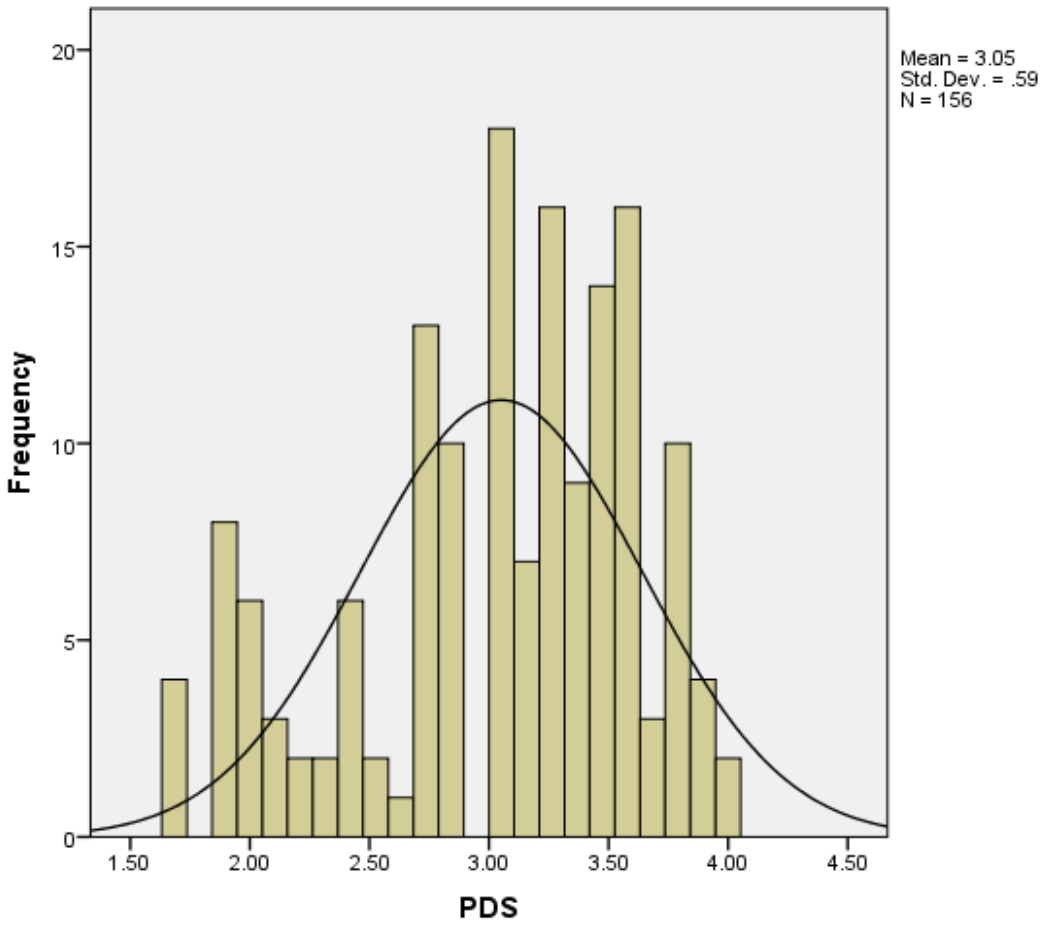

Figure 4.1: Histogram and curve showing distribution of respondents on PDP

Figure 4.1. shows that the majority of the study respondents were concentrated on the right side of the histogram and curve suggesting that to some extent academic staff in the colleges where the current study was carried out (CHUSS and COVAB) do engage in PDP organized. This figure also shows a normal curve meaning that there was a normal distribution of respondents on PDP (content focus, active learning, coherence, collaborative and periodic offering of PDP).

The documents reviewed indicated that PDP are most and strongly respected on the side of academic staff. The Makerere University Human Resource Manual for instance indicated that there is a provision for PDP. The policy indicates the attributes these beneficiaries of PDP should have, especially in terms of applying for the PDP, the likely procedures to access funds and benefits. This showed that although some academic staff may not access PDP, the documents have clearly spelt out the conditions and procedures followed to access the PDP.

Likewise, the university Fact Book (2018) and Rwendeire Visitation Committee Report (2017) had indicated that there are a number of academic staff on PDP in the university. In the two colleges over 15 junior academic staff were on study programmes sponsored by Makerere University. While some other academic staff were allowed to go for professional training schemes in the recent past. These findings implied that even the documents indicate that in general academic staff are allowed to attend PDP.

4.3 Description of the dependent variable (Pedagogical practices)

In this section, pedagogical practices were studied basing on content knowledge practices, course organization practices, knowledge of pedagogical approaches and classroom management practices.

4.3.1 Content Knowledge Pedagogical Practices

Content knowledge pedagogical practices were studied using a Likert scale ranging from 1= SD, 2= D, 3= NC, 4= A and 5= SA. Pertinent results are offered in Table 4.3:

Table 4.3: Frequencies, Percentages, Means of academic staff on Content Pedagogical Practices

Indicators of content pedagogical practices	SD	D	NS	A	SA	Mean	Std. Dev
When preparing the course content that I teach, I consider the course objectives	00	00	14 7.7%	94 51.6%	74 40.7%	4.33	0.614
The course structure guides me in developing the course content (e.g. following scope, sequence, etc)	00	00	18 9.9%	79 43.4%	85 46.7%	4.37	0.658
For every topic/ content I teach, I select appropriate reading materials (references guided by course objectives	00	00	18 10%	88 48.9%	74 41.1%	4.31	0.645
Before I teach a given topic/ content, I do adequate research around it (e.g. using journal articles, textbooks, etc)	00	00	16 8.8%	81 44.5%	85 46.7%	4.30	0.643

Source: Primary Data

Findings in Table 4.3 shows that majority of the study respondents 92.3% agreed that when preparing the course content, they teach, they consider course objectives. This finding means that course objectives are by academic staff considered when preparing the course content, they teach. This finding was confirmed by mean 4.33 equal to code 4 = agree on the Likert scale that was used while the low standard deviation 0.614 meant that respondents views did not vary from one respondent to another.

Participants were asked to give the extent to which academic staff teach relevant content and how effective they offer it. Study participants to a greater extent showed that lecturers in the colleges where the study was done had adequate content knowledge in their disciplines.

Following results of the focused group discussion guide of undergraduate students from science college revealed that,

> *Lecturers in their colleges are competently knowledgeable of what they teach. Many are picked from students who have scored first class or second upper degree in their areas of specialization. The academic staff tend to connect what they teach with real life problems. Some lecturers labour to connect the subject matter to solving real life problems. These lecturers incorporate pictures/photos/videos in their slides as a way of explaining the concepts in relation to real life situations.*
> *Source: Academic staff FGD.*

This finding suggested that academic staff in COVAB possess adequate content knowledge and fairly transfer it to the learners.

Results in Table 4.3, showed that 90.1% the course structure guides academic staff in developing the course content (e.g. following scope, sequence, etc). This finding suggested that, the course structure is followed by academic staff in developing the course content. Such a finding is confirmed by mean 4.37 which is equal to code 4 = agree. It suggests that the course structure guides academic staff in developing the course content (i.e. following scope and sequence). The standard deviation 0.658 was low implying that respondents' views did not vary from one respondent to another.

Majority of the study respondents, 90% agreed that for every topic/content area they teach, they select appropriate reading materials as opposed to 10% who were non-committal. These results suggested that academic staff in the colleges where the study was done select appropriate reading materials (references guided by course objectives). This finding was supported by mean 4.31 = agree while the standard deviation 0.645 was low implying that respondents' views did not vary so much from one respondent to another.

Most of the study respondents in their interviews confirmed that academic staff have the content required on the job. One of the administrative staff revealed that,

> *We recruit people with PhDs now. But to do this we have to ensure that one's master's degree qualification matches with the PhD. The current university policy calls for one to have one line of specialization to be fully competent in the area chosen. Most of the university dons have fulfilled this requirement and have the content required in their disciplines.*
> *Source: Administrative staff interview*

This finding suggested that academic staff in Makerere University have the content required for them to execute their teaching mandate which implies that they have what it takes to use appropriate pedagogical practices.

Whereas lecturers who were interviewed indicated that they were equally competent and knowledgeable of the subject matter. One on these academic staff said that,

> *We have the content required to teach. Those who are not adequately trained are recommended to go back for PhDs and masters' degree in the areas they teach. We have now over 90% of our lecturers in this college as specialists in the areas they offer. They have undergone intensive training in their area of specialization and they have gone ahead to do research and publish in those areas. As a college we have diligent, confident and committed faculty that possess knowledge of subject matter in their area of specialization.*
> *Source: Academic staff FGD.*

This finding suggested that most of the study respondents specifically academic and administrative academic staff do have the content that is required. This presupposes that academic staff in CHUSS and COVAB have command of the subject matter given their training background.

> *However, contrary to the above narrative of academic staff, findings from the focused group discussion guide with undergraduate students, there are a few cases of lecturers who come to teach but you can visibly see that they lack adequate knowledge of the subject matter. These students indicated that some of lecturers lack adequate content and always do not show knowledgeability of what they teach. They also added that it is quite*

surprising to find academic staff who lack adequate content of what they teach in the university.

Source; Focused group interview with undergraduate students in one of the colleges

This finding shows that despite the fact that academic staff are knowledgeable of what they teach there are exceptional cases where academic staff show lack of adequate knowledge of the subject matter and mild levels of unpreparedness.

The document checklist showed that academic staff in Makerere University have the content that is required on the job. Looking at qualifications of academic staff in the human resource manual. It indicated that academic staff were highly competent to do the job. Currently, the two colleges have over 85% of their academic staff as PhD holders. These PhD holders had been believed to be highly knowledgeable and have the skills required on their job. This presupposes that they can effectively deliver the content matching with their line of specialization.

Finally, 91.2% of the study respondents agreed that before they teach a given topic/content, they do adequate research around it compared to 8.8% who were non-committal. It implied that academic staff always do adequate research on the topic/content they teach. This is normally done using journal articles, textbooks, among others. This is supported by mean 4.38 almost equal to code 4 = agree. This implied that there was a high degree of agreement that academic staff do adequate research before a given topic/content they teach is offered and before stepping in class to execute their teaching mandate.

When it comes to content knowledge, the observations on academic staff showed that they had knowledge of the subject matter. These academic staff were observed *making thorough explanation in their diverse areas of specialization during instruction. Some were giving*

different examples related to issues they teach and how these are applicable in our day today life situation. This was a sign that these lectures had command of the subject matter which depicted that they were highly knowledgeable in their diverse areas of specialization. This finding implied that lectures in COVAB and CHUSS were highly knowledgeable in their discipline which is also a good indicator of appropriate pedagogical practices.

Even when compared with the documents reviews, findings, showed that majority of the lectures in the college where the study was done are adequately knowledgeable, for instance, over 80% of the lectures in COVAB and CHUSS were possessing PhD, and a few who did not have PhDs were already enrolled for same. This implied that in a few coming years almost all academic staff in the two colleges studied, would be PhD holders in their areas of specialization. This form of human resource development and capacity building in terms of PhDs would position academic staff in a better place to serve the student community better.

These results suggested that academic staff in COVAB and CHUSS have the required content knowledge, to serve in the capacities they were offered.

Most of the study respondents in the focused group discussion that is; academic staff had pedagogical content knowledge required on the job. One of these lecturers noted that,

> *There are a number of strategies to be adopted in order to achieve the main goal of teaching which is students learning. In order to teach well, you need to be able to adapt to your students' characteristics. Thus, as faculty we always look for ways to teach disciplinary contents in an enjoyable, clear and comprehensive manner and keep our classes organized and structured. The goal of teaching is achieving students learning, thus several teachers seek to make students better persons through teaching relevant content".*
> *Source: Academic staff FGD.*

Whereas another lecturer from CHUSS revealed that the point of teaching is to provide students with knowledge they can apply.

Whereas an academic staff participant from CHUSS on the issue of knowledge showed that

> *Content changes overtime and this requires teachers to adequately be knowledgeable in almost all aspects of their area of specialization in order to fit in the contemporary world. Academic staff need to change with generations, and at the same time understanding them would help teachers to acquire knowledge that would share with these young people.*
> *Source: Academic staff FGD.*

This finding was not any different from of an academic staff participant from COVAB who said,

> *I think always think through my ability to transfer knowledge and always take learners into account, what the students know and what they do not know. Also one has to labour to ask how old are these learners, their education background and then base on that to prepare adequate content that fits the learners you are planning to teach.*
> *Source: Academic staff FGD.*

These findings meant that lectures always ensure that they transfer content needed by learners in their different disciplines, hence they ensure that pedagogical content knowledge is effectively applied in their instruction processes. This finding from the pedagogical content knowledge shows that the knowledge of lecturers about the course content is highly essential in their pedagogical practices. However, this finding shows that even lecturers can learn from students to enhance what they already know.

> *Some of the academic staff participants in the focused group discussion were opposed to the ideas of fronting knowledge in discharge of their work. These noted that it is not knowledge alone that they are meant to offer. Such participants included those who noted that "I think the teachers' role is teaching not just a given subject but rather a set of values. Behavioral ethics in addition to knowledge and skills.*
>
> *Source: Academic staff FGD.*

This participant showed that we do not come to transfer knowledge, that is a misconception we come to shape people. All these views showed that there is much more to offer to the students than giving them subject matter regarding pedagogical practices.

The percentages and means on this content knowledge suggest most of the respondents had agreed that content knowledge is adequately and appropriately done by academic staff in CHUSS and COVAB at Makerere University. To confirm these results a histogram and curve were generated as in Figure 4.2:

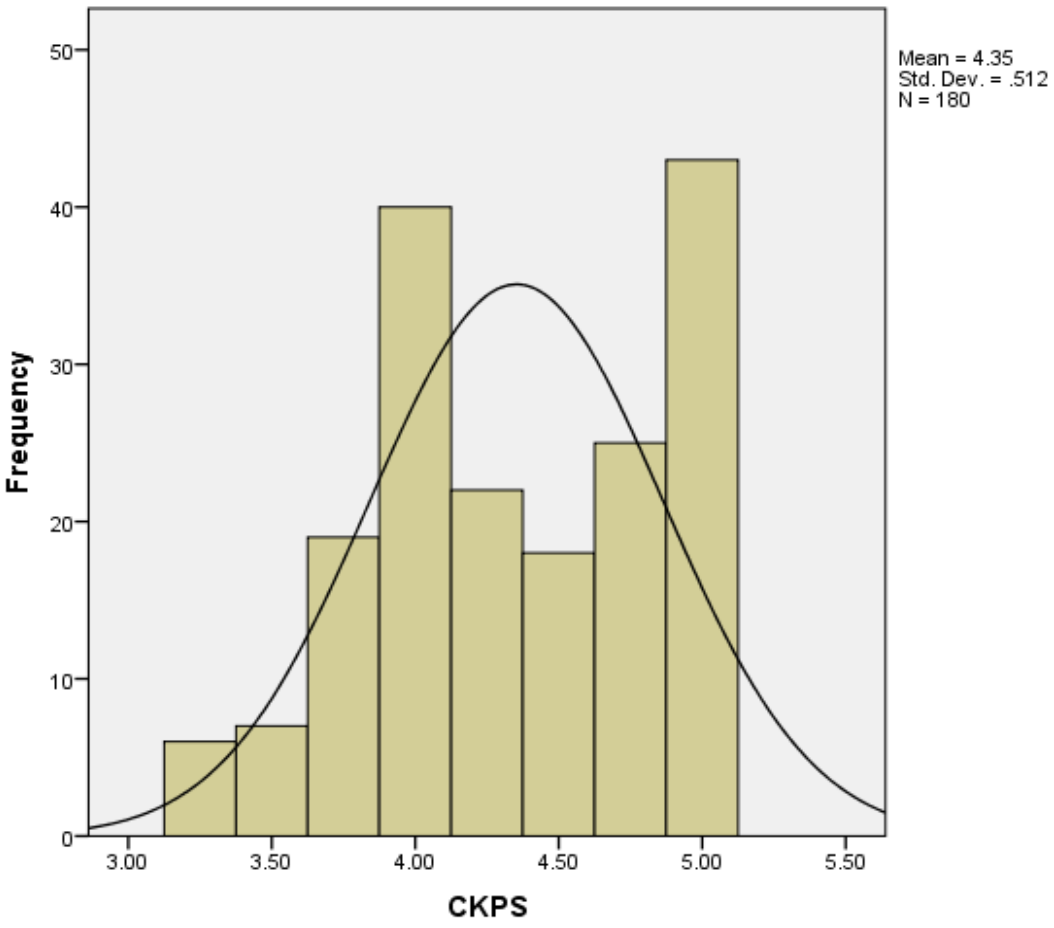

Figure 4.2: Content Knowledge Pedagogical Approaches

Figure 4.2 shows that majority of the study respondents were concentrated on the right side of the histogram and curve implying that academic staff have adequate knowledge of the subject matter. This was confirmed by a high general mean 4.35 which meant further that content knowledge practices were effectively applied by academic staff during the teaching and learning process. Thus focus now turns on course organisation practice among academic staff.

4.3.2 Course organization pedagogical practices

Course organization pedagogical practices were studied using a Likert scale ranging from 1= SD, 2= D, 3= NC, 4= A and 5= SA. Pertinent results are offered in Table 4.4:

Table 4.4: Frequencies, Percentages, Means of academic staff on Course Organization Pedagogical Practices

Indicators of/ Items on course organization pedagogical practices	SD	D	NS	A	SA	Mean	Std.Dev
When planning for my course content, I consider course objectives	00	00	27 14.8%	83 45.6%	72 39.6%	4.25	0.297
I sometimes revisit and improve my course content of a specific day or week	00	12 6.6%	27 14.8%	95 52.2%	48 26.4%	3.98	0.824
I think through and prepare tasks before my lesson that will guide my students during teaching and learning process	00	6 3.3%	30 16.7%	94 52.2%	50 27.8%	4.04	0.61
When teaching some of my courses I use the same classroom space	9 4.9%	9 4.9%	40 22%	90 49.5%	34 18.7%	3.72	0.988
I give mid-semester assessment (exams, tests, course works, etc)	3 1.7%	11 6.2%	39 21.9%	87 48.9%	38 21.3%	3.82	0.896
I give my students exercises/ quizzes/tests/take-home assignments as a way of as a way doing self-evaluation on the subject matter in every 2-3 weeks	00 00	18 9.8%	27 14.8%	86 46.7	51 27.7%	3.93	0.908
I return results of continuous assessment atleast in a week after being done by students	00	9 5.1%	29 16.3%	71 39.9%	69 38.8%	4.12	0.861
I set end of semester examinations as I teach the course content	5 2.7%	12 6.6%	26 14.3%	91 50%	48 26.4%	3.91	0.956
Before I start teaching the course content, I set end of semester examinations guided by the course outline	67 36.8%	89 48.9%	13 7.1%	4 2.2%	9 4.9%	1.90	0.983
I set end of semester examinations after completing the course content	7 3.8%	6 3.3%	23 12.6%	98 53.8%	48 26.4%	3.96	0.933

Source: Academic Staff

Table 4.4 results show that most of the study respondents 84.2% agreed that when planning for their course content, they consider course objectives compared to 14.8% who were non-committal. This finding suggested that academic staff always reflect on course objectives which shows that they follow the course organization practices. Such a finding was supported by mean 4.25, which was almost equal to code 4 = agree. This implied further compliance with course organization while the standard deviation 0.697 was low implying that they had almost similar views and opinions about planning the course following course objectives.

On the question, 'Do you prepare for teaching before the semester begins?' Most of the participants that is academic staff and academic administrative staff showed that they do engage in preparations for teaching and learning before the semester begins. Specifically, participant 004 from the academic staff side stated that,

> *"before the semester starts I do intensive reading around areas that are in the course unit because stepping into the classroom without doing thorough preparation would make one ineffective as academic. A classroom is like a firing line and without preparation you can be embarrassed by the students. Having a PhD as a lecturer does not mean entering a class without preparing yourself adequately.*
>
> *Source: Academic staff FGD.*

This finding suggested that academic staff should make preparation on how to teach which streamlines what they offer to learners. It also eases the teaching learning process on the side of the lecturer.

However, in the focused group interview with undergraduate students from CHUSS it was indicated that some academic staff do not prepare their teaching content properly. They rely more on old notes for about five years. This was highly related with the too much work

schedules and programmes possessed by academic staff especially teaching in more than one university.

This finding suggested that with use of these old notes academic staff find it hard to teach relevant content in the changing societal trends.

When it comes to course organization, undergraduate students were asked ‘what activities are done by lectures at the beginning of each course/lesson?’ On this question, the students in the focused group discussion revealed that,

> *Lecturers normally begin by introducing themselves by their names and introducing the course unit as well. The second aspect is that they take us through the course requirements, guidelines and all kinds of assessment procedures and references.*
> *Source: Undergraduate Student FGD.*

These results suggested that academic staff always carry out systematic course organization before they begin lecturing. Such a procedure was considered effective in making students aware of the norms to follow. Thus in this case academic staff were seen as individuals who appropriately use pedagogical practices that enhance teaching and learning. Without this procedures students may find it hard to follow the course and master what they are supposed to do.

Contrary to the above, some undergraduate students were somewhat skeptical on level of preparedness of some academic staff when it comes to teaching and learning. They revealed that;

> *Some lecturers come to class spend like an hour talking of stuff that is outside the course content and end up discussing the course content for only 30 minutes and to make matters worse, they tell us to go and do independent reading and the books they recommend are never in the library. So I wonder if these lecturers labor to find out which books are in the library before they recommend them to the students.*
> *Source; Academic Staff FGD.*

Similarly, when it comes to assessment of course works students showed that it is at times hard to know whether these lecturers have assessment guides. We have also realized that some lecturers grade our essays/assignments without examining them thoroughly.
Source: Undergraduate Student FGD.

This finding meant that to some extent academic staff do not adequately organise the course properly which signifies further that their course organisation practices are at times not the best.

Similarly, academic staff participants were asked whether academic staff consider course objectives. Participants on this question revealed that course objectives are highly followed in the instructional process. Academic staff participant 003 said that,

I have been carefully following course objectives during the teaching and learning process. These objectives are the ones which guide me in whatever that I do, course objectives help me in planning for course assessment and in revision of the instructional materials and methodologies. Course objectives guide me a lot in the way I instruct my learners.
Source: Academic staff FGD.

While another academic staff participant indicated that it is incumbent upon academic staff to introduce the course objective at the beginning of the course or lecture. At times, we agree as a team in the department on the scope and sequence of the course content. This is expected from every lecturer. You cannot claim to be a professor, lecturer in a university without carrying out adequate preparations. Through preparations it makes the entire teaching and learning more logical and systematized. Thus I do make preparations before each semester begins.
Source: Academic staff FGD.

This finding was almost similar with that of academic staff participants from CHUSS who indicated that

Lecturers while teaching at CHUSS are guided by the course outline and the tasks assigned to us are always based on well laid down course objectives. Academic staff in this college also do research around the area of specialization in order to make session notes which are elaborate with learning out comes.
Source: Academic staff FGD.

This finding meant that course organisation is effectively done by academic staff in CHUSS since they teach guided by course objectives.

Alternatively, some students in the focused group discussion guide indicated that, *some lecturers do not follow the course outline and teaching time table, this makes it difficult for us to follow the course at hand.*

Relatedly, undergraduate students indicated that;

> *Some lecturers miss lectures for the first four weeks of the semester and then exert pressure on the students due to the limited time left for them to complete the course content of the entire semester. We are always overloaded with too much content which is not explained well and at the same time we are overloaded with a lot of course work and tests that are always given towards the end of the semester.*
> *Source: Undergraduate Student FGD.*

This finding implied that at times some academic staff do not follow lesson objectives which is a poor course organization practice/strategy. This finding meant that academic staff need to follow the course objectives and timelines in order to make teaching and learning process more effective.

For corroboration purposes, academic staff study participants were also subjected to observation checklist in their classrooms during the teaching and learning process. The findings indicated that some of the academic staff were introducing the course units well to the students by giving them a course outline and clearly stating the course objectives. For instance, in the two colleges, lecturers were seen introducing their course units with well spelt out course objectives, and at the same time, they were reflecting on previous lectures held. Therefore, they tried to link their lessons/lectures, and course objectives to ensure sequence of what was being taught.

This finding meant that lecturers in the colleges of COVAB and CHUSS normally have proper organization of the course. Since they draw a plan and follow it steadily in the lecture rooms.

Therefore, course organization as a pedagogical practice is not isolated in the instruction process by the academic staff.

Most of the study respondents 78.6% agreed that they sometimes revisit and improve on their course content of a specific day or week, compared to 6.6% who disagreed. This finding implied that academic staff sometimes revisit and improve on course content of a specific week or day. This finding was in line with mean 3.94 which was almost equal to code 4 = agree. This hence shows agreement with revisiting the course content of a specific day or week.

Further, 80% of the study respondents agreed that they think through the lessons/lectures and prepare tasks in advance to guide students during teaching and learning process. This finding differed from 20% who disagreed while 16.7% were non-committal. This implied that academic staff always prepare tasks that guide students during teaching and learning process. Such a finding was supported by mean 4.04 which was equal to code 4 = agree which showed agreement with course tasks setting to guide students during teaching and learning. While the low standard deviation 0.761 implied that respondents' views did not vary so much from one respondent to another.

On the qualitative side, Academic staff participants were asked the extent to which they prepare tasks before the lesson and follow them accordingly in their teaching process.

On this question, participants showed that they followed the teaching tasks appropriately which improved on the way they do their work. For instance, an academic staff participant 007 showed that,

> *I follow the course as planned in the instructional process. Each period is allocated specific dates and lessons planned appropriately to match with the teaching and learning needs of students. This has allowed me to complete what I am assigned to teach within the expected timeless.*
> *Source: Academic staff FGD.*

This finding shows that lecturers follow the course objectives and plans as designed.

Whereas undergraduate students in the focused group discussion showed that,

> *The theoretical part of the course units were well organized and presented to us. However, fields trips are missed by lectures due to limited resources, you find out that in a semester you are supposed to have like six fields trips of practicals. However, a semester can elapse without doing any of the field trips that are allocated for a given semester and this affects the ability to know the practical part of the course. Surprisingly, when you talk to lecturers they tell us that that are no resources in terms of money to facilitate the field trips for practicals, the college no longer has buses to transport students and that the numbers of students had increased compared to available resources which cannot allow such trips to be undertaken. Lecturers tell us that in 1990's it was easy to train veterinary doctors since they had few students compared to today where student numbers are increasing day by day.*
> *Source: Undergraduate Student FGD.*

This finding suggested that academic staff would prefer to follow the course units in an organized manner. However, such constraints deny academic staff and students to have course units followed as organized and planned.

Respondents 68.2% agreed that when teaching some course units, they use the same classroom space compared to 9.8% who disagreed while 22% were non-committal. This finding implied that academic staff in the colleges where the study was done had to share classroom space in the teaching and learning process. This finding was in line with mean 3.72 almost equal to code 4 = agree, thus they utilize the same classroom space during teaching and learning.

Majority of the study respondents 82.5% agreed that when teaching some of their course units, they seek for classroom space in advance compared to 3.2% who disagreed while 14.3% were

non-committal. This finding meant that when teaching their course units, academic staff seek for classroom space in advance. This is supported by mean 4.21, which suggested that when teaching some of the course units they seek for classroom space in advance.

On the aspect of assessment of different course units by academic staff, a big number of the study respondents 70.2% agreed that they give mid-semester assessment (exams, tests, course work, etc.) compared to 7.9% who disagreed while 21.9% were non-committal. This finding implied that academic staff give mid-semester (exams, tests, course work, etc.). This suggests compliance with course organization practices. The mean 3.82 was almost equal to code 4 = agree on the Likert scale used. This suggested that respondents had agreed with giving mid-semester assessments while the standard deviation 0.896 implied that respondents views did not differ from one respondent to another.

Participants were asked whether they assess students effectively in the university. An interviewee from the academic administrative staff 002 said,

> *Basically we expect one to teach students with the assigned workload, guide them on what to do to gain further reading on that subject, and then take them through the practical sessions. Also one is expected to come up with questions in the middle of the semester and at the end of the semester as a part of the formative and summative assessment. This has allowed us to make teaching and learning more organized.*
> *Source: Academic administrative Staff interview*

This finding implied that following procedures as laid down by heads of department and the university procedures is adequately followed by academic staff in the university.

Findings 78.7% agreed that they return results of continuous assessment at least a week after being done by students, compared to 5.1% who disagreed while 16.3% were non-committal. These results meant that academic staff in the colleges where the study was done do return

results from continuous assessments at least in a week after being done by students. This is confirmed by mean 4.12 which is equal to code 4 agree while the standard deviation 0.861 was low implying that respondents' views did not differ from one respondent to another.

Over 76.4% of the study respondents agreed that they set end semester examinations as they teach the course content compared to 9.3% who disagreed while 14.3% were non-committal. These results implied that academic staff always select and set examinations as they teach the course content. This also enhances the chances for organizing the course appropriately. This finding is supported by mean 3.91 which shows further that they do set questions as they teach the course content while the standard deviation 0.956 was low suggesting that respondents' views were almost similar from one respondent to another.

Most of the study respondents 85.7% disagreed that before they start teaching the course content, they set semester examinations guided by the course outline, compared to 7.1% who agreed while 7.1% were non-committal. This finding implied that academic staff do not set exams before the semester begins. Such a finding is supported by mean 1.90 which is almost equal to code 1 = strongly disagree while the standard deviation 0.983 was low suggesting that respondents' views were almost similar from one respondent to another.

Majority of the study respondents 80.2% agreed that they set end of semester examinations after completing course content opposed to 7.1% disagreed while 12.6% were non-committal. This finding implied that academic staff always set end of semester examinations after completing the course content.

From the qualitative data participants were asked to show the magnitude to which they carry out continuous assessments. Lecturers on this question indicated that they do carry out continuous assessment of learners. Academic staff revealed that they do continuous assessment by giving course work and tests which are marked out of 30, at times this coursework has 5% as part of attendance. Specifically, a lecturer from CHUSS revealed that,

> *I do give out a self-study course work where a student has to do research on the question posed. Afterwards, the students are assessed with a test where the two are merged to make 30% of the grade for the entire coursework results. This has been here for years following the university examination policy guideline, I have to fulfill it by giving the two modes of assessment (course works and a test). While the final end of semester examinations takes 70%.*
> *Source: Academic staff FGD.*

This finding suggested that lecturers do carry out continuous assessment which implies that lecturers carry out formative evaluation as a practice of self-evaluation and establishing the learners progress in the areas taught for a particular subject matter.

Whereas student's in the focused discussion guide also confirmed that,

> *Continuous assessment is conducted any time in the semester in form of take-home assignments, quizzes, orals and tests which contribute to end of semester exams. However, majority of the academic staff do not return course work scripts at all or sometimes those lecturers who are able to return the coursework, they always return scripts late (at the end of the semester or even return the coursework when the semester has ended) and never give feedback to students. This affects us psychologically and academically since we end up doing final semester examinations without knowing our performance in the course work and we are never guided on the way forward in case of poor performance in the coursework.*
> *Source: Undergraduate Student FGD.*

In terms of course assessment which is a form of course organisation undergraduate student participants in the focused group discussion revealed that,

> *Most of the lecturers miss the first four weeks of the semester and then exert pressure on the students due to the limited time left for them to complete the course content of the entire semester (conduct of lecturers). We are always overloaded with a lot of course works and tests that are always given towards the end of semester. Therefore, some of us end up not performing well since tests of different course units tend to be given on the same days and sometimes on weekends.*

Source: Undergraduate Student FGD.

Similarly, students also revealed gaps in terms of returning course work results and exam results, coupled with failure to return course work scripts which impacts their performance negatively. This finding also suggests laxities and inefficiencies in the course organization practices among academic staff as students are obliged to receive feedback from the assessments done. Failure to give feedback implies that students are not able to establish their strength and weakness in different course units assessed.

Using the observation checklist on course organisation during teaching and learning process, lecturers were seen introducing the course units they were teaching first, by stating the lecture/lesson objectives, assigning students responsibilities and allowing them to make clarifications. At times a lecturer would first ask students a few questions about what was going to be discussed. Thereafter, an explanation would follow and tasks for further reading left behind. With this approach, the instruction process was better organized as there were limited chances of lecturers and students conflicting.

Still under course organization, the documents reviewed showed that course organization was highly emphasized. Each course unit had its credit units recorded in the heads of departments records, numbers of contacts hours, the assessment strategies. For instance, the course works, as a continuous assessment mode and the final examination as the summative evaluation were properly time tabled and well defined. With this arrangement, the documents ascertained that the academic staff religiously follow the course organization practices in the colleges of COVAB and CHUSS.

The percentages and means on course organization practices suggest that respondents had agreed that they effectively carry out course organization. These findings were presented on histogram and curve as in Figure 4.3:

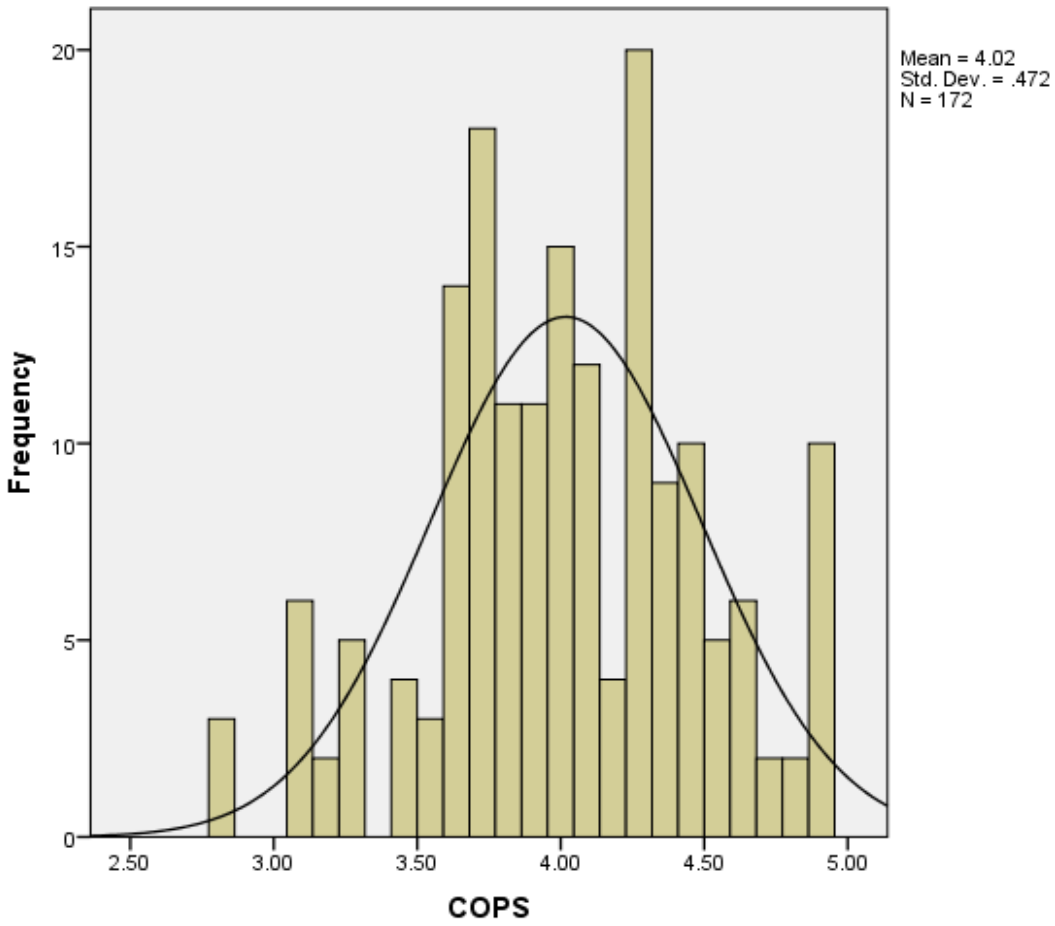

Figure 4.3: Histogram and curve showing distribution of respondents on course organization pedagogical practices

Results in Figure 4.3 shows that majority of the respondents were concentrated on the right hand side of the histogram and curve which implies that course organization pedagogical practices are effectively done by academic staff in the colleges where the study was done. The curve was not normal as it was skewed on the right side of the histogram and curve suggesting that that course organization practices was good.

4.3.3 Knowledge of Pedagogical Approaches

Knowledge of pedagogical approaches in this section were studied using 13 quantitative questions on which respondents were requested to do self-rating basing on Likert scale ranging from 1= SD, 2= D, 3= NC, 4= A and 5= SA. Results are presented in Table 4.5:

Table 4.5: Frequencies, Percentages, Means and Standard Deviation on Knowledge of Pedagogical Approaches of academic staff

Items on pedagogical approaches	SD	D	NS	A	SA	Mean	Std.Dev
Prior to my lesson/lecture, I think through/ reflect on the course content in order to choose the most appropriate teaching aids	00	4 2.2%	29 15.9%	74 40.7%	75 41.2%	4.21	0.787
Lesson/lecture objectives guide me while selecting appropriate teaching methods	00	6 3.3%	28 15.4%	85 46.7%	63 34.6%	4.13	0.787
Prior to my lesson/lecture, I draw a plan on how to use selected teaching methods	00	8 4.5%	18 10.2%	94 53.4%	56 31.8%	4.13	0.768
At the beginning of my lessons/lectures, I let my students know of lesson objectives	12 6.8%	22 12.4%	58 32.8%	67 37.9%	18 10.8%	3.32	1.041
While teaching, I make effort to follow lesson/lecture objectives	24 13.5%	37 20.8%	37 20.8%	58 32.6%	22 12.4%	3.10	1.252
I use MUELE platform for online teaching as a lecturer	6 3.3%	7 3.8%	28 15.4%	92 50.5%	49 26.9%	3.94	0.935
I found MUELE platform user friendly for me as a lecturer	7 4%	8 4.5%	21 11.9%	103 58.2%	38 21.5%	3.89	0.929
I use AIMS platform for feeding in student examination results	88 49.2%	64 35.8%	18 10.1%	5 2.7%	4 2.2%	1.87	0.870
I find AIMS platform user friendly for me as a lecturer	52 28.7%	85 47%	32 17.7%	9 4.9%	3 1.6%	1.89	1.074
I take into account different studying styles while teaching visual, audio, physical, logical, social learning	4 2.2%	10 5.5%	22 12.1%	63 34.6%	83 45.6%	4.16	0.987
When teaching I integrate visual Aids and practical session in my lessons/lectures	00	9 4.9%	26 14.3%	91 50%	56 30.8%	4.07	0.806
When I am teaching I encourage students participation and interaction	00	17 9.3%	46 25.3%	68 37.4%	51 28%	3.84	0.941
When I am teaching, I consider students background i.e. (the cognitive, affective, psychomotor needs e.g. student motivation attitude, intelligence aptitude, disabilities)	4 2.2%	16 8.8%	61 33.5%	57 31.3%	44 24.2%	3.66	1.01

Source; Primary Data

Table 4.5 results indicate that majority of the study respondents 81.9% agreed that prior to the lecture/lesson, they think through/reflect on the course content in order to choose the most appropriate teaching method compared to 2.2% who disagreed while 15.9% were non-committal. These results suggested that academic staff always reflect on the course to choose the most appropriate teaching methods. These findings were in line with the mean 4.21 almost equal to code 4 agreeing with reflecting on the course content the most appropriate teaching methods.

A big number of the study respondents 81.3% agreed that lecture/lesson objectives guide them while selecting the most appropriate teaching methods compared to 3.3% who disagreed while 15.4% were non-committal. These findings implied that before choosing teaching methods, the objectives of the lesson always guide lecturers to make appropriate selections. This finding was in line with mean 4.13 equal to code 4 = agree on the Likert scale used. This implied that objectives of the lecture/lesson always guide academic staff when choosing appropriate teaching methods.

Academic staff were asked also how the objectives of the course help them to select teaching methods. Many of the lecturers on this item revealed that you cannot choose teaching methods without reflecting on course objectives. Academic staff participant 006 on this item mentioned that,

> *I do set objectives of each course unit, topics and sub-topics. These objectives are the ones which help me to choose appropriate teaching methods. For instance, in COVAB here we set objectives that allow learners to have practical hands on experience on what is taught. Therefore, we normally do field studies, carry out experiments or we may request the students to do a laboratory discovery. However, this entirely depends on the course unit and objectives pertaining to it.*
> *Source: Academic Staff FGD*

This finding suggested that the nature of the course unit, and its objectives highly dictate the method to be applied in the teaching learning process.

Lecturers, 85.2% agreed that prior to their lecture/lesson, they draw a plan on how to use the selected teaching methods compared to 4.5% who disagreed while 10.2% were non-committal. These results show that prior to the lecture, academic staff always draw a plan on how to use the selected teaching methods.

Also, a big number of the study respondents 48.1% agreed that at the beginning of their lectures/lessons, they let students know of the lecture/lesson objectives as opposed to 19.2% who disagreed while 32.8% were non-committal. The 32.8% of the Non-Committal academic staff is suggestive of the inability to comprehend lesson objectives. This finding implied that academic staff on average always let students know the session course objectives. The mean 3.32 was almost equal to code = 3 non-committal signifying a moderate fair rating on making students aware of course objectives prior to the lecture. Hence, it implies further that some of the academic staff make students aware of lesson objectives while others hardly do so. The standard deviation 1.041 was low implying that they had similar views and opinions regarding making students aware of course objectives.

Results, 45% indicated that lecturers agreed that while teaching, they make effort to follow lesson objectives compared to 44.3% who disagreed while 20.3% were non-committal. These findings suggested that academic staff in the colleges where the study was done do follow lesson objectives. This is confirmed by mean 3.10 which is a moderate fair rating, hence signifying that they fairly follow lesson objectives during the teaching and learning process.

On the question which pedagogies do you normally use in the instruction of learners. Respondents in the focused group discussion from COVAB that is academic staff 012 showed that they use more of experiments and laboratory methods.

One of these participants identified that,

> *I teach using experiments, I bring equipment's specimen and other forms of apparatus to illustrate concepts. It is like a show, so that they can experience a phenomenon. I ask students to collaborate, come on board, help me and we perform the experiments as group. These approaches are more favourable to leaners in science as science needs students to critically observe all that is taught.*
>
> *Source: Academic staff FGD.*

This finding showed that most of these lecturers in COVAB have been adopting methods that require practical hands on experience and are collaborative in nature.

Whereas, academic staff 013 from CHUSS in the focused discussion indicted that,

> *I begin my lectures by asking a controversial question on the topic, students react by thinking of possible answer, thus it generates discussion and controversy. Hence, students who are interested to read will begin to read on their own and discover. The following day students would begin to give comments, extending the discussion with their friends.*
>
> *Source: Academic staff FGD.*

Hence, this finding meant that guided discovery, question and answer, and discussion method are used as pedagogical approaches in CHUSS. Thus no single approach is used at a moment.

Majority of the study respondents 77.4% agreed that they use MUELE platform for online teaching as lecturers. This finding is opposed to 7.1% who disagreed while 15.4% were non-committal. These percentages revealed that MUELE as an online pedagogy is highly applied in the instructional pedagogies used by lecturers in Makerere University. This is confirmed by the mean 3.94 which is almost equal to code 4 = agree, hence there was agreement with use of MUELE as an online teaching platform by lecturers. The standard deviation 0.935 was low implying that respondents' views did not vary from one respondent to another.

On pedagogical practices, further, undergraduate students in the focused group discussion guide revealed that MUELE as a teaching and learning platform is becoming complex on their side. They identified that,

> *First of all, opening a MUELE account is laborious due to a slow internet network in the university and it is costly for students to acquire data for them to access internet at their places of residence. To make matters worse, some students hardly have access to gadgets like laptops, smart phones or I-pads that are needed for one to engage on the online platform of teaching and learning. Furthermore, online teaching has become a must and given this COVID 19 period, students from poor families cannot afford to buy expensive computers and meet internet costs.*
> *Source: Undergraduate Student FGD.*

Further, students in the focused group discussion guide noted that they find it difficult to login into the MUELE account. Even students have not been adequately trained to use MUELE as a teaching and learning platform which makes its usability next to impossible. Students also revealed that after face-to-face lectures they are obliged to go to their home areas and study online. However, electricity in rural areas is unpredictable and internet is very unstable thus making it impossible to study online. This finding meant that MUELE online platform may be in place but its usability is not effective since students are not well trained and prepared in this mode of teaching and learning. Also it has added an extra financial cost on students as they have to acquire computers, buy internet storage devices like flash diskettes, which may not be readily available and accessible to students.

Majority of the study respondents 85% disagreed that they use AIMS platform for entering student examination results, compared to 4.9% who agreed. These results meant that academic staff hardly use AIMS platform to feed in students' examination results. These results were confirmed by a mean 1.87 which is equal to code 2 = disagree, hence suggesting that AIMS is

not adequately used to enter in students results while the standard deviation 0.870 was low suggesting that respondents' views did not vary from one another.

Respondents, 75.7% disagreed that they find AIMS platform user friendly for them as lecturers compared to 6.5% who agreed. These results depicted that AIMS platforms is not user friendly on the side of lecturers. This was confirmed by a mean of 1.89 which was slightly below code 2 = disagree while the standard deviation 1.074 meant that respondents' views were similar from one another.

Most of the study respondents 80.2% agreed that they take into account different students learning styles while teaching (visual, audio-visual, physical, logical, social learners, etc.) compared to 7.7%. These findings implied that academic staff had agreed that they take into account the different learning styles during the teaching and learning process. These results were confirmed by mean 4.16, which was equal to code 4 = agree, hence concretizing that academic staff take into account the different learning styles. A standard deviation of 0.987 on this item suggested that respondents had similar views and opinions on learning styles application in teaching.

Lecturers/interviewees were asked which methods of teaching they applied most during the teaching and learning process. Findings on this question showed that different academic staff use different methods of teaching depending on the course units they teach and the course objectives. Interviewee 009 for instance showed that,

> *I look at the curriculum topics; I use pictures to teach because students tend to remember visual objects better than the narratives. I take two hours to organize these visual aids which are supplemented with other methods like question and answer, lecture methods, among others.*
> *Source. Academic staff FGD.*

This finding implied that lecturers apply different modes of teaching but many prefer the use of visual aids as these ones make students remember learning concepts more than other methods.

Similarly, in science, since they engage more in practicals, high preference is offered on visual aids. The visual aids are preferred since they allow students to have an observation of what is being studied to come up with deductions.

For instance, lecturer participant 007 noted that,

> *I highly encourage use of visual aids, pictorials in my lectures. These are preferred as they help students to feel the atmosphere of what they are required to do after lectures here. Without these visuals, they may not carefully observe, yet a mistake in science has serious consequences.*
> *Source. Academic staff FGD.*

This finding implied that visual aids are preferred and adapted more especially in science related disciplines.

However, in the case of CHUSS, lecturer participant 003 said,

> *We use methodologies that favour the nature of the course unit, number of students and course objectives. As we have big classes than in science fields, we normally recommend peer methods, discussion, guided discovery especially in Geography, among others.*
> *Source. Academic staff FGD.*

Hence, this finding implied further that the course unit, class size always dictates the mode of teaching for a given course unit.

Majority of the study respondents 80.8% agreed that when teaching, they integrate visual aid and practical sessions in their lectures/lessons compared to 4.9% who disagreed. These results

suggested that when teaching, academic staff always integrate visual and practical sessions in their lectures which helps to develop the three domains of learning among students that is; cognitive domain, affective domain and the psychomotor domain. This was confirmed by mean 4.07 almost equal to code 4 = agree. This suggested further that they agreed with integration of visual aids and practical skills in the lessons they offer. The low standard deviation 0.805 was suggesting that respondents' views did not differ at all from one respondent to another.

A big number of the study respondents 65.4% agreed that when they are teaching, they encourage student participation and interaction compared to 9.3% who disagreed. These findings suggest that lecturers encourage student participation and interaction during teaching and learning. This allows them to learn from one another. The mean 3.84 equal to code 4 = agree while the standard deviation 0.941 was low suggesting that respondents' views were not dispersed from one another.

Regarding considering students' background (cognitive, affective and psychomotor needs, most of the respondents 75.5% agreed compared to 11% who disagreed. This implies that students background in form of cognitive, affective and psychomotor needs are considered in the teaching and learning process. This implied further that academic staff always consider holistic learning of students.

Qualitative findings on knowledge of pedagogical approaches revealed that lecturers in CHUSS and COVAB at Makerere University use appropriate modes of teaching during the teaching and learning process. In the observation checklist, it was established that in the lecture rooms some

lecturers had projectors, smart boards and other ICT related facilities. These have been highly emphasized and used by lecturers to execute their teaching mandate.

Lecturers were observed integrating ICT like the use of projectors and smart boards to display their teaching materials while teaching. In the electronic lecture rooms, some electronic devices like computers, power accessories, wireless network were identified and functioning. This meant that the university is the in the right direction in regard to moving away from the traditional methods of teaching (Talk and Chalk) to the new modes of teaching especially using ICTs and other forms of blended teaching and learning.

This finding implied that the university of moving towards digitalizing the methods of teaching. Also in the observations made at COVAB some students were seen carrying different experiments in the laboratory in form of practicals. These were seen actively doing experiments and writing down key answers/ observations from experiments done. This finding implied that experiment method is highly used by academic staff in COVAB. Thus generally, the study findings revealed that academic staff apply different modes of teaching including the conventional and online methods are applied by academic staff in CHUSS and COVAB.

Also when moving around the compound of these colleges CHUSS and COVAB, some students were seen busy following lessons organized using online. These students were seen in groups of twos, attending lectures on MUELE platform.

However, in CHUSS also some lecturers were seen having their students in lecture rooms and the mode of instruction was the conventional in nature in form lecture method, question and answer together with discussion methods. This finding showed that a mixture of different instructional methods being applied by lecturers in COVAB and CHUSS at Makerere University.

The observations made indicated that lecturers in the colleges where the study was done used to vary methods of teaching. At one time, one was observed picking students who had raised up their hands to answer questions asked. This was an indication that question and answer method was used by lecturers in COVAB and CHUSS whereas in other situations, these were revamped by lecture method, discussion methods especially in the college of humanities and social sciences. Also in this college, in one of the observations made, the lecturer was heard offering group questions to students for research and discuss as peers after which they would make presentations online as others follow. This finding implied that the lecturer was using discovery, peer methods of teaching and online methods.

This method of teaching observed in CHUSS implied that the blended learning approach is highly emphasized and already adopted by lecturers which showed that a mixture of methods are used.

Whereas in COVAB, the methods that were commonly applied were experimental in nature. This experimental method included students who were seen doing different experiments. In doing this, the lecturer was also observed helping them to come up with conclusions and deductions. This also implied that there was an effective use of different modes of teaching

(pedagogical approaches) as a key component of pedagogical practices in the college of COVAB.

The descriptive results (frequencies, percentages, means) on average suggests that pedagogical approaches are excellently varied and appropriately applied by academic staff in the teaching and learning process. The standard deviations on whole shows that they were low depicting that respondents had almost common opinions regarding pedagogical approaches used in instruction of learners.

To find out whether findings were normally distributed, a histogram and curve were generated as in Figure 4.4:

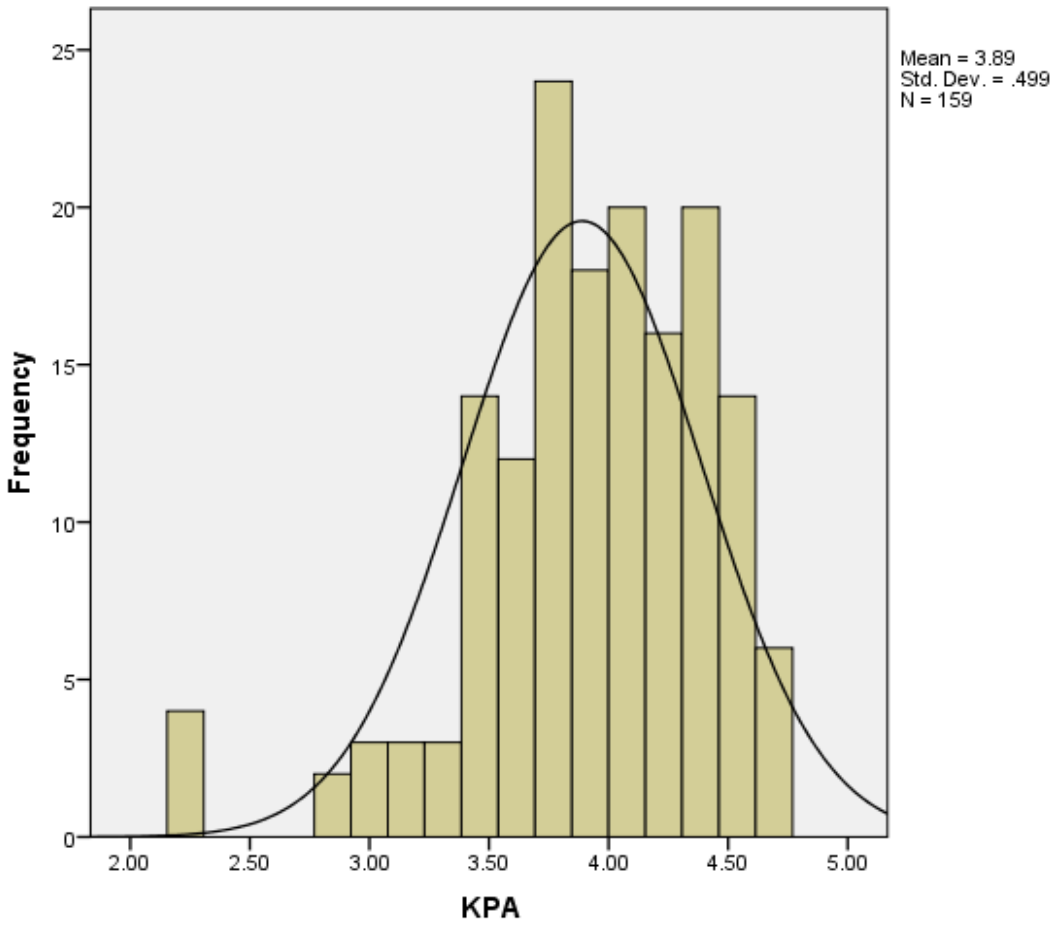

Figure 4.4: Histogram and curve showing distribution of respondents on pedagogical approaches.

The figure shows that most of the respondents were concentrated on the right hand side of the histogram and curve which indicated that it was skewed on the right side of the histogram and curve. This implied that they were in agreement with the view that pedagogical approaches are appropriately varied and utilized in instruction process in CHUSS and COVAB at Makerere University.

4.3.4 Description of Classroom Management Practices

Knowledge management one of the factors under pedagogical practices was studied basing on the eight quantitative items on which respondents were requested to do self-rating basing on Likert scale. Arising results were provided in Table 4.6:

Table 4.6: Frequencies, Percentages, Means and Standard Deviations of academic staff on Classroom Management Practices

Indicators of classroom management	SD	D	NS	A	SA	Mean	Std.Dev
For every first lecture/lesson in a semester, I take my students through the course requirements (e.g. expectations from students assessment procedures, timelines and field works	00	4 2.2%	33 18.2%	119 65.7%	24 13.8%	4.03	0.763
During the first interaction with my students we agree and establish classroom regulations that are conducive to teaching and learning	3 1.7%	5 2.8%	61 33.9%	75 41.7%	36 20%	3.91	0.635
During the first interaction with my students, we agree and remind each other of the consequences for failure to abide by the set classroom regulations	00	2 1.1%	23 12.8%	90 50%	65 36.1%	3.76	0.863
I make an effort to learn students names for identity and support purposes	00	2 1.1%	23. 12.8%	90 50%	65 36.1%	4.21	0.701
I make purposeful movements in the classroom to check what students are doing	2 1.1%	6 3.4%	38 21.8%	77 42.3%	56 31.3%	4.00	0.874
When I am teaching, students are free to ask questions/ make comments for clarity on content being taught	00	4 0.6%	28 15.7%	78 43.8%	71 39.9	4.23	0.727
I manage classroom time effectively starting on time and ending the lesson on time	00	6 3.3%	24 13.3%	103 57.2%	47 26.1%	4.06	0.726
I reward students for being active in class for good performance	6 3.3%	11 6%	31 17.3%	84 46.9%	47 26.3%	3.87	0.985

Source: Primary Data

Table 4.6 results revealed that a big number of the study respondents 79.5% agreed that for every first lecture/lesson in a semester, they take their students through the course requirements compared to 2.2% who disagreed. These findings suggest that lecturers take students through course requirements, which might enhance positive teaching and learning. The mean value, 4.03 was close to code 4 = agree which confirms agreement with course requirements. On the other hand, the standard deviation of 0.763 was low suggesting that respondents' views and opinions regarding giving course requirements were similar from one respondent to another.

Still in the qualitative interview with academic staff on what they think of their interaction with students in the classroom. They indicated that,

> *I begin by introducing myself to the students, I also give an overview of the course unit I am going to teach and the course requirements. I do some sort of career guidance by showing my students the relevance of the course unit that I am teaching. I tell them the opportunities ahead of them by undertaking this course in terms of employment. Sometimes I also invite one of my former students (alumni) to give career guidance and act as an inspiration to current students.*
> *Source academic staff FGD.*

This finding suggested that academic staff always take students through the course requirements so as to prepare them for the tasks ahead of them during the programme of the study.

In terms of academic staff setting classroom regulations with their students, majority of the study respondents 61.7% agreed that during their first interaction with students they agree to establish classroom regulations that are conducive to teaching and learning compared to 4.5% who disagreed. These results suggested that academic staff always set regulations that are conducive to teaching and learning. This finding was confirmed by an average mean of 3.91 equal to code 4 = agree which implied further that academic staff agreed with establishing of classroom

regulations. The low standard deviation 0.635 suggested that the views of respondents on this item did not vary much from one respondent to another.

Participants were asked whether they set classroom regulations with students, These, participants showed that they do set classroom regulations with students. For instance, one of the academic staff participant 009 revealed that,

> *I do set classroom rules and we agree on them with the students I teach. I always tell my students to put their phones in silence, avoiding unnecessary movement while I am teaching, and raising hands when they want to say something. These guidelines have always enabled us to have a conducive teaching and learning environment*.
>
> *Source: academic staff FGD.*

This finding implied that academic staff create a conducive teaching and learning environment through setting classroom regulations which is a reflection good classroom management practices.

Undergraduate students in the interviews were asked to show the extent to which their lecturers set with them classroom regulations. On this question, students in the focused group discussion guide from CHUSS showed that lecturers take it upon themselves to take students through the course requirements, and rules.

This was supported by the undergraduate student interviewees who indicated that;

> *During the departmental orientation, students are taken through the course requirements by all lecturers in the department, classroom regulations are set as well and students are allowed to give their submissions on the guidelines to be followed in the classroom.*
> *Source: Undergraduate Student FGD.*

This finding suggests that rules and regulations are often set by academic staff as a way of ensuring a conducive teaching and learning environment.

Regarding establishing consequences for failure to abide by classroom regulations, a big majority, 86.1% of the study respondents agreed that they make students aware of the

consequences for their actions regarding following classroom regulations compared to 1.1% who disagreed. These findings implied that academic staff make students aware of the consequences for their behaviours. Such findings were confirmed by a mean of 3.76 almost equal to code 4 = agree thus concretizing that they do make students ware of the consequences of violating classroom regulations. Whereas the low standard deviation 0.863 suggested that respondents' views were not scattered from one respondent to another.

When it came to lecturers' opinions on making an effort to learn students' names, most of the study respondents 86.1% agreed that they make effort to learn students' names for identity and rapport purposes compared to 1.1% who disagreed while 12.8% were non-committal. These findings implied that lecturers normally make an effort to learn students' names for easy identification and rapport purposes. It is also a sign that academic staff labour to create a good classroom environment. This finding was confirmed by mean = 4.21, equal to agree while the low standard deviation 0.701 meant that the views of respondents did not vary so much on this item.

Respondents, 74.3% agreed that they make purposeful movement in the classroom to check what students are doing compared to 4.5% who disagreed while 21.2% were non-committal. These percentages implied that lecturers make purposeful movement in class to allow them manage their teaching effectively. This is confirmed by mean 4.00 equal to code 4 = agree. This implied further that lecturers make purposeful movements while the low standard deviation 0.874 implied that respondents' views did not vary so much from one respondent to another.

Regarding to rewarding learners for good performance, majority of the study respondents 73.2% agreed that they reward students for being active in class or for good performance (e.g. with a thank you, gifts, etc.) compared to 9.5% who disagreed. These findings implied that lecturers reward students for good performance. Findings on this item suggested that lecturers always re-enforce students for attendance and good performance using positive and negative re-enforcements. The mean 3.87 was almost equal to code 4 = agree, confirming lecturers' re-enforcement of learners while the low standard deviation 0.985 meant that respondents' views did not vary so much from one respondent to another.

Undergraduate student participants were asked how students are rewarded as a way of motivating them.

In the focused group discussion guide some of the undergraduate students identified that,

> *Some lecturers appreciate at university level that there is no wrong or right answer. Even if a student gave a wrong answer, some lecturers would appreciate the contribution of students which makes the students not to feel degraded like what other lecturers do. Then lecturers build on the contribution of students with facts.*
> *Source; Undergraduate Student FGD.*

This finding implied that some lecturers manage classrooms better using varied approaches to re-enforce students' answers including negative answers. It implies further that such students are motivated by this classroom management approach not to feel shy to ask questions and master what is taught.

However, still from the focused group discussion guide, some students revealed that some of lecturers' classroom management practices are still not up to the expected standards in terms of re-enforcing students learning. One of student participants noted that,

> *In year one, I gave a wrong answer and the lecturer asked me which high school I came from. I was embarrassed and never to raise up my hand again in classroom*.

Whereas another student participant said,

> *Students fear lecturers, some students fear to challenge the lecturers even in the classroom during the teaching and learning process. This is because lecturers abuse them for giving wrong answers*.
> *Source: Undergraduate Student FGD.*

These findings revealed that as an alternative to following proper classroom management practices, some lecturers do the opposite and instead resort to negative behaviours of insulting students who give wrong answers. This behaviour creates a sense of low esteem, low confidence among students and a poor pedagogical practices among academic staff in the colleges where the study was done.

Regarding lecturer giving an opportunity to students to ask questions/make comments for clarity on content being taught, a big number of the study respondents 83.7% agreed compared to 0.6% who disagreed while 15.7% were non-committal. Such findings implied that lecturers allow students to ask questions and make comments which enhances the teaching and learning process as clarifications are made on questions and comments raised. This is confirmed by mean 4.23 equal to code 4 = Agree while the standard deviation 0.727 was low suggesting that respondents' views did not differ so much from one respondent to another on this item.

Students in the interviews were asked to show the extent to which they interact with lecturers in form of giving them space to ask questions and make comments during the teaching and learning process. Students in the focused group discussion guide indicated that lecturers to a large extent interact fairly and are friendly with students. Interviewee students indicated that,

We normally interact with our lecturers in and outside classroom. I always see my lecturers asking students to present their grievances to solve them on their behalf. In such scenarios many lecturers have been deeply concerned about issues challenging students and indeed students have been able to persist, concentrate on the course with the advice offered by academic staff in the university.
Source: Undergraduate Student FGD.

This finding revealed that the interaction between students and lecturers was fair and could help them to manage the classroom effectively. Whereas, some other students in the focused group discussion guide from COVAB indicated that,

The relationship between lecturers and students is not positive/close, because most of the lecturers and administrators do not allow students to express themselves freely especially outside classroom. Students have to go through their classroom representatives in order to forward their issues. There are also poor classroom management practices that is, even if students wanted to ask/consult lecturers on certain issues, like submitting course works, they have to go through a classroom representative but not directly go to the lecturer.
Source: Undergraduate Student FGD.

Similarly, lecturers have a tendency of despising those students that join on mature entry (Diploma holder), they think and take these diploma holders as students who are less knowledgeable and weak academically as compared to their counter parts (those who join the university straight from A - level).

Source: Undergraduate Student FGD.

Whereas another interviewee student in COVAB, revealed that I have a different experience with diploma students, i.e. some lecturers were encouraging us to help those students who come with diplomas in our first year, and a lecturer reminded us that these diploma students join the university with experience (hands on capabilities) i.e. project/fieldwork experience. Since they have experience in practice.
Relatedly, there are some lecturers who are proud or full of themselves, they make you feel like you don't know anything; they make you feel like you are nothing. Some lecturer said to us…, that you students you make me feel like I am teaching high school, you don't have even the fundamentals of joining this college, she demoralised the entire class and it took us a whole week to regain our esteem as students. This esteem thing made us feel like, we are not fit to study in mighty university.
Source: Undergraduate Student FGD.

Also undergraduate students in the focused group discussion from CHUSS noted that,

> *Lecturers sometimes don't allow us to interrupt while teaching and sometimes you may want to say something but a lecturer says what you are saying is "bullshit" but when the lecture is done and as you interact with a lecturer outside the lecture room, they are able to appreciate your submissions outside classroom yet while in classroom teaching he/she never (commended) appreciated it. It feels like they suffocate our opinions at times and this leaves us asking ourselves as university students …are we supposed to contribute anything to the lecture or generate a discourse with our lecturers.*
>
> *Other lecturers are too aloof in their conduct, they think they know it all and look at us as individuals who should just listen and appreciate their PhDs. They feel so special, since they have PhDs and this sometimes makes lecturers unapproachable that is to say they create a fear factor among students.*
> *Source: Undergraduate Student FGD.*

This finding implied that the interaction between lecturers and students in the colleges where the study was done is not fair to students opposing the views of academic staff in the self-administered questionnaire and in the in-depth interviews. This is a sign of poor interpersonal relations among academic staff and students in COVAB and CHUSS.

In terms of time management by academic staff in the classroom, most of the study respondents 83.3% agreed that they manage classroom time effectively (starting time and ending the lesson time) compared to 3.3% who disagreed while 13.3% were non-committal. This meant that academic staff manage time effectively as confirmed by mean 4.06 equal to code 4 = agree while the standard deviation 0.726 was low implying that they had similar views and opinions regarding managing classroom time effectively.

Qualitatively, students were asked the extent to which lecturers manage their time in the lecture rooms. Students in the focused group discussion guide showed that lecturers manage their time effectively and also request students to meet deadlines or assignments done.

Specifically, they said, *in terms of time management, many lecturers are good at keeping time and at times when they want to exceed the time allocated to them, on the time table. They do request students to allow them do so.*

Source: Undergraduate Student FGD.

This finding meant that lecturers take an initiative to manage time effectively to have assignments done within respective time frames. While undergraduate student participants in the second focused group discussion guide from CHUSS noted that,

> *Most lecturers arrive late for lectures and to make matters worse they arrive 30 minutes late or an hour late while others do not come at all. Some cannot communicate in time or notify us in case they are not coming. However, there are a few lecturers who communicate in time in case they are to miss a particular lecture*.
>
> *Source*: *Undergraduate Student FGD.*

This finding suggested that academic staff in the two colleges make an effort to use time appropriately during the teaching and learning process.

Using the observation checklist guide, Lecturers were observed managing their classes effectively. In a few observations made, these were seen making purposeful movements in the class and had proved to have effective control of all that was going on during instruction process. For instance, in COVABs, as students were making experiments, lecturers were observed moving around helping students have their experiments properly organized and also helping them in case of failures.

This was a sign that the classroom management was effective in COVAB as lecturers were making movements across the different areas of the classroom.

Whereas in the college of humanities and social sciences (CHUSS) lecturers were also seen moving around and were effectively monitoring students seated in the different corners. These lecturers would identify students on phones and would request them to go out and would also give them punishments. Such punishments would include requesting them to change their sitting positions, confiscate the mobile phone for a while, among others.

This was proof that indeed all efforts were done by lecturers to manage their classrooms better which is a good classroom management pedagogical practice.

Furthermore, in the observations made in the two colleges, lecturers in the two scenarios were calling upon students to raise up their hands in case they would like to make any submission, ask a question or requesting for more clarification. This was effective in all scenarios, COVAB and CHUSS and it was a positive development since it helped reduce on interferences in classroom and also gave the lecturer effective control of their classrooms thus creating a conducive teaching and learning atmosphere on the side of lecturers and students.

Averagely, the means and percentages on the whole suggest that classroom management practices are effectively done among lecturers in the colleges where the study was carried out. The standard deviations were all low implying that academic staff had similar views and opinions regarding classroom management practices.

To confirm these findings, a histogram and curve were generated as in Figure 4.5:

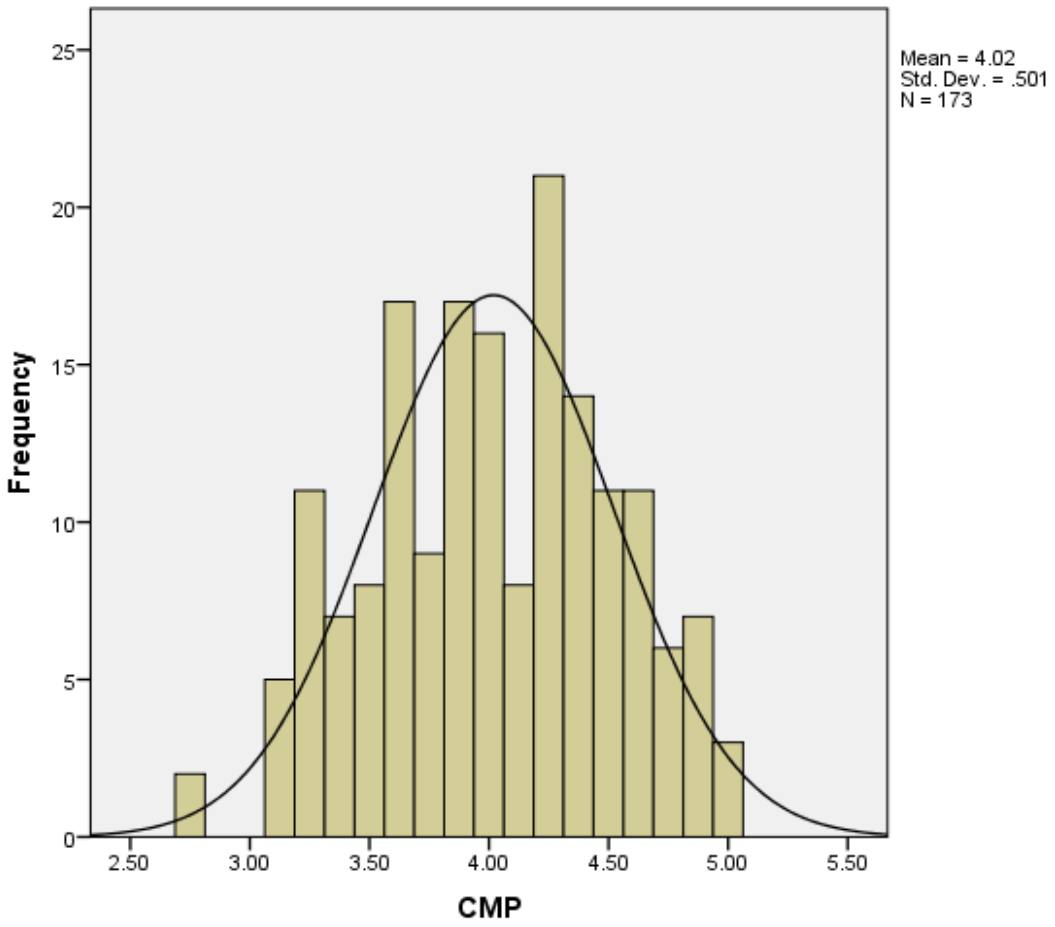

Figure 4.5: Histogram and curve showing distribution of respondents on classroom management practices

The histogram and curve shows that majority of the study respondents were concentrated on the right side of the histogram and curve suggesting that classroom management practices is fairly administered among academic staff in the colleges where the study was carried out.

4.4 Testing of the study hypothesis

The study aimed at testing the four hypotheses that is, PDP significantly influences content knowledge, course organization practices, knowledge of pedagogical approaches and classroom

management practices of academic staff. These four objectives were tested using Pearson's Correlation Simple Linear Regression as in the subsequent subsections.

4.4.1 Hypothesis One. The first correlational Hypothesis PDP positively influence academic staff content knowledge practices. Results are provided in beginning with Pearson's Correlation Co-efficient findings in Table 4.7:

Table 4.7: Pearson Correlation Co-efficient results between PDP and content knowledge pedagogical practices

		PDP	CKP
PDP	Pearson correlation	1	.261**
	Sig (2-tailed)		0.001
	N	156	154
CKPS	Pearson correlation	.261**	1
	Sig (2-tailed)	0.001	
	N	154	180

Correlation is significant at 0.01 level (2-tailed)

Table 4.7 shows Pearson correlation coefficient index between PDP and content knowledge practices r = 0.261**, sig = 0.001 less than 0.05. The study hypothesis that PDP significantly relate with content knowledge practices was accepted. It implied that there was a positive significant influence between PDP on content knowledge practices of academic staff in COVAB and CHUSS. This implied that as PDP (content focus, active learning, coherence, collective participation, and duration) are organized and offered to academic staff basing on their areas of specialization, the higher the extent that they would acquire skills to appropriately select and teach appropriate content and absence of well organised PDP would result into inappropriate

content knowledge pedagogical practices. This finding was supported by Situated Learning Theory which had it that adult learning is an integral activity of every day practices, work place, family and social settings and that through participation in PDP one acquires relevant content on the job. It implies also that through lecturers' participation in PDP, identification with PDP and practicing what is offered in PDP as core tenets of Situated Learning Theory academic staff are better positioned to cultivate appropriate content knowledge pedagogical practices. This finding was also in line with the Adult Learning Theory which assumes that Adult Learning depends on self-concept, past learning experiences, readiness to learn, orientation to learning, practical reasons to learn and internal motivation as key drivers for one to effectively engage in PDP to acquire relevant pedagogical practices. Teachers enter professional development as self-directed learners with previous experience, defined expectations for their learning outcomes, and a willingness to collaborate with their colleagues. This coincides with the study finding in the way that as academic staff find it useful to participate in the Professional Development Programmes organized by the university. This level of self-drive among academic staff is likely to help them to become more conversant with the content knowledge of the course units they teach at different levels. To confirm these findings, a Simple Regression Analysis was run and findings are offered in Tables 4.8, 4.9 and 4.10:

Table 4.8: Model summary Table on the influence of PDP on Content Pedagogical Practices (CKP)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.261[a]	.068	.062	.57404

a. Predictors: (Constant), CKP

The model summary table shows that adjusted r2 = 0.062 which means that PDP explain only 6.2% of the change in content pedagogical practices, thus the remaining 93.8% is accounted for by other factors not considered in the study.

Table 4.9: ANOVA Table on PDP and Content Pedagogical Practices

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.670	1	3.670	11.139	.001[b]
	Residual	50.087	152	.330		
	Total	53.757	153			

a. Dependent Variable: PDP

b. Predictors: (Constant), CKP

The ANOVA Table shows F value 11.139 with a corresponding sig value .001 which is less than 0.05. Hence the hypothesis which states that PDP have a positive influence on content knowledge practices was accepted while the null hypothesis which States that PDP have a

negative influence on content knowledge practices was rejected. This means that PDP have a positive significant influence on content knowledge pedagogical practices. Thus, as PDP are organized and administered in the university, the higher the likelihood that content knowledge pedagogical practices of academic staff would improve.

Table 4.10: Coefficient table on the effect of PDP on Content Pedagogical Practices

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.413	.412		10.714	.000
	CKP	.313	.094	.261	3.337	.001

a. Dependent Variable: PDP

Table 4.10 shows that the Beta value 0.261 was accompanied by a significance P value 0.000, less than 0.05. Hence the hypothesis which states that PDP have a positive influence on content knowledge practices was accepted while the null hypothesis which States that PDP have a negative influence on content knowledge practices was rejected. This suggested that there was a highly strong positive significant effect between PDP and content knowledge pedagogical practices of academic staff in the colleges where this study was done in Makerere University and the reverse is true.

Qualitative findings revealed that PDP greatly help and have helped academic staff respondents to improve on their content knowledge of the different course units that they handle in a given semester.

One of the academic administrative staff in COVAB indicated that,

> *PDP have helped many of our young academic staff to acquire knowledge required to teach the different course units in the department. These novice academic staff are normally encouraged to attend workshops, seminar series, and conferences both from within and outside the university. They have been identified to have a command of the subject matter every after training. Trainings of this nature have highly improved on academic staff content knowledge practices.*
>
> *Source: Academic Administrative Staff Interview*

Findings from this participant indicate that PDP do influence the content knowledge practices of participants significantly.

Whereas one of the academic staff participant revealed that

> *When I was offered a study leave to go for further education, I did not have adequate knowledge of doing research. However, after attending a number of seminar series/workshops/conferences and with the sponsorship of the university, I am able to do research around the areas that are embedded in the course units that I teach and I can adequately research on any topic or area of study before presentation.*
>
> *Source: Academic staff FGD.*

This finding also indicates that PDP help one to improve on content knowledge as the trainers handle all facets of higher education, more especially research which is the center of knowledge.

Here, academic staff were asked how PDP influence their content knowledge practices. Findings on this indicated that as academic staff engage in PDP, the higher the extent they are likely to improve on their pedagogical content knowledge. One of the academic staff participants 010, on this said,

"The world of knowledge is evolving, and there are new concepts emerging in our areas of specialization. Without engaging in PDP, this new information would be far from us. Hence, there is a positive change in terms of masterly of the content ever since I started engaging in PDP. Engaging in PDP has enable me have adequate knowledge on how to sequence content in the course units I handle in a given a semester."
Source: Academic staff FGD.

This finding implied that PDP offers academic staff an opportunity to master and prepare adequate course content of the different course units they handle in a given semester.

4.4.2 Hypothesis Two. The second hypothesis of the study was existing PDP positively influence on course organization practices among academic staff in CHUSS and COVAB at Makerere University. First, Pearson Correlation Coefficient Index was applied as in Table 4.11:

Table 4.11: Pearson's Correlations Co-efficient index showing relationship between PDP and Course Organization Practices (COP)

		PDP	COP
PDP	Pearson correlation	1	0.238**
	Sig (2-tailed)		0.004
	N	156	146
COP	Pearson correlation	0.238**	1
	Sig (2-tailed)	0.004	
	N	146	172

Correlation is significant at 0.01 level (2-tailed)

Table 4.11 shows Pearson's correlation coefficient index between PDP and COP r = 0.238**, sig = 0.004 less than 0.05. Thus, the research hypothesis which states that PDP have a positive influence on course organization practices of academic staff is accepted. It further implied that

there was a highly strong positive significant relationship between PDP and COP at the five percent level two tailed. This suggests that as PDP are effectively administered to academic staff, the higher they are likely to organize their course units properly and failure to offer PDP to academic staff would result into inappropriate course organisation pedagogical practices. This finding was supported by the Adult Learning Theory second assumption which had it that adult learners have a vast array of experiences which they draw on as opposed to children. In line with andragogy, it was revealed that as adults engage in PDP they get an opportunity to share these experiences with their fellow teachers gaining more skills of benefiting from them during teaching and learning process. The findings on this hypothesis was also in favour of the Situated Learning Theory which had it that adult learning is grounded on actions of everyday situations where academic staff should participate, and identify themselves with the existing PDP in the university for effective course organisation. Relatedly, the finding suggests that the training from PDP should not be separated from the teachers' daily actions of organizing the course units they teach. Thus considering organizing PDP as suggested by the theory academic staff course organization practices improves while failure to engage them in PDP as per the theory would mean that lecturers would not use appropriate course organization practices.

To confirm these results, a Simple Linear Regression Analysis was done and results are offered in Tables 4.12, 4.13 and 4.14.

Table 4.12: Model summary Table on the influence of PDP and COP

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.238[a]	.057	.050	.58765

a. Predictors: (Constant), COP

The model summary table revealed an adjusted r2 = 0.050 which meant that PDP explained only five percent of the change in COP. It signified that the remaining 95% of the change in COP is accounted for by other factors which may be different from the ones this study considered.

Table 4.13: ANOVA results on the influence of PDP on COP

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.988	1	2.988	8.653	.004[b]
	Residual	49.727	144	.345		
	Total	52.715	145			

a. Dependent Variable: PDP

b. Predictors: (Constant), COP

The ANOVA table shows F value 8.653 with a corresponding significance P value 0.004, less than 0.05. From this finding the research hypothesis which states that PDP have a positive influence on course organization practices was accepted while the null hypothesis which states

that PDP have a negative influence on course organization practices of academic staff was rejected. This implied that PDP had a positive significant influence on COP among academic staff. As PDP are effectively administered and offered to the academic staff in the university, the greater the possibility that their COP would improve and the reverse is true.

Table 4.14: Co-efficient Table on the influence of PDP on COP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.834	.409		4.481	.000
	COPS	.298	.101	0.238	2.942	.004

a. Dependent Variable: PDP

Table 4.14 shows that the Beta value 0.236 was accompanied by a significance P value 0.004 less than 0.05. From this finding the research hypothesis which states that PDP have a positive influence on course organization practices was accepted while the null hypothesis which states that PDP have a negative influence on course organization practices of academic staff was rejected. This finding concretizes that PDP have a highly positive significant influence on the course organization practices of academic staff. It also suggests further that as academic staff are allowed to participate in Professional Development Programmes they are likely to acquire adequate knowledge on how to prepare, sequence, assess and give feedback to learners.

Academic staff participants were asked how PDP influence course organization practices.

On this question, study participants showed that through PDP, there are higher chances of having lecturers fully equipped with competences to organize their courses better. One of the academic staff participants on this indicated that,

> *As we go for the PDP we are offered with knowledge and skills of designing course curriculum, course delivery, modes of assessment and feedback provision. For instance, we have been previously trained by the university on how to go about course organisation. Such a move has highly helped me on how to organize and structure my course units.*
> *Source: Academic staff FGD.*

Thus the findings on course organisation practices revealed that as academic staff are engaged in PDP the greater they can organise their course units

4.4.3 Hypothesis Three. The third hypothesis of the study was PDP positively influence on academic staff's knowledge of pedagogical approaches. This hypothesis was tested first using Pearson's Correlation Coefficient Index as in Table 4.15:

Table 4.15: Pearson's Correlation Coefficient Index between PDP and Knowledge of Pedagogical Approaches (KPA)

		PDP	KPA
PDP	Pearson correlation	1	0.397**
	Sig (2-tailed)		0.000
	N	156	138
KPA	Pearson correlation	0.397**	
	Sig (2-tailed)	0.000	
	N	138	159

Correlation is significant at 0.01 level (2-tailed)

Table 4.15 shows Pearson's correlation coefficient index between PDP and pedagogical approaches r = 0.397, sig = 0.000. Hence the research hypothesis which states that PDP have a positive influence on knowledge of pedagogical of approaches of academic staff is accepted while the null hypothesis which states that there is a negative influence between PDP and knowledge of pedagogical of approaches was rejected. This meant that there was a positive significant influence between PDP on academic staff knowledge of pedagogical approaches. This suggests that as PDP are effectively administered and offered to academic staff, the higher the chances that academic staff would use appropriate knowledge of pedagogical approaches in form of development of academic staff conceptions of teaching and learning and consequently changes in students' learning. This finding is in tandem with Adult Learning Theory concepts of readiness to learn, having practical reasons to learn as is with the case of academic staff in CHUSS and COVAB with an intention of acquiring relevant knowledge of pedagogical approaches where teachers take on new learning challenges to address a problem that exists. They seek learning opportunities when they perceive a deficiency in their own knowledge (Gregson & Sturko, 2007). Teachers strive for new knowledge and skills that address a problem immediately (Kelly, 2017).

It also resonates with Situated Learning Theory which are premised on core issues of participation, identity, and practice in that once academic staff are actively engaged in PDP in line with the aforementioned assumptions of the theory, they would be endowed with adequate knowledge of pedagogical approaches. This consequently shows that as one subscribes to the social norms of the university especially those requiring academic staff to continuously search for knowledge related with teaching pedagogical approaches. Furthermore, engaging in PDP in

form of content focus, active learning and collective participation, academic staff are likely to acquire and use appropriate knowledge of pedagogical approaches like the current MUELE, discussion, peer review, student self-discovery among others.

These results were confirmed using a simple regression analysis and results are offered in Tables 4.16, 4.17 and 4.18.

Table 4.16: Model summary on the on PDP and Knowledge of Pedagogical Approaches of academic staff

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.397[a]	.158	.151	.56199

a. Predictors: (Constant), KPA

Table 4.16 results show the adjusted r2 = 0.151 which implied that PDP explained only 15.1% of the change in pedagogical approaches. This implied further that the remaining 84.9% is accounted for by other factors not considered in the study.

Table 4.17: ANOVA results on PDP and Knowledge of Pedagogical Approaches

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.033	1	8.033	25.436	.000[b]
	Residual	42.953	136	.316		
	Total	50.987	137			

a. Dependent Variable: PDP

b. Predictors: (Constant), KPA

The ANOVA results in Table 4.17 shows the F value 25.436 and the sig value 0.000, less than the critical P value 0.05. Hence the research hypothesis which states that PDP have a positive influence on knowledge of pedagogical approaches of academic staff is accepted while the null hypothesis which states that there is a negative influence between PDP and Knowledge of Pedagogical Approaches was rejected. This suggests that there was a strong positive significant influence between PDP and academic staff knowledge of pedagogical approaches. It implies that PDP have a strong influence on the way academic staff choose and use pedagogical approaches.

Table 4.18: Coefficient results on PDP and Knowledge of Pedagogical Approaches

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.196	.365		3.280	.001
	KPA	.472	.094	.397	5.043	.000

a. Dependent Variable: PDP

Table 4.18 shows the beta value 0.397 and the significance P value 0.000 less than 0.05, thus implied that there was a strong positive significant influence between PDP and knowledge of pedagogical approaches used by academic staff in the teaching and learning process. Hence, the research hypothesis which states that PDP have a positive influence on knowledge of pedagogical approaches of academic staff was accepted while the null hypothesis which states that there is a negative influence between PDP and knowledge of pedagogical approaches was rejected. As academic staff are trained they would effectively use pedagogical approaches in the teaching and learning process.

Findings revealed that PDP strongly help to enhance knowledge of pedagogical approaches among academic staff in the university. Many of the study participants revealed that through engaging in PDP, they acquire pedagogies that are current in this digital age. Such pedagogies included, discussion, student based learning methods and online methods.

One of the academic administrative staff participant showed that;

> *We offer trainings to academic staff especially those related with new teaching pedagogies. We receive information from students that lecturers are using varied teaching approaches which has helped greatly to improve on the instruction competencies of academic staff.*
>
> *Source: Academic administrative staff interview.*

This finding did not differ from that of another academic administrative staff participant who showed that PDP improve greatly on their knowledge of pedagogical approaches as administrators in the university are satisfied with the same.

Whereas one academic staff participant 007 indicated that,

> *I was trained in the early 1990's, the way we were trained did not have online methods. These PDP have helped much with most of our aging professors to improve on the way they teach moving hand in hand with new pedagogical approaches in the current age.*
>
> *Source: Academic staff FGD.*

This finding indicated that PDP have helped more to improve on the methods of teaching used by lecturers especially the veteran/experienced academic staff who were trained in times when online methods of teaching like MUELE were absent.

4.4.4 Hypothesis Four. The fourth hypothesis of the study was that PDP have a positive influence on academic staff classroom management practices. This hypothesis was also tested using Pearson's Correlation Coefficient Index and Simple Linear Regression Analysis method.

Table 4.19: Pearson's correlation coefficient results on PDP and Classroom Management Practices (CMP)

		PDP	CMP
PDP	Pearson correlation	1	0.020
	Sig (2-tailed)		0.805
	N	156	
CMS	Pearson correlation	0.020	1
	Sig (2-tailed)	0.805	
	N	150	173

Correlation is significant at 0.01 level (2-tailed)

Table 4.19 shows Pearson's Correlation Co-efficient index between PDP and course management practices r = 0.020 and a corresponding critical P value = 0.805 greater than 0.05. It meant that the research hypothesis which states that PDP have a positive influence on classroom management practices is rejected in favour of the null hypothesis which states that there is a negative influence between PDP and classroom management practices of academic staff. This meant that there was an insignificant influence of PDP on classroom management practices of academic staff in Makerere University.

These results were confirmed with use of simple regression analysis as in Tables 4.20, 4.21 and 4.22

Table 4.20: Model summary on PDP and Classroom Management Practices

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.020[a]	.000	.006	.59587

a. Predictors: (Constant), CMP

Table 4.20 results reveals an adjusted r2 = 0.006 which meant that PDP explained only 0.6% of the change in classroom management practices. This hence shows that the excess 99.4% was explained by other factors influencing classroom management practices other than PDP that were not considered in the current study.

Table 4.21: ANOVA results on PDP and Classroom Management Practices

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.022	1	.022	.061	.805[b]
	Residual	52.549	148	.355		
	Total	52.570	149			

a. Dependent Variable: PDP

b. Predictors: (Constant), CMP

ANOVA results in Table 4.21 shows the F value 0.061 and a corresponding P value 0.805, greater than 0.05. Hence the research hypothesis which states that PDP have a positive influence on classroom management practices of academic staff is rejected while the null hypothesis which states that there is a negative influence between PDP and classroom management practices was

accepted. This thus shows that there is an insignificant influence between PDP and classroom management practices of academic staff. This finding disagrees with the tenets of Situated Learning Theory which assumed that learning is best achieved during educational training sessions especially through participation, identity and practice. Further learning which occurs in everyday situations like those of academic staff engagement in PDP may not have any influence on academic staff classroom management practices.

In addition, this finding opposes that assumptions of Adult Learning Theory of self-concept, past learning experience, readiness to learn, orientation to learning, practical reasons to learn and internal motivation. Internal motivation comes from the teacher as opposed to a leader or outside pressure (Gorozidis & Papioannou, 2014). Although external factors can be a motivator, such as keeping a job or getting a promotion, long term application and staying committed to a vision and mission occurs more readily with internal motivation (Gregson & Sturko, 2007). Sometimes the poor classroom management practices of academic staff are associated to their internal motivation but not necessarily on external motivation (PDP). Henceforth, this confirms the finding which suggests that PDP have no influence on academic staff classroom management practices. This insignificant finding can be explained using qualitative data as envisaged in descriptive results in the previous section under classroom management practices where most of the undergraduate student participants revealed that academic staff have poor classroom management practices in terms of interpersonal relations, re-enforcement and time management.

Table 4.22: Coefficient results on PDP and Classroom Management Practices

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.938	.401		7.319	.000
	CMP	.025	.099	.020	.247	.805

a. Dependent Variable: PDP

Table 4.22 shows the beta value 0.020 with a significance P value 0.805 greater than the critical P value 0.05. Hence the research hypothesis which states that PDP have a positive influence on classroom management practices of academic staff is rejected while the null hypothesis which states that there is a negative influence between PDP and classroom management practices was accepted. This implied that PDP had no influence on the classroom management practices.

Qualitative findings on the influence of PDP on academic staff classroom management practices showed slightly differing findings as study participants in all categories showed that as PDP are organized the higher the chances that academic staff would acquire skills to manage classrooms. One of the lecturers indicated that,

> *"With active and collaborative learning in PDP we acquire experiences on effective control of classrooms. This has been always emphasized in the trainings as fellow lecturers give experiences on how they manage noise and students who lack attention. This knowledge has greatly allowed us improve on our teaching and classroom management as we are able to control our students in lecture rooms."*
> *Source: Academic staff FGD.*

This finding in one way or the other implies that the pedagogical training equips lecturers with knowledge of controlling classes. All in all, the main finding of the study on this objective was that PDP have an insignificant influence on classroom management practices of academic staff in COVAB and in CHUSS at Makerere University.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

In this chapter, the discussion of results obtained in the study, the study conclusions based on results, study recommendations as well as areas for further research are offered.

5.1 Discussion

In this section, the discussion of results is offered and the discussion follows the four study objectives. The discussed results were acquired using quantitative and qualitative results as in the subsequent subsections.

5.1.1 Objective One

The first objective of the study was to establish the influence of PDP on academic staff content knowledge practices. Simple and Pearson Correlation Coefficient results revealed that PDP had a direct positive significant influence on academic staff content knowledge practices in CHUSS and COVAB at Makerere University. This suggests that once discipline specific PDP are offered with content which is focused on improving and deepening lecturers' content knowledge, then there is a high possibility that content knowledge selection and transfer in the classroom would be possible while failure to do the same implies the alternative. This finding is in agreement with Knowles Adult Leaning Theory which suggests that through offering training in consideration previous lecturer's learning experience and area of specialization by emphasizing content focus there would be a significant improvement in the content knowledge practices of academic staff in CHUSS and COVAB at Makerere University.

These findings revealed that PDP had a direct positive significant influence on content knowledge practices this was in agreement with Baiku, Demas, Woldekawariat, Gatahun and Mekonnen (2018) studied the effect of teaching without pedagogical training in St. Paul's hospital millennium college, Addis Ababa who revealed that most instructors practiced their personal teaching methods which was huge, with no lesson plan, no clear objectives, poor time management and overlapping content.

The findings presented on this objective is in tandem with the Adult Learning Theory which shows that adult learners have experiences which experiences are shared during PDP. Academic staff utilize life experiences to enhance their teaching (Gregson & Sturko, 2007). Life experiences and skills help transform information as it is learned into meaningful, applicable information (Reichert, 2016). This finding implied that as academic staff share experiences during PDP trainings this impacts positively the way they deliver the subject matter to learners. The study finding that PDP had a direct positive significant influence on content knowledge practices was in line with Shah, Madhavaram and Laverie (2018) in a theoretical study established that faculty need to be able to understand and present subject matter knowledge using theories conceptual frameworks and analytical skills. These theoretical frameworks include the Situated Learning Theory which calls for a community of practice where academic staff should participate in PDP offered as a strategy to improve on their content knowledge practices.

The study findings that PDP have a positive significant influence on content knowledge practices was in agreement with Emily, Allen and Gregory (2017) who revealed that engaging in professional development programs can provide opportunities for faculty members to learn from

each other through the establishment of networks that encourage and support sharing of knowledge, ideas and resources. This resonates with Situated Learning Theory which calls for a legitimate peripheral participation which requires one to understand, take part and subscribe to social norms, values and behaviours of the community they participate in. In so doing, academic staff content knowledge practices in the disciplines they teach improves. Relatedly, professional development increases teachers' self-reported knowledge and skills and changes in teaching practice (Desimone, Porter, Garet, Yoon & Birman, 2002).

In tandem with the study finding, Penuel, Sun, Frank and Gallagher (2012) showed that a well-designed professional development scheme can change teacher knowledge and practice. Professional Development Programmes enhance teacher knowledge and improves practice when sustained over it enhances teachers' knowledge of the curriculum implementation. Normally, active learning PDP enables teachers to master what they are supposed to offer to learners. This rhymes well with Adult Learning Theory which had it that adults need to know why new learning is needed which would help academic staff interpret what they already know and the current gap that exists creating the need for learning. Thus organizing PDP following teaching needs of academic staff would help change their attitudes and willingness to participate in the pedagogical training courses and transfer that knowledge during the teaching and learning process.

The study finding that PDP had a direct positive significant influence on content knowledge practices was in the same vein with Svendsen (2016) who indicated that collaborative professional development approaches are effective in bringing about positive changes in

teachers' practice, attitudes, and knowledge. This study showed that weekly collaborative PDP were offered leading to acquisition of knowledge and skills in the course. This was in consonance with community of practice embedded in the Situated Learning Theory.

The findings of the study revealed that PDP had a direct positive significant influence on content knowledge practices. This was in agreement with Smeby and Heggen (2012) who studied coherence and development of professional knowledge and skills which revealed that the three types of professional development coherence (biographical, pre-enrollment and programmes) had a significant influence on newly qualified teachers teaching work in terms of offering theoretical and practical knowledge taught. The finding that PDP had a direct positive significant influence on content knowledge practices was in the same vein with Liu and Liao (2013) study professional development and teacher efficacy using descriptive results revealed that professional development of teachers improved their content knowledge, curriculum in the discipline significantly. This finding was in support of the Adult Learning Theory aspect of self-directedness where adult learners take control of their learning through planning, carrying out, and analyzing their learning experience. This in turn leads to improvement of their content knowledge practices.

The finding of the study showed that PDP had a direct positive significant influence on content knowledge practices. This was more less similar with Kafyulilo (2014) who studied professional development through teacher collaboration as an approach to enhance teaching and learning in Science and Mathematics in Tanzania. Findings revealed that teachers' collaboration as an approach to professional development enhances effectiveness and efficiency in teachers masterly

of content and following the curriculum as expected in science related disciplines. Teachers are the one who implement the curriculum by selecting and combining the various aspects of knowledge contained in the curriculum or syllabus document. Hence the ought to be acknowledged and acquainted about the components of curriculum content and the different ways through which the curriculum content can be effectively delivered to learners.

The study findings that PDP have a positive significant influence on the pedagogical content knowledge was in line with Curwood (2014) who studied continuity and change in identities and narratives within professional development of teachers. Findings revealed that the traditional forms of professional development did not allow space for teachers' narratives. Hence the traditional professional development was ineffective at engaging teachers as learners, promoting critical reflection or encouraging new understandings about content and pedagogy. This finding was in line with the Situated Learning Theory which had it that identity is concerned with developing new ways of knowing in practice but also with understanding who we are and what potential we have. Likewise, academic staff must identify themselves as the gate keepers of knowledge and that this knowledge could become obsolete overtime rendering it necessary to engage in PDP.

The study findings that PDP have a positive significant influence on the pedagogical content knowledge was in support of Soine and Lumpe (2011) who measured characteristics of teacher professional development using correlational analysis technique and revealed that there was a slight but significant correlation between active learning in classroom and teachers use of new knowledge and skills as measured by classroom observation score. Such a finding concurs with a

community of practice construct of the Situated Learning Theory where newcomers or novices interact with experts in activities that include various identities, artifacts, and the knowledge within a certain socio-cultural environment or community of practice. The rationale for the community of practice is to allow peripheral newcomers to eventually become a part of the academic arena for teaching and learning.

The study findings that PDP have a positive significant influence on the pedagogical content knowledge was in agreement with that of Kafyulilo (2014) who showed that collaborative professional development offers teachers with a possibility to alter the curriculum and pedagogy within their subjects and also make connections between subjects and pedagogy. Further, this collaborative professional development stimulates new ideas and promotes coherence in a school's curriculum and instruction. All this depicts that collaborative professional development has a potential to enhance the acquisition of content knowledge.

The study finding was theoretically supported by Further, Penuel, Sun, Frank and Gallagher (2012) argues that professional development that employs active learning strategies can support teachers in making changes to their practice. Like other learners, teachers learn best when they have an opportunity to construct knowledge using new tools for thinking, reflection and revising of ideas. Thus with active learning teachers can construct and acquire new knowledge in their areas of specialization. In conclusion, PDP have a high positive significant influence on content knowledge pedagogical practices among academic staff in Makerere University.

5.1.2 Objective Two

The second objective of the study was to establish the influence of PDP on course organization practices among academic staff in CHUSS and COVAB at Makerere University. Findings on this objective revealed that PDP have a positive significant influence on course organization practices of academic staff in CHUSS and COVAB at Makerere University. This finding implied that as PDP are offered, periodically, sequentially and with active involvement of academic staff, the higher the possibility that these academic staff would effectively organize their course units following the right processes, strategies, and techniques of the teaching and learning process.

These results are in agreement with Lave and Wenger's Situated Learning Theory which suggests that learning of adults requires a community of practice where academic staff with teaching experience cascade course organisation skills to novice or early career academic staff. Normally this is realised through engaging in PDP which boosts ones' course organization practices. This finding was also in favour of the Adult Learning Theory where teachers take on new learning challenges to address a problem that exists. They seek learning opportunities when they perceive a deficiency in their own knowledge (Gregson & Sturko, 2007). Teachers strive for new knowledge and skills that address a problem immediately by engaging in PDP as a way of improving their course organization practices (Kelly, 2017). These are better arrived at through offering professional development practices.

In addition, this finding is in direct support of earlier studies. Such studies included Shah, Madhavaram and Laverie (2018) showed that excellent teachers should have course management capabilities which includes planning the course and assessing students' performance which was acquired through participation in PDP. The study finding showed that PDP have a positive significant influence on course organization practices of academic staff at CHUSS and COVAB

in Makerere University. This finding was in agreement with Aheisibwe and Ntunguka (2015) who studied equipping university academic staff with pedagogical competence at Bishop Stuart University and revealed that there were statistically significant differences between trained lecturers and non-teacher trained lecturers in management of teaching and learning at Bishop Stuart University. This finding was in tandem with Situated Leaning Theory which calls for active participation of academic staff in PDP to effectively organise their course units.

Theoretically the finding of the study was in agreement with Atteberry (2011) who showed that long-term teacher professional development is coordinated by creation of multiple opportunities for teachers to reflect on their own teaching, to talk about their observations of children with a more expert (coach). Under this training, the key steps in instructional process are reflected on that is, the teacher preparations, course introduction, lesson development, and assessment procedures. Thus through PDP these can be effectively implemented to improve on their course organisation practices. This earlier finding was in line with the Adult Learning Theory which advances that adults tend to recognize when they need to learn something new. As suggested by the aforementioned theory timing of new learning is critical for adults, as adults do not value learning if they do not feel they need to know.

In addition, the study finding was in agreement with Svendsen (2016) who indicated professional development approaches are more sensitive to the context in which teachers work and which are grounded in a coherent view of teacher learning and professionalism. Thus, professional development is viewed as complex with systems and subsystems that can easily be mastered through effective course organization practice. This finding collaborates well with Situated Learning Theory of Lave and Wenger construct of identity which is concerned with developing new ways of knowing in practice but also with understanding who we are and what potential we

have. This signifies that as academic staff establish their true identities in terms of course organisation for instance course structure, preparation for teaching, assessment, and feedback they are likely to engage in PDP for improvement purposes.

The study finding that PDP have a positive significant influence on course organisation practices was in direct agreement with Noben et al. (2021) who studied how professional development programme is related to the development of university teachers' self-efficacy beliefs and teaching conceptions. Findings arising from the earlier study also revealed that through professional development, with focus on teaching, teachers acquire ways of preparing for teaching, widening their knowledge about content selection, scheme of work, drawing, assessments and other course organization skills. This sharpens them in the way they discharge their course organisation practices. Such a finding was in favour of the self-concept construct of the Adult Learning Theory which proposes that adult learners have their own needs and wants, having the opportunity to be a self-directed which allows for individual needs to be met.

The findings of the study were in the same vein with Esterhazy, Lange, Bastiansen and Wittek (2021) who revealed that when academic staff study as a group in professional development programmes, they acquire the systematic ways of sequencing their content and presenting it before learners. This is normally learnt through sharing experiences from fellow academic staff. This finding was in line with the community of practice construct of the Situated Learning Theory which stresses that participation requires one to understand, take part and subscribe to social norms, values and behaviours of the community they participate in. In so doing they share knowledge through networking leading to improvement of their course organisation practices.

In more less the same direction with the study findings, Guzman (2009) studied developing craft knowledge in university teaching with key emphasis on how beginning teachers learn to teach. Results revealed that through training programmes like workshops, seminars, inductions, and conferences teachers are able to display profound knowledge of subject matter and how to organize its content, including writing, grammar, forms of oral expression and appropriate use of language. The study finding was theoretically, supported by Kwok (2021) who showed that it is disheartening that many teachers cannot adequately prepare despite the fact they had received teacher education. In the aforementioned study, it is exposed that through professional development trainings, teachers are able to develop ways to help students understand and commit to behavior standards and routine procedures that ensure a safe supportive classroom environment behavior. This finding was in agreement with the Adult Learning Theory constructs of readiness to learn and orientation to learning. Thus as academic staff and as adult learners recognize the need to learn something new, they are willing to take on new learning challenges to address a problem as it exists. This is normally realised through participation in PDP organised and offered by the university. In conclusion, PDP have a direct positive significant influence on course organization practices among academic staff in CHUSS and COVAB at Makerere University.

5.1.3 Objective Three

The third objective of the study was to establish the influence of PDP on knowledge of pedagogical approaches among academic staff in CHUSS and COVAB at Makerere University. Results indicated that PDP had a positive significant influence on knowledge of pedagogical approaches among academic staff in CHUSS and COVAB at Makerere University. This finding

suggested that as academic staff are trained, given appropriate content and following sequential teaching needs of adult learners, it is likely that PDP would have a positive significant influence on the knowledge of pedagogical approaches like use of blended learning, MUELE, student-based pedagogies (collaborative/peer review method, discussion, discovery etc.) that are andragogical in nature would be applied. This finding is in favour of Adult Learning Theory construct of readiness to learn, practical reasons to learn and orientation to learning. As academic staff see the value of engaging in PDP they are able to actively and collaboratively participate at any time in the activities that would promote their knowledge of pedagogical approaches. The earlier presented findings were also in agreement with the Situated Learning Theory constructs of participation, identity and practice. For instance, as academic staff engage in the community of practice they are able to share diverse knowledge of pedagogical approaches basing on their identities as subject specialists making them use appropriate modes of teaching and learning.

This finding resonates with those of Biku et al. (2018) who empirically showed that there were pedagogical training gaps among medical college instructors in St. Paul's hospital millennium. This consequently affected negatively on the standardization of methods used in instruction. Theoretically, the study finding supported Shah, Madhavaram and Laverie (2018) who revealed that professors should be able to use appropriate pedagogical approaches and be in position to understand the merits and demerits of each.

The finding of the study that, PDP had a positive significant influence on knowledge of pedagogical approaches among academic staff in CHUSS and COVAB at Makerere University. This was in agreement with Ezati, Opolot-Okurut and Ssentamu (2014) who studied addressing

pedagogical training needs of teaching staff in Makerere University and revealed that academic staff appreciated workshop methodology, the co-teaching approach and sharing of experiences. These pedagogical trainings were likely to improve on academic staff knowledge of pedagogical approaches. This finding resonated well with the Situated Learning Theory construct of participation in PDP where sharing of experience of pedagogy and andragogy would improve on their mode of teaching and learning. Such a finding also supports the Adult Learning Theory construct of past learning experience where academic staff are deemed to have previous learning experiences which was exposed to them during their classroom days similar to their students. Further, academic staff have experience gained after graduating from the university to the point of delivery of instruction. Through engaging in PDP such experiences are shared leading to improvement of knowledge of pedagogical approaches among individual lecturers.

The study finding is more in support of Emilly et al. (2017) showed that it is the responsibility of faculty developers to educate participants on principles of adult learning, instructional pedagogies and classroom management. Following the Situated Learning Theory construct of community of practice academic staff ought to engage in PDP to improve on their knowledge of pedagogical approaches that is to say improving methods of teaching, e-learning, use of teaching aids among others. The finding that PDP had a positive significant influence on knowledge of pedagogical approaches among academic staff in CHUSS and COVAB Makerere University was in agreement with Penuel et al. (2012) who revealed that active learning strategies in which teachers practice new pedagogical skills and receive feedback from others, creates opportunities for one to use most applicable teaching pedagogies in class. The study finding that PDP had a positive significant influence on pedagogical approaches among academic staff in Makerere

University was in line with, Fairman, Smith, Pullen and Lebel (2020) studied the challenge of keeping teacher professional development relevant and PDP plays a central in aligning accountability needs and teachers' professional needs, technology using a high breed and online methods.

The study finding that PDP had a positive significant influence on knowledge of pedagogical approaches among academic staff in CHUSS and COVAB at Makerere University was in consonance with Hontvedt, Silseth and Wittek (2021) who studied professional collaboration in teacher support teams and revealed that sharing solutions to teaching related problems, creative and problem solving pedagogy was a right pedagogical approach in the teaching of students. This finding was in agreement with the Situated Learning Theory construct of community of practice described as legitimate peripheral participation where a person's intentions to learn are engaged and the meaning of learning is configured through the process of becoming a full participant in a socio-cultural practice. In so doing, academic staff engagement in PDP in a cohesive manner is considered to have a significant influence on their knowledge of pedagogical approaches.

In more less the same direction with the study findings, Liu and Liao (2019) showed that professional development had enhanced participating teacher's efficiency and beliefs for using technologies in their future practices. Many of the respondents in the aforementioned study showed technology related content offered in classes allows one to use these teaching pedagogies effectively. Similarly, the length of the professional development positively enhances ones use of appropriate knowledge of pedagogical approaches. For instance, adding a one-year online course to a 5-day face to face PD programme had efficiency in use of pedagogical practices. This

finding concurs with the Adult Learning Theory construct of readiness to learn where adult learners tend to recognize when they need to learn something new. Therefore, timing of new learning is critical for adult learners as adults do not value learning if they do not feel they need to know.

The study findings showed a direct positive significant influence between PDP and knowledge of pedagogical approaches of academic staff in CHUSS and COVAB at Makerere University. This finding was in agreement with Vanassche and Welchtermans (2015) who revealed that collaborative learning in PDP and collaborating with a trained researcher who has the necessary theoretical and technical - methodological expertise can help in finding that the distance in pedagogical applications in research and teaching activities are improved. This is in the same vein with the Adult Learning Theory construct of orientation to learning where academic staff take on new learning challenges to address a problem that prevails. They seek learning opportunities when they perceive a deficiency in their own knowledge. Consequently, this improves and allows one to use the most appropriate teaching methods.

The Study findings showed a direct positive significant influence between PDP and knowledge of pedagogical approaches of academic staff in CHUSS and COVAB at Makerere University. This finding was in agreement with Lankford (2010) who examined the pedagogical content knowledge and practice of experienced secondary biology teachers for teaching diffusion and osmosis. Findings revealed teachers lacking professional skills could not effectively teach osmosis and diffusion using relevant pedagogies.

The study findings showed that professional development practices had a positive significant influence on knowledge of pedagogical practices of academic staff in COVAB and CHUSS. This finding was in agreement with, Milistetd, Salles, Backes, Mesquita and Nascimento (2019) who studied learner-centered teaching in a university based coach education and revealed that with use of university based coaching approach, student centered teaching approach was effectively applied in the university. The coaches were viewed as senior staff experienced in teaching and would guide junior teachers with knowledge about use of student centered methods. This finding agreed with the Situated Learning Theory construct of community of practice which provides a way to speak about the relations between newcomers and old-timers, and about activities, identities, artefacts and communities of knowledge and practice. Also the community of practice construct is more concerned with the process by which newcomers become part of a community of practice. Hence it suggests that as senior academic staff are used as coaches they provide novice and fellow academic staff with pedagogical and andragogical approaches relevant in the teaching and learning process.

The study findings were in the same vein with Antunes, Armellini and Howe (2021) who studied beliefs and engagement in an institution-wide pedagogic shift and revealed that engagement in PDP highly promoted pedagogical shift of academic staff away from the traditional methods to blended learning methods with high emphasis on electronic methods. Also the beliefs of teachers have changed through engaging in professional development programmes thus adapting online pedagogical training methods. In tandem with the study findings Cook-Sather (2020) studied respecting voices and how co-creation of teaching and learning can support academic staff and revealed that through training co-creative works, teachers were positioned to use pedagogical

approaches more friendly to learners at a given moment. In line with the study findings Esterhazy, Lange, Bastiansen and Wittek (2021) studied moving beyond peer review of teaching and collegial faculty development. Results showed that through collegial faculty development there were high chances for university faculty to teach more using collegial and peer review methods. This allows to vary the methods of teaching especially when academic staff work as a team. Thus, professional development empowers academic staff to teach using peer methods away from the traditional individual teaching approaches. This finding was in support of the Situated Learning Theory construct of participation which requires one to understand, take part and subscribe to social norms, values and behaviours of the community they operate. Thus through engaging in PDP following the collective participation and active learning, the higher the possibility that they would use appropriate knowledge of pedagogical approaches.

In agreement with the study findings Mahmood (2020) studied instructional strategies for online teaching in Covid-19 pandemic and showed that online instructional methodologies were to a large extent challenged by inflexible teaching and assessment policies, slow rate of getting feedback from students and finally, teachers and students low readiness to adapt to these online instructional methodologies. This presupposed that these teachers were lucking adequate training. The finding differed from Aheisibwe and Ntunguka (2015) who studied equipping university academic staff with pedagogical competence and established that non-trained teacher lecturers were largely using demonstration pedagogical approaches. In conclusion, PDP have a direct positive significant influence on knowledge of pedagogical approaches used by academic staff in CHUSS and COVAB at Makerere University.

5.1.4 Objective Four

The fourth objective of the study was to establish the influence of PDP on classroom management practices of academic staff in CHUSS and COVAB at Makerere University. Findings on this objective revealed that there was an insignificant influence between PDP and classroom management practices among academic staff in CHUSS and COVAB at Makerere University. These results suggested that even if PDP are organized and offered to academic staff, it may have no influence on how they manage their classrooms. The findings opposed Lave and Wenger's Situated Learning Theory which presupposes that academic staff are expected to acquire the necessary skills, knowledge, and attitudes that would enable them to be part of a community of practice. Therefore, academic staff participation in PDP does not influence their classroom management practices. These findings differed from Shah, Madhavaram and Laverie (2019) revealed that professors need to have skills to create an environment that encourages student learning. Such an environment should be noise free to allow learners concentrate for effective learning to occur.

The finding that there is an insignificant influence between PDP and classroom management practices among academic staff in Makerere University was opposed to Alghamdi (2017) who studied the relationship between lecturers professional competence, teaching environment and classroom teaching practices at Al-Baha University and with use of Pearson Correlation Co-efficient and Regression Analysis technique revealed that class size, support from faculty and teaching environment were significant determinants of classroom teaching practices among lecturers in the university.

The finding that there is an insignificant influence between PDP and classroom management practices among academic staff in Makerere University was opposed to Vilppu, Sodervik, Postareff and Murtonen (2019) who studied the effect of short online pedagogical training on university teachers interpretations of teaching-learning situations and with use of qualitative techniques established that online training programmes have a potential to affect participants interpretations of teaching and learning situations especially when participants are not very experienced in teaching. The study finding that professional development practices insignificantly influences classroom management practices differed from Wolf (2020) who studied classroom management in lieu of teachers' experiences and established that novice teachers have limited hours of teaching experience creating a need for more in-service trainings to acquire more skills in classroom management. Recognizing the differences in classroom management approaches novice teachers ought to be supported through professional development for the career-long process linked to the teaching experiences in classroom. The study findings differed from Noben, Deinu, Ark and Hofman (2020) who studied how professional development programme was related to the development of university teachers, self-efficacy beliefs and teaching conceptions and revealed that through professional development university teachers acquire more skills of managing students in classrooms. As mature students, this professional development equips teachers with knowledge of dealing with them. In conclusion, PDP have a direct positive significant influence on classroom management practices among academic staff in Makerere University.

5.2 Conclusions

The study made the following conclusions

5.2.1 Objective One. Basing on results from this objective, it is concluded that PDP have a positive significant influence on content knowledge practices among academic staff in CHUSS and COVAB at Makerere University. This means that considering staff specialization areas, organizing PDP frequently, ensuring that PDP are coherently offered and academic staff actively participate in PDP the higher the chances that content pedagogical practices would be effectively and appropriately used by the academic staff. On the other hand, ignoring PDP would imply inappropriate content knowledge practices by academic staff.

5.2.2 Objective Two. It is concluded that PDP have a positive significant influence on course organization practices among academic staff in CHUSS and COVAB at Makerere University. This means that through appropriately choosing content in PDP, ensuring that academic staff involvement in PDP is done, coherence between what is taught in PDP and what is offered for one to teach and above all constantly organize PDP on periodic intervals, academic staff course organization practices improves. Likewise, failure to offer PDP would mean inappropriate course organisation practices by academic staff.

5.2.3 Objective Three. On this objective it is concluded that PDP have the potential to positively and significantly influence on knowledge of pedagogical approaches of academic staff in CHUSS and COVAB at Makerere University. The study means that with effective administration of PDP to academic staff, the higher the chances that academic staff would use appropriate knowledge of pedagogical approaches in teaching and learning and consequently

changes in students' learning. Alternatively, failure to offer PDP to academic staff would imply inappropriate cultivation of knowledge of pedagogical approaches by the academic staff.

5.2.4 Objective Four. From the findings and discussion on objective four, it is concluded that PDP insignificantly influence classroom management practices among academic staff in CHUSS and COVAB at Makerere University. This means that, even if academic staff actively engage in PDP, with relevant content, there are limited chances to influence their classroom management positively.

5.3 Recommendations

From the findings, discussion and conclusions, this study recommends that if pedagogical practices are to be improved among lecturers in CHUSS and COVAB at Makerere University, policy makers. The university policy making organs like the University Council and University Senate in due consideration of the enablers of effective pedagogical practices such as an enabling quality assurance environment, institutional infrastructure and professional development programmes/pedagogical training should do the following;

(i) Through the implementation pedagogical practice policy guideline PDP should be organized basing on the one's teaching experience (early career, mid-career and senior) rank and line of specialization to allow alignment of content offered with lecturers' masterly of the subject matter. This would equip them with adequate knowledge in the discipline to apply the knowledge in their disciplines effectively.

(ii) There should be constant and continuous provision of PDP. Also an implementation pedagogical practice policy guideline which requires that all academic staff to attend over

one professional development training course designed to allow academic staff undertake course organization practices of the courses they teach and this should be done with immediate deliverables.

(iii) Further, on the third objective through the implementation pedagogical practice policy guideline, PDP organized by CHUSS and COVAB ought to emphasize on application of the various knowledge of pedagogical approaches like authentic/practitioner-related student-centred, and online pedagogies. This may be done by constantly involving these aspects in PDP training sessions. More so, all academic staff at all levels in terms of teaching experience, rank and qualification should be obliged to participate in these PDP since, knowledge of pedagogical approaches evolves over the years. Therefore, the need for retooling of academic staff to acquire the relevant PPs.

(iv) From the fourth objective, it is recommended that University management should make a review on the current PDP by tailoring them towards discipline specific pedagogical practices. This should be done by moving away from the generic PDP to discipline specific and practitioner-related pedagogical practices. Therefore, more effort needs to be exerted to the University Quality Assurance Department to look into other factors that would promote appropriate academic staff classroom management practices other than the generic PDP.

5.4 Areas for Further Research

Due to a wide scope of the study variables, the study considered Professional Development Programmes as a key factor influencing pedagogical practices of academic staff in CHUSS and COVAB at Makerere University. However, there are other variables or factors like, university

management practices, academic staff remuneration, resources, working conditions, institutional support, the university teaching and learning policies, Government funding models, demographic characteristics among others. These might in one way or the other have a direct positive influence on academic staff pedagogical practices. Therefore, future researchers may be prompted to undertake empirical studies to ascertain their influence on pedagogical practices of academic staff in Makerere University. Furthermore, Professional Development Programmes of academic staff were studied basing on content focus, active learning, collective participation, periodical learning and coherence as authentic/practitioner-related aspects. Another study might view the same concept as on the job and off the job continuous professional development of academic staff to establish their influence on pedagogical practices.

5.5 Contribution to new knowledge

The current study contributes to new knowledge in the sense that, the findings make a contribution and enables the operationalization of the earlier Makerere University teaching and learning policies and ICT policies. Also, the findings arrived at partly verify and approves the two theories that guided the study that is the Situated Learning Theory of Lave and Wenger and the Adult Learning Theory of Knowles as theories that guided the influence of PDP on PPs. That is to say, the findings which revealed a strong positive significant influence between PDP on content knowledge, course organization and knowledge of pedagogical approaches/practices are in favour of the two theories. Thus they are applicable in the contexts of COVAB and CHUSS. However, findings also show a new aspect that it is not valid truth that the two theories support pedagogical practices of academic staff as PDP had a negative and insignificant influence classroom management. Even if the environment of adult instructors/learners is made conducive by ensuring that PDP are organized and provided to academic staff in consideration of content

focus, active learning, coherence, collective participation and frequent PDP (duration), classroom management practices remains un-changed thus a new knowledge from this study. It also calls for scrutiny into other enablers like the institutional infrastructure, classroom size, other support devices like internet access in all classrooms, time tabling to ascertain whether they have an influence on academic staff classroom management practices.

References

Aheisibwe, I. & Ntunguka, O.R. (2017). *Equipping University Academic Staff with Pedagogical Competence:* A case of Bishop Stuart University. International Journal of Science and Research 6(6), 1872-1880 https://www.ijsr.net/search_index_results_paperid.php?id=8061706

Alemdjrodo, R. (2018). The Usefulness of African Academics in the Diaspora to African Universities. *Kujenga Amani.* https://kujenga-amani.ssrc.org

Alhija, F.N. (2017). Teaching in higher education: Good teaching through students' lens. Studies in Education Evaluation, 54(7), 4-12. https://doi.org/10.1016/j.stueduc.2016.10.006

Alghamdi, A. H. (2017). *The relationship between lecturers' professional competence, teaching environment and classroom teaching practices at Al-Baha University*. A thesis submitted in fulfillment of the requirements for the award of degree of Doctor of Philosophy.

Altinyelken, H. K. (2010). Pedagogical renewal in sub-Saharan Africa: The case of Uganda. *Comparative Education*, 46(2), 151-171, Doi:10.1080/0305006100377544

Antunes, V. T., Armellini, A. & Howe, R. (2021). Beliefs and engagement in institution-wide pedagogic shift. Teaching in higher education; Critical perspectives. *Journal of Homage,* https://doi.org/10.1080/13562517.2021.1881773.

Askerc, K. and Kocar, S. (2015). Teaching and pedagogical training of university teaching staff-practice and opinions under Solvaman Higher Education Legislation. *Inquiry,* 6(2), 159-175, Doi:10.3402/edui.v6.25591

Asiimwe, D., Ezati, E., Mugisha, F., Muhangi, D., Onweg, T. & Nnsabagasani. (2001) *Decentralization and Human Resources Demand Assessment from the Perspective of Districts',* Makerere University.

Association of African Universities (2013). 13th General Conference: 'Transforming African higher education for graduate employability and socio-economic development.

https://www.adeanet.org/en/events/13th-general-conference-of-the-association-of-african-universities-aau

Attebery, A. & Bryk, A. S. (2011). Analyzing teacher participation in literacy coaching activities. *The Elementary School Journal*, 112(2), 357-382. https://www.researchgate.net/publication/259709741

Badri, M., Almuaimi, A., Mohaidat, J., Yang, G. & Rashedi, A. (2016). Perception of Teachers' Professional Development Needs, Impacts, and Barriers: The Abu Dhabi Case. https://journals.sagepub.com/doi/pdf/10.1177/2158244016662901

Ball, D. L., Thames, M. H. & Phelps, G. (2008). Content knowledge for teaching. What makes it special. *Journal of Teacher Education, 59(5), 389-407.* http://dx.doi.org/10.1177/0022487108324554

Bartleton, L. (2018). A case study of teachers' perceptions of the impact of continuing professional practice in further education college in the West Midlands. University of Wolver Hampton. https://wlv.openrepository.com/bitstream/handle/2436/621633/

Baryomuntebe, D.M. (2019). Effects of staff development policy on the quality of pedagogy in Ugandan universities. *International Journal of Multidisciplinary Research and Development, 2(5), 223-245.*

Besar, P.N. (2018). Situated Learning Theory: The Key to Effective Classroom Teaching? *International Journal for Educational, Social, Political & Cultural Studies*, 1(1), 49-60 https://journals.mindamas.com/index.php/honai/article/view/1022

Biku, T., Demas, T., Woldehawariat, N., Gatahun, M. & Mekonnen, A. (2018). The effect of teaching without pedagogical training in St. Paul's Hospital Mellenium medical college, Addis Ababa, Ethiopia. *Advances in Medical Education and Training*, 9(893-904), https://doi.org/10.2147/AMEP.S167944

Bisaso, R. (2010). Organizational responses to public sector reforms in higher education in Uganda: A case study of Makerere University. *Journal of Higher Education Policy and Management, 32(4), 343-351.* http://dx.doi.org/10.1080/1360080X.2010.491108

Bisaso, R. (2017). Makerere University as a Flagship Institution: Sustaining the Quest for Relevance. http://cees.mak.ac.ug/sites/default/files/Bisaso_Flagship.pdf

Bishop, M. J. (2016). *The impact of ongoing professional development in Math achievement*. A PhD thesis presented at Faculty of Education Department. Larson Newman University.

Bishop, W. & Starkey, D. (2006). Key words in Creative Writing. University Press of Colorado,

Branham, L. M. (2018). *Interpretative Analysis of Adult Learners' Lived Experiences in a Uniquely Designed Higher Education Program*. A PhD Thesis at Antioch University.

Bryman, A. & Bell, E. (2011). Business research methods. 3rd ed. Oxford University Press.

Cameron, A. & Woods, C. (2016). *A Proposed 'Ladder of Learning for Academics' Professional Development in Teaching.* Science Teaching and Learning Centre.

Carlos-Guzman, J. (2018). Best teaching practices of higher education professors. *Research Gate*, 16(2), 1-9. http://revistas.vam.es/index.php/reice/article/view/9428

Caruth, G.D. (2014). Meeting the Needs of Older Students in Higher Education. *Participatory Educational Research*, 1(2) 21-35. http://www.partedres.com

Caruth, G. (2014). Learning How to Learn: A Six Point Model for Increasing Student Engagement. *Participatory Educational Research*, 1(2), 1-12. http://dx.doi.org/10.17275/per.14.06.1.2

Casares, J., Dickson, D.G., Hannigan, T. & Phelps, A. (2011). *The future of teaching and learning in higher education*.

https://www.rit.edu/provost/sites/rit.edu.provost/files/docs/future_of_teaching_and_learning_reportv13.pdf

Cercone, K. (2008). Characteristics of adult learners with implications for online learning design. *AACE Journal*, 16(2), 137-159. https://www.researchgate.net/publication/228629238

Chabaya, R.A. (2015). *Academic Staff Development in Higher Education Institutions: A Case Study of Zimbabwe State Universities.* A PhD Thesis submitted at the University of South Africa.

CHUSS Annual Report. (2020). Transforming Humanity. Makerere University, Kampala Uganda, https://chuss.mak.ac.ug/news/sites/default/files/downloads/CHUSS%20ANNUAL%20REPORT%202020.pdf

Clapper, T.C. (2010). Beyond Knowles: What Those Conducting Simulation Need to Know about Adult Learning Theory. *Clinical Simulation in Nursing 6(1),* 7-14. https://doi.org/10.1016/j.ecns.2009.07.003

Clawson, J. G. (2014). *Adult Learning Theory*. Darden Business Publishing, University of Virginia

Cook-Sather, A. (2020). Respecting voices. How the co-creation of teaching and learning can support academic staff, under represented students and equitable practices? *Higher Education*, 79(885-901), https://doi.org/10.1007/510734-019-00445-W

COVAB Annual Report. (2019). Safer Planet, Prosperous Communities. Makerere University Kampala. https://covab.mak.ac.ug/wp-content/uploads/2021/05/x-ANNUAL-COVAB-REPORT-2019-2020.pdf

Creswell, J.W. (2014). Educational Research: *planning, conducting and evaluating quantitative and qualitative research.* Upper Saddle Creek, NJ: Pearson Education.

Creswell, J.W. (2013). Qualitative, quantitative, and mixed methods approaches (4th ed.). Thousand Oaks, CA: Sage.

Curwood, J. S. (2014). Between continuity and change, identities and narratives with teacher professional development. *Teaching Education*, 25(2), 156-183, Doi:10.1080/10476210.2012.755159

Darling-Hammond, L., Hyler, M, E., & Gardner, M. (2017). Effective teacher professional development, learning policy institute. http://creativecommons.org/licenses/by-nc/4.0/

Desimone, L.M. & Pak, K. (2017). Instructional Coaching as High-Quality Professional Development. *Theory into Practice, 56(1), 3-12.* https://doi.org/10.1080/00405841.2016.1241947

Desimone, L. M. & Garet, M. S. (2015). Best practices in teachers professional development in United States. *Psychology, Society and Education, 7(3),* 252-263. http://repositorio.ual.es/bitstream/handle/10835/3930/Desimone%20En%20ingles.pdf?s

Desimone, L. M., Porter, A. C., Garet, M. S., Yoon, K. S. & Birman, B. F. (2012). Effects of professional development in teachers instruction. *American Educational Research Association*, 81-112, http:/www.jstor.org/stable/3594138

Diaz, C., Gonzalez, G., Jara-Ramirez, L. & Munoz-Parra, J. (2018). Validation of a Classroom Management Questionnaire for Pre and In-service Teachers of English. *Revista Colombiana de Educacion,* 75, 263-285.

Directorate of Quality Assurance. (2017). Makerere University Self-Assessment Report

Down, C.M. (2004). *Situated learning: Perceptions of training practitioners on the transfer of competence across workplace contexts*. PhD Thesis at Royal Melbourne Institute of Technology.

Driel, J. H. V. & Berry, A. (2012). Teacher professional development focusing on pedagogical content knowledge. *Educational Researcher, 41(1),* 26-28, https://doi.org/10.3102%2F0013189X11431010

Emilly, D. A., Allen, R. L. & Gregory, H. E. (2017). Higher education faculty perceptions of professional development. *Multidisciplinary research information, 2(1),* 40-52, https://www.researchgate.net/publication/315396303

Esterhazy, R., Lange, T. D., Bastiansen, S. & Wittek, A. L. (2021). Moving beyond peer review of teaching: A conceptual framework for collegial faculty development. *Review of Educational Research*, 91(2), 237-271, Doi:10.3102/0034654321990721

Esterhazy, R., Lange, T. D., Bastiansen, S. & Wittek, A. L. (2021). Moving beyond peer review of teaching: A conceptual framework for collegial faculty development. *Review of Educational Research*, 91(2), 237-271, Doi:10.3102/0034654321990721

Etikan, I., Musa, S.A., & Alkassim, R. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics, 5(1), 1-4.* doi: 10.11648/j.ajtas.20160501.11

European Higher Education Area (2018) Bologna Process Implementation Report. http://ec.europa.eu/eurydice

European University Association. (2010). Africa-Europe Higher Education Cooperation for Development: Meeting regional and global challenges.

European University Association. (2019). Continuous Development of Teaching Competences: Learning and Teaching Paper. Thematic Peer Group Report.

European Science Foundation (2019). Professionalization of Academics as Teachers in Higher Education. *Science Position Paper, The Contribution of European Social Science.*

Eyal, O. & Roth, G. (2011). Principals' leadership and teachers' motivation: Self-determination theory analysis, *Journal of Educational Administration, 49(3), 256-275.* DOI:10.1108/09578231111129055

Ezati, B. A., Ocheng, M. K., Ssentamu, P. N., & Sikoyo, L.N. (2010). Enhancing quality of student teachers' practices through reflective journal writing during school practice. *Perspectives in Education, 28 (2),* 31-40.

Ezati, B.A. & Mugimu, C. B. (2010). Possibilities and Challenges of Providing Continuous Professional Development in Pedagogy for Higher Education Staff in Africa: A case of Makerere University. *Comparative and International Higher Education.* https://www.ojed.org/index.php/jcihe/article/view/794

Ezati, B.A., Okurut, C.O. & Ssentamu, P.N. (2014). Addressing Pedagogical Training Needs of Teaching Staff: Lessons from Makerere University Short Professional Development Programs 2006 – 2010. *American Journal of Educational Research, 2 (12),* 1190-1198. DOI:10.12691/education-2-1 2-9

Fairman, J.C., Smith, D.J., Pullen, P.C. & Lebel, S.J. (2020). The challenge of keeping teacher professional development relevant. *Professional Development in Education*. https://doi.org/10.1080/19415257.2020.1827010

Ferman, T. (2002). Academic professional Development practice: what lecturers find valuable. *International Journal for Academic Development, 7(2),* 146-158.

https://doi.org/10.1080/1360144032000071305

Fraenkel, J.R. & Wallen, N.E. (2008). How to Design and Evaluate Research in Education. The McGraw Hill Companies, 146-150.

Garet, M., Porter, A. C., Desimone, L., Birman, K. & Yoon, S. (2009). What makes professional development effective results from a national sample of teachers. *American Educational Research Association,* 38(4), 915-945, http://www.jstor.org/stable/3202507

Gorozidis, G., & Papioannou, A. (2014). Teachers' motivation to participate in training and to implement innovations. *Teaching and Teacher Education, 39(4), 1-11*. DOI:10.1016/j.tate.2013.12.001

Gregson, J.A. & Sturko, P.A. (2007). Teachers as Adult Learners: Re-conceptualizing Professional Development. *Journal of Adult Education*, 36(2), 1-18 https://files.eric.ed.gov/fulltext/EJ891061.pdf

Guerriero, S. (2013). Teachers pedagogical knowledge and teaching profession. Background Report and Project Objectives, OECD. Better policies for better lives.

Guzman, C. V. (2009). Developing craft knowledge in teaching at university. How do beginning teachers learn to teach? *European Educational Journal*, 8(2), 326-335, http://dx.doi.org/10.2304/eerj.2009.8.3.326

Hadadi, E. H & Kirby, D. A. (2016). Universities and Innovation in a factor-driven economy. *Industry and Higher Education, 30(2) 140-148* https://doi.org/10.5367%2Fihe.2016.0302

Henard, F. & Roseveare, D. (2012). Fostering quality teaching in higher education: *Policies and Practices. An IMHE Guide for Higher Education Institutions*. https://www.oecd.org/education/imhe/QT%20policies%20and%20practices.pdf

Hammersley, M. (2019). From Positivism to Post-Positivism: Progress or Digression? http://dx.doi.org/10.4467/25440845TP.19.009.10292

Hasan, M. & Parvez, M. (2017). Professional Development of 21st Century Teachers in Higher Education, *International Journal of Education and Applied Sciences*, 8 (1), 145-149, Doi:10.5958/2230-7311.2017.00021.6

Haung, D. & Cho, J. (2010). Using professional development to enhance staff retention https://files.eric.ed.gov/fulltext/EJ1068369.pdf

Haywood, H., Pain, H. & Adams, J. (2014). Engagement with continuing professional development: Development of a service model. *Journal of Allied Health*. https://www.researchgate.net/publication/228070674

Hefnawi, A (2017). Staff perception of professional development Activities. A case study in a Boys school in the UAE. *Research Gate,* 1-12. https://www.researchgate.net/publication 126335722

Herrington, J., Oliver, R., Herrington, T. & Sparraw, H. (2003). Towards a new tradition of online instruction. Using situated learning theory to design. Web-based units. Edith Cowan University, Australia. https://www.researchgate.net/publication/2376757

Hontvedt, M., Silseth, K. & Wittek, L. (2021). Professional collaboration in teacher support teams: A study of teacher and nurse educator. *Creative problem-solving in shared space for professional development*, 65(2), 240-357, https:doi.org/10.1080/00313831.2019.1665098

Hudson, P. (2013). Strategies for Mentoring Pedagogical Knowledge, Teachers and Teaching: *Theory and Practice*, 19(4), 363-381. https://doi.org/10.1080/13540602.2013.770226

Inamorato, A., Gausas, S., Mackeviciute, R., & Martinaitis, Z. (2019). Innovating Professional Development in Higher Education. *Publications Office of the European Union.* https://core.ac.uk/download/pdf/199318332.pdf

Jacob, W. J., Xiong, W., Ye, H., Wang, S. & Wang, X. (2019). Strategic best practices f flagship university professional development centers. *Professional Development in Education*, 45(5), 801-813, Doi:10.1080/194152572018.1543722

Jacob, W.J., Nsubuga, Y.K., & Mugimu, C.B. (2009). Higher Education in Uganda: The Role of Community Colleges in Educational Delivery and Reform. *Indigenous Education Project. Academic Profession in the Knowledge-Based Society*, 4(19), 4020-9477. https://www.researchgate.net/profile/W-Jacob/publication/227072205

Jacobson-Lundeberg, V. (2013). Pedagogical implementation of 21st century skills.

Jansen, C. and Marwe, P. V. D. (2015). *Teaching practice in the 21st century: Emerging trends, challenges and opportunities.* Education leadership and management. College of Education, Unisa, Department of Psychology, College of Human Sciences.

Jeanin, L. M. (2016). *Professional development needs of faculty members in an international university in Thailand.* PhD Thesis at Walden University, College of Education.

Kafyulilo, A. C. (2014). Professional development through teacher collaboration: An approach to enhance teaching and learning in Science and Mathematics in Tanzania. *Africa Education Review*, 10(4), 671-688, https://doi.org/10.1080/18146627.2013.853560

Kakembo, F. & Barymak, R.M. (2017). Broadening Perceptions and Parameters for Quality Assurance in University Operations in Uganda. *Journal of Higher Education in Africa, 15(1), 69-88.* https://www.jstor.org/stable/10.2307/90016701

Karimi, F.K. (2014). Didactic Competencies among Teaching Staff of Universities in Kenya. *International Journal of Higher Education*, 3(2), 28-37. http://dx.doi.org/10.5430/ijhe.v3n2p28

Kasule, G. W., Wesselik, R., & Mulder, M. (2016). Professional development status of teaching staff in a Ugandan public university. *Journal of Higher Education Policy and Management*, 3-16, Doi:10.1080/1360080x.2016.1181883

Kaynardag, A. Y. (2017). Pedagogy in Higher Education: Does it Matter? *Studies in Higher Education, 44(1), 111-119.* https://doi.org/10.1080/03075079.2017.1340444

Kedraka, K. & Rotidi, G. (2017). A New Culture is Emerging in Greek Higher Education. *International Journal of Higher Education, 6 (3), 147-153.* http://dx.doi.org/10.5430/ijhe.v6n3p147

Kelly, J. (2017). Professional Learning and Adult Learning Theory: A Connection. Northwest *Journal of Teacher Education, 12(2), 1-15.* https://doi.org/10.15760/nwjte.2017.12.2.4

Kim, S., Raza, M. & Seidman, E. (2019). Improving 21st century teaching skills. The key to effective 21st century learners. *Research in Comparative and International Education. Sage*, 14(1), 99-117, Doi:10.1177/17454991829214

Klink, M. V. D., Kools, Q., Avissar, G., White, S. & Sakata, T. (2017). Professional development of teacher educators. What do they do? Findings from an explorative international study. *Professional Development in Education*, 43(2), 163-178, Doi:10.1080/19415257.1114506

Knight, J. (2014). Professional Development for Faculty and Staff in Ras Al Khaimah's Higher Education Institutions. *Foundation for Policy Research.* https://www.researchgate.net/publication/336214703

Knowles, S.M. (1970). The Modern Practice of Adult Education: From Pedagogy to Andragogy. Cambridge Book Company.

Knowles, S.M. (1980). The Modern Practice of Adult Education: Revised Edition. Chicago: Association Press.

Knowles, S.M. (1984). Introduction: The Art and Science of Helping Adults Learn. In Andragogy in Action: Applying Modern Principles of Adult Learning. San Francisco: Jossey-Bass.

Kobayashi, S., Dolin, J., Soborg, A. & Turner, J. (2017). Building Academic Staff Teaching Competencies: How Pedagogic Continuous Professional Development for Academic Staff Can Be Organised and Developed in Research-Intensive Universities. http://dx.doi.org/10.1007/978-3-319-56499-9_5

Korthagen, F. A. J. (2009). Situated learning theory and pedagogy of teacher education. Towards an integrative view of teacher behavior and teacher training. *Teaching and Teacher Education*, 26(98-106), www.elsevier.com/locate/tate

Krejcie, R.V. & Morgan, D.W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30, 607-610. https://doi.org/10.1177%2F001316447003000308

Kultsum, U. (2017). The concept of pedagogical content knowledge (PCK). Recognizing the English teachers' competencies in Indonesia. *Education and Humanities Research*, 134(55-59), https://dx.doi.org/10.2991/icirad-17.2017.11

Kwok, A. (2021). Managing classroom. Management preparation in teacher education, teacher and teaching. *Routlage*, https://doi.org/10.1080/1354602.2021.1933933

Lankford, D. (2010). *Examining the pedagogical content knowledge and practice of experienced secondary biology teachers for teaching diffusion and osmosis*. A PhD dissertation at the Faculty of the Graduate School, University of Missouri, https://doi.org/10.32469/10355%2F8345

Lara-Alecio, R., Tang, S., Sutton-Jones, K. L. & Irby, B. J. (2021). Teachers' pedagogical and content knowledge after participation in virtual professional development. *International Journal of Virtual and Personal Learning Environments*, 11(1), 64-86, Doi:10.4018/IJVPLE.2021010105

Lave, J. & Wenger, E. (1991). Situated Learning: Legitimate Peripheral Participation. Cambridge University Press. https://psycnet.apa.org/doi/10.1017/CBO9780511815355

Lankford, D. (2010). *Examining the pedagogical content knowledge and practice of experienced secondary teachers for teaching diffusion and osmosis*. A dissertation presented to faculty of the graduate school university of Missouri for award of Doctor of Philosophy.

Lessing, A. & Witt, M. D. (2007). The value of continuous professional development: teachers' perceptions. *South African Journal of Education*, 27(1), 53-67. https://files.eric.ed.gov/fulltext/EJ1150223.pdf

Liu, Y. & Liao, W. (2019). Professional development and teacher efficacy: evidence from the 2013 TALIS. *School Effectiveness and School Improvement*, 30(4), 487-509, https://doi.org/10.1080/09243453.2019.1612454

Loeng, S. (2013). Eugen Rosenstock-Huessy – an andragogical pioneer, *Studies in Continuing Education, 35(2), 241-253.* https://www.researchgate.net/publication/263677421

Pesce, J.R. (2015). Professional Development for Teaching in Higher Education: Faculty Perceptions and Attitudes. PhD Dissertation, Boston College Lynch School of Education. http://hdl.handle.net/2345/bc-ir:104134

Machingambi, S. (2016). Academic staff development: A lever to address the challenges of the 21st Century university classroom. *African Journal of Science, Technology, Innovation and Development, 8(3), 320-326.* https://doi.org/10.1080/20421338.2016.1163480.

Madhavaram, S. & Lavarie, D. (2010). Developing Pedagogical Competence: Issues and Implications for Marketing Education. *Journal of Marketing Education, 32(2), 197-213.* https://doi.org/10.1177%2F0273475309360162

Mahlase, N. O. (2014). *The influence of a continuing professional development programme on the classroom practices and professional development of technology teachers*. A thesis submitted in partial fulfillment of the requirements for the degree Magister Education in Assessment and quality assurance in education and training, Faculty of Education at University of Pretoria.

Mahmood, S. (2020). Instructional Strategies for Online Teaching in COVID-19 Pandemic https://doi.org/10.1002/hbe2.218

Malunda, P.N. & Atwebembeire, J. (2019). Staff Development and Quality Education in Uganda: Analysis of Quality Teaching and Research in Private Chartered Universities. *The Uganda Journal of Management and Public Policy Studies*, 15(1), 104-117. https://www.researchgate.net/publication/330385648

Makerere University Strategic Plan. (2020). Unlocking the Knowledge Hub in the Heart of Africa 2020-2030.

Makerere University Teaching and Learning Policy. (2010). Makerere University Policies.

Makerere University Annual Report. (2017).

Makerere University Annual Report. (2018).

Makerere University Human Resources Manual. (2009). The Policy on Appointment and Promotion of Academic Staff as Reviewed and Approved by University Council.

Makerere University Fact Book. (2019). Planning and Development Department http://pdd.mak.ac.ug/

Mamdani, M. (2007). Scholars in the market place - the dilemmas of neo-liberal reform at Makerere University, 1989-2005. Kampala, Fountain Publishers. https://www.africanbookscollective.com/books/scholars-in-the-marketplace/Scholars%20in%20the%20Marketplace%20-%20Preface.pdf

Mansvelt, J., Suddaby, G. & O'Hara, D. (2008). Learning how to e-teach? Staff perspectives on formal and informal professional development activity. https://www.researchgate.net/publication/251303324

Marsh, H.W. (2011). Help teachers improve skills or live with the consequences. *International Journal Learning and Development, 1(1), 163-193.* https://doi.org/10.1348/000709910X503501

Marsh, H.W. & Martin, A.J. (2011). Academic self-concept and academic achievement: Relations and causal ordering. *British Journal of Educational Psychology, 81, 59-77.* https://doi.org/10.1348/000709910X503501

Mendonca, M. I. M. D. R. (2014). *Developing teaching and learning in Mozambique higher education. A study of pedagogical development at Eduardo Mondlene University*. Doctoral dissertation in education work. Department of Science and Mathematics Education. Umea Universities.

Merriam, S. (2001). Andragogy and Self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education*, 89(2), 3-13. https://doi.org/10.1002/ace.3

Mezirow, J. (1996). Contemporary paradigms of learning. Adult Education Quarterly, 46(3), 158-172. https://doi.org/10.1177%2F074171369604600303

Mccarthy, K.E. (2016). *An Analysis of the Formal and Informal Professional Learning Practices of Middle and High School Mathematics Teachers*. PhD thesis, University of South Florida, USA.

Milistetd, M., Salles, W. D., Backes, A. N., Mesquita, I. & Nascimento, J. V. D. (2019). Learner centered teaching in university-based coach education: First attempts through action research inquiry. *International Journal of Sports Science and Coaching*, 14(3), 294-309, Doi:10.1177/1747954754119842957.

Mitchell, R. (2013). What is Professional Development, how does it occur in individuals, and how may it be used by educational leaders and managers for the purpose of school improvement? *Professional Development in Education, 39 (3), 387-400.* http://dx.doi.org/10.1080/19415257.2012.762721

Milistetd, M., Salles, W.N., Backes, A.F., Mesquita, I. & Nascimento, J.V. (2019). Learner-centred teaching in a university-based coach education: first attempts through action research inquiry. *International Journal of Sports Science and Coaching, 14(3), 294-309.* Doi: 10.1177/1747954119842957

Mizell, H. (2010). Why Professional Development Matters? https://www.researchgate.net/publication/234748122

Morse, J.M. & Niehaus, L. (2009). Mixed methods design: Principles and Procedures. Walnut Creek, CA: Left Coast Press.

Mugizi, W. (2018). The Role of Higher Education in Achieving Uganda Vision 2040. *Elixir Social Studies,* 115 (5), 49831-49837. https://www.researchgate.net/profile/Mugizi-Wilson/publication/323393914

Mundy, M.A., Kupezy, L., Dellis, J. & Salgoch, R. (2012). Setting the standard for faculty professional development in higher education. *Journal of Academic and Business Ethics, 26(1), 1-9.* https://www.aabri.com/manuscripts/111041.pdf

Munir, F., Jabeen, S. & Nader, M. (2021). Continuous professional development: Performance of primary school teachers. *Pakistan Social Science Review,* 5(1), 637-649, www.pssr.org.pk

Murphy, J. (2014). Managing Professional Development of Academic Staff to Enhance University Performance. A thesis submitted for Degree of Doctor of Business Administration. *Higher Education Management.*

Mushemeza, E.D. (2016). Opportunities and Challenges of Academic Staff in Higher Education in Africa. *International Journal of Higher Education, 5(3), 236-246.* http://dx.doi.org/10.5430/ijhe.v5n3p236

Nabaho, L., Aguti, J. & Oonyu, J. (2016). Assuring the Quality of Teaching at Makerere University in Uganda: Practices and Experiences of Academics and Students. https://journals.ukzn.ac.za/index.php/soa/article/view/1334

Nabayego, C., Kiggundu, M.M., Itaaga, N., & Mugagga, A.M. (2015). Informal product-based training as a strategy for nurturing patriotism for Uganda's development through university education. *World Journal of Educational Research and Reviews. 2(2), 014-021.*

http://cees.mak.ac.ug/informal-product-based-training-strategy-nurturing-patriotism-uganda%E2%80%99s-development-through

Nakabugo, M.G. (2008). Repositioning the Role and Pedagogy of Teachers in Higher Education in the Context of Privatization: The Case of Makerere University, Uganda. *Journal of International Educational Cooperation, (3) 89-93.* http://cees.mak.ac.ug/sites/default/files/publications/Goret_1_0.pdf

National Council for Higher Education (2018). Annual Performance Report and Financial Statement of the Financial Year 2017/2018.

National Council for Higher Education (2020). The Uganda Higher Education Review, Journal of the National Council for Higher Education, 8 (1), 1-69. https://www.unche.or.ug/

Nguyen, T.S. (2017). Conceptual Changes in Higher Education Teaching and Learning: Insights from a compulsory teacher training program for higher education teachers in Vietnam. *A PhD Thesis at the Faculty of Arts and Social Sciences, Sydney School Education and Social Work. The University of Sydney*

Ningtiyas, F. A. & Jailani, A. (2018). Does training affect the pedagogical competence of mathematics teachers? *Journal of Physics Conference Series*, Doi:10.1088/1742-6596/109711/012106

Noben, I., Deinum, J. F., Ark, I. M. E. D. & Hofman, W. H. (2021). How is professional development program related to the development of teachers' self-efficacy beliefs and teaching conceptions. *Studies in Educational Evaluation Elsevier*, 68 (1-10), https:dddoi.org/10.1016/j.stueduc.2020.100966

Odalen, J., Brommesson, D., Erlingsson, G.O., Schaffer, J.K. & Fogelgren, M. (2019). Teaching university teachers to become better teachers: the effects of pedagogical training courses

at six Swedish universities. *Higher Education Research and Development, 38(2), 339-353.* https://doi.org/10.1080/07294360.2018.1512955

OECD, (2018). Measuring Innovation in Education: A journey to the future. *Center for Educational Research and Innovation.* https://www.oecd.org/education/ceri/Measuring_Innovation_16x23_ebook.pdf

Oliveira, E.T. (2021). Pedagogical Knowledge of Pre-Service Teachers from a Brazilian Virtual University: Analysis of Data collected by TPACK Survey. *American Journal of Humanities and Social Science*. https://www.researchgate.net/publication/351348230

Omaswa Report (2014). Task Force On-job Evaluation, Reorganization of the Staff Structure and Financing of Makerere University. https://www.scribd.com/document/318174781

Othman, A. & Dahari, Z. B. (2011). Professional development among academic staff at selected Malaysian public universities. Preliminary findings of the impact of basic teaching methodology course (BTMC). *International Journal of Business and Social Science*, 2(11), 125-134, www.ljbssnet.com

Owens, A., Daddow, A., Clarkson, G. & Nulty, D. (2020). What is the price of excellence in learning and teaching? Exploring the costs and benefits for diverse academic staff studying online for a GCHE supporting the SoTL, https://creativecommons.org/licenses/by-nc/4.01/

Patton, M.Q. (2001). Qualitative evaluation and Research Methods (3rd ed.). Newbury Park, CA: *Sage Publications*.

Patton, M.Q. (2002). Qualitative Research and Evaluation Methods (3rd ed.). Newbury Park, CA: *Sage Publications*.

Pesce, J.R. (2015). *Professional Development for Teaching in Higher Education: Faculty Perceptions and Attitudes.* PhD Dissertation Submitted to Boston College – Lynch School of Education.

Penuel, W. R., Sun, M. & Gallagher, H. A. (2012). Using social network analysis to study how collegial interactions can augment teacher learning from External Professional Development. *American Journal of Education*, 18, 103-136. https://doi.org/10.1086/667756

Phelps, G., Weren, B., Croft, A. & Gitomer, D. (2014). Developing Content Knowledge for Teaching Assessments for the Measures of Effective Teaching Study. *Research Report Series.* doi:10.1002/ets2.12031

Phillips, P. (2008). Professional Development as a Critical Component of Continuing Teacher Quality. *Australian Journal of Teacher Education*, 33(1). http://dx.doi.org/10.14221/ajte.2008v33n1.3

Powell, E., Furey, S., Scott-Evans, A. & Terrell, I. (2007). Teachers perceptions of the impact of CPD: An institutional case study. *Journal of in-service Education*, 29(3), 389-404, Doi:10.1080/13674580300200225

Qablan, A., Mansour, N. & Sabbah, S. (2015). Ensuring effective impact of continuing professional development. Saudi Science Teachers' Perspective. *Eurasian Journal of Mathematics, Science and Technology*, 11(3), 619-631, www.esmste.com.

Quinn, L. (2003). A theoretical framework for professional development in a South African university. *International Journal for Academic Development, 8(1-2), 61-75.* https://doi.org/10.1080/1360144042000277946

Quinn, L. (2012). Understanding resistance: an analysis of discourses in academic staff development. *Studies in Higher Education, 37(1), 69-83.* https://doi.org/10.1080/03075079.2010.497837

Qureshi, N. (2016). *Professional Development of Teacher Educators: Challenges and Opportunities.* A thesis submitted to the University of Warwick for the degree of Doctor of Philosophy

Reichert, C.S. (2016). *An Examination of Professional Development Practices for Secondary Teachers Through the Lens of Adult Learning Theory*. A Dissertation Presented to the Faculty of the Graduate School, University of Missouri-Columbia.

Ribers, B., Balslev, M.& Jensen, C. R. (2021). Education, collaboration and pedagogical phronesis: essential dimensions in professional learning and development. *Professional Development in Education*. https://doi.org/10.1080/19415257.2021.1902835

Risku, H. (2016). Situated learning in translation research training: Academic research as a reflection of practice. *The interpreter and translator trainer*, 10(1), 12-26, Doi:10.1080/1750399x.2016.1154340

Roscoe, J. (2010). Continuing professional development in higher education. *Human Resource Development International*, 15(1), 3-9. https://doi.org/10.1080/13678860110076006

Rwendeire Report. (2017). Bringing the Future to the Present: *The Report of the Visitation Committee on Makerere University.* http://www.education.go.ug/wpcontent/uploads/2020/01/The-Report-of-the-Visitation-Committee-on-Makererere-University-2016-compressed.pdf

Sarantakos, S. (2005). Social Research(3rd) Melbourne, Macmillan Education

Shah, P., Madhavaram, S. & Laverie, D. A. (2019). Developing and demonstrating effective pedagogy in marketing education. Pedagogical competence and organizing framework for teaching portfolios. *Marketing Education Review*, 29(4), 283-304, https://doi.org/10.1080/105280082019.1657775

Shava, G. N. (2015). Professional development, a major strategy for higher education student success. Experiences from university in Zimbabwe. *Zimbabwe Journal of Science and Technology*, 10(11-25), zimbabwej.sci.technol

Schreier, M. (2014). Qualitative Content Analysis in Practice. http://dx.doi.org/10.4135/9781446282243.n12

Short, A. (2017). Mandatory pedagogical training for all staff in higher education by 2020 – A great idea or bridge too far. *Journal of the European Higher Education Area. (3).* https://www.researchgate.net/publication/283211609

Simon, E., Murphy, J., Quinlan, K.M. & Roxa, T. (2012). The Professionalization of Academics as Teachers in Higher Education, https://www.researchgate.net/publication/263038062

Smeby, J. C. & Heggen, K. (2014). Coherence and development of professional knowledge and skills. *Journal of Education and Work*, 27(1), 71-91, Doi:10.1080/13639080.2012.718749

Soine and Lumpe, A. (2014). Measuring characteristics of teacher professional development. *Teacher Development*, 18(3), 303-333, http://dx.doi.org/10.1080/13664530.2014.911775

Ssempebwa, J., Teferra, D. & Bakkabulindi, F.E.K. (2016). 'Swim or Sink': State of induction in the deployment of early career academics into teaching at Makerere University. *Studies in Higher Education, 41 (10), 1854-1868.* https://doi.org/10.1080/03075079.2016.1221649

Ssemuwemba, E. (2017). *The effect of professional development practices on teacher performance in public secondary schools in Kigali, Rwanda*. A dissertation submitted to the School of Management Sciences in partial fulfillment of the requirements for the award of Masters degree in Institutional Management and Leadership of Uganda. Management Institute, Kampala Uganda.

Ssengendo, A.K. (2012). Challenges facing Universities in Uganda.

Ssentamu, J.D. (2013). Prospects and challenges of higher education in Uganda. *Speech at the celebrations to commemorate 50 years of the University of East Africa.* http://vc.mak.ac.ug/speeches2013/06.

Stemler, S. (2001). "An Overview of Content Analysis". *Practical Assessment, Research & Evaluation 7 (17).* https://www.researchgate.net/publication/313219637

Suwaed, H. & Rahouma, W. (2015). A New Vision of Professional Development for University Teachers in Libya: It is not an Event, It is a Process. *Universal Journal of Educational Research, 3(10), 691-696.* DOI: 10.13189/ujer.2015.031005

Svendsen, B. (2016). Teachers' experience from a school-based collaborative teacher professional development programme: Reported Impact on Professional Development, 20(3), 313-328, Doi:10.1080/13664530.2016.1149512

Tan, J. P., Choo, S. S., Kang, T., & Liem, G. A. D. (2017). Educating for twenty first century competencies and future-ready learners: Research perspectives from Singapore. *Asia Pacific Journal of Education*, 37(4), 425-436, Doi:10.1080/02188791.2017.1405475

Teferra, D. (2016). African flagship universities: their neglected contributions. *Higher Education, 72 (1), 79-99.* https://www.jstor.org/stable/24756968

Teferra, D. (2017). Flagship Universities in Africa. *Higher Education Research and Development, 39 (4), 339-353.* DOI 10.1007/978-3-319-49403-6

Thirston, A., Christie, D., Howe, C. J., Tolmie, A. & Topping, K. J. (2008). Effects of continuing professional development on group work practices in Scottish primary schools. *Journal of In-service Education*, 1-14, Doi:10.1080/1367/458080220463

UNESCO. (2017). Development of Higher Education in Africa http.//dx.org/10.1080/19415257.2020.1827010 7

USAID (2014). USAID Higher Education Landscape Analysis 2014-2018. United States Agency for International Development. https://www.edulinks.org/sites/default/files/media/file/HELA%20Final%20Report_Sept19.pdf

Vanassche, E. & Kelchtermans, G. (2016). Facilitating self-study of teacher education practices: Towards a pedagogy of teacher educator professional development. *Journal of Homage*, 42(1), 100-122, http://dx.doi.org/10.1080/19415257.2014.986813

Vereijken, M.W.C. & Van der Rijst, R.M. (2021). Subject matter pedagogy I university teaching: how lecturers use relations between theory and practice. *Teaching in Higher Education*, https://doi.org/10.1080/13562517.2020.1863352

Vilppu, H., Sodervik, L., Postareff, L. & Murtonen, M. (2019). The effect of short online pedagogical training on University teacher's interpretations of teaching and learning situations. *Instructional Science*, 47(679-709), https://doi.org/10.1007/511251-019-09496-Z

Walder, A.M. (2017). Pedagogical Innovation in Canadian Higher Education: Professors' perspectives on its effects on teaching and learning. *Studies in Educational Evaluation, 54, 71-82.* https://doi.org/10.1016/j.stueduc.2016.11.001

Wall, (2013). A framework for Academic Professional Development in Higher Education. https://repository.wit.ie/3020/1/Wall%202013.pdf

Weir, C.D. (2017). *Understanding self-directed professional development in mathematics for elementary teachers: A phenomenograpical study*. PhD thesis, University of Western Ontario, Canada

Wenger, E., McDermott, R.A. & Snyder, W.M. (2002). Cultivating Communities of Practice: A Guide to Managing Knowledge, Harvard Business School press.

Wolf, C. E. (2020). Classroom management scripts: A theoretical model contrasting expert novice teachers' knowledge and awareness of classroom events. *Educational Psychology Review*, 33(131-148), https://doi.org/10.1007/S/0648-020-09542-0.

World Bank Group. (2017). Higher Education for Development: *An Evaluation of the World Bank Group's Support, DC: World Bank.*

Yin, R.K. (2012). Applications of case study research. 3rd ed. Sage. Thousand Oaks, Calif: Sage; https://books.google.co.ug/books?hl=en&lr=&id=FgSV0Y2FleYC&oi=fnd&pg=PP1&dq=Applications+of+case+study+research&ots=4297QrvgUm&sig=VVSQxPHYwaRDZCHoF65sy2ztqs&redir_esc=y#v=onepage&q=Applications%20of%20case%20study%20research&f=false. Accessed on 25th May 2019.

Yizengaw, T. (2008). Challenges of higher education in Africa and lessons of experience for the Africa-US. *Higher education collaboration initiative*. http://www.aplu.org/NetCommunity/Document.

Zadravec, K.A. & Kocar, S. (2015). Teaching and the Pedagogical Training of University Teaching Staff – Practice and Opinions Under Slovenian Higher Education. *Education Inquiry, 6 (2) 159-175*. http://dx.doi.org/10.3402/edui.v6.25591

Appendix 1

A Self-administered Questionnaire for Academic Staff on Professional Development Programmes and Academic Staff Pedagogical Practices in CHUSS and COVAB at Makerere University.

Dear Respondent,

I am a Makerere University student pursuing a doctoral degree in education. This survey is undertaken to examine the influence of Professional Development Programmes on academic staff pedagogical practices in CHUSS and COVAB at Makerere University. PDP were oparationalised as content focus, active learning, coherence, collective participation and duration. Whereas pedagogical practices in this study were conceptualised as; content knowledge, course organization practices, knowledge of pedagogical approaches, and classroom management practices. In your position as an academic staff, you have useful information to contribute to the success of this study. Participation is voluntary. As a respondent, you are free to withdraw from the process at any time. Also, confidentiality and right to privacy will be maintained.

Yours sincerely,

……

John Kalule

PhD candidate

Makerere University

CEES – Department of Foundations and Curriculum Studies

Section A: Background information

Please tick/ circle the alternative that corresponds with you.

A1. Gender: 1) Male 2) Female

A2. Marital status: 1) Single 2) Married 3) Others specify

A3. University teaching experience: 1) 0-5 years 2) 5-10 years 3) 10-15 years 4) 15-20 years 5) 20+ years

A4. College: 1) CHUSS 2) CAES

A5. Qualification: 1) Bachelor's degree 2) Masters 3) PhD 4) Others specify

A6. Designation: 1) Professor 2) Associate professor 3) Senior Lecturer
4) Lecturer 5) Assistant Lecturer 6) Teaching assistant

Section B: Professional Development Programmes

In this section, Professional Development Programmes of academic staff will be divided into two. On each of the items you are requested to tick or circle the most appropriate response using Likert scale ranging from 1 to 5, where 1= strongly disagree (SD), 2= disagree (D), 3= Non-committal (NC), 4= agree (A) and 5= strongly agree (SA)

B1. Professional Development Programmes (PDP)

	Professional Development Programmes	1	2	3	4	5
B1	In my department new academic staff are assigned at least one colleague for teaching and learning mentorship					
B2	It is easy for me to obtain financial support from the university to attend international teaching and learning conference (pedagogical training conference)					
B3	In my department, every newly appointed academic staff work hand in hand with colleagues for teaching and learning mentorship (pedagogical mentorship)					
B4	Prior to lectures in a semester, I look for the literature/ content that would add valve to the course content.					
B5	I invite a colleague at least once in a semester to observe me while teaching to get feedback and for improvement purposes					
B6	I am invited by a colleague at least once in a semester to observe him/her while teaching for feedback and improvement purpose.					
B7	I make an effort at least once in a semester to seek consent from colleagues to observe them while teaching in order to improve on my teaching and learning practices.					
B8	Content selection in the course unit that I teach follow					

	critical areas of specialization.					
B9	Content followed in PDP meets the training needs of learners.					
B10	Content offered in PDP is varied across all topics I teach.					
B11	There a strong link between the content offered in PDP and what I teach.					
B12	I receive an invitation from the university director of human resources to attend at least one teaching and learning seminar/ conference or workshop in an academic year.					
B13	I am invited in an academic year to attend a MUELE training					
B14	I am invited by the department at least once in an academic year to attend an AIMS training.					
B15	The director of human resources recognizes teaching and learning seminars for academic staff (pedagogical training course at least once) in an academic year.					
B16	There is a policy recommending collective participation of academic staff in PDP					
B17	I receive invitation to participate in PDP organized in my department.					
B18	My department inducts newly appointed staff as a way of preparing them for teaching and learning activities.					
B19	I am consulted to contribute towards professional training organized in my college.					

MUELE – Makerere University Electronic-Learning Environment

AIMS – Academic Information Management System

Section C: Academic Staff Pedagogical practices

This section covers questions on pedagogical practices for academic staff. On each of the items you are requested to tick or circle the most appropriate response using Likert scale ranging from 1 to 5, where 1= strongly disagree (SD), 2= disagree (D), 3= Non-committal (NC), 4= agree (A) and 5= strongly agree (SA)

C1. Content knowledge practices

	Content knowledge practices	1	2	3	4	5
C1.1	When preparing the course content that I teach, I consider the course objectives.					
C1.2	The course structure guides me in the selection of the course content (e.g. following scope, sequence, etc….)					
C1.3	For every topic/content I teach, I select appropriate reading materials/references guided by the course objectives.					
C1.4	Before I teach a given topic/content, I do adequate research around it (e.g. using journal articles, textbooks, etc….)					

C2. Course organization practices

	Course organization practices	1	2	3	4	5
C2.1	When planning for my course content, I consider the course objectives					
C2.2	I sometimes revisit and improve my course objectives after a specific day or week.					
C2.3	I think through and prepare tasks before my lesson that would guide my students during the teaching and learning process.					
C2.4	When teaching some of my course(s), I use the same classroom space.					
C2.5	When teaching some of my other courses, I seek for classroom space in advance.					
C2.6	I give mid-semester assessment (quizzes, tests, coursework, etc….) of the course(s) I teach between 6^{th} and the 8^{th} week of the semester					
C2.7	I return results of continuous assessment at least a week after being done by the students.					

C2.8	I set end of semester examinations as I teach the course content.					
C2.9	Before I start teaching the course content, I set end of semester examination guided by the course outline.					
C2.10	I set end of semester examinations after completing the contents.					

C3. Knowledge of pedagogical approaches

	Knowledge of Pedagogical Practices	1	2	3	4	5
C3.1	Prior to my lesson, I think through/reflect on the course unit I teach in order to choose the most appropriate teaching methods.					
C3.2	Lesson/lecture objectives guide me while selecting the appropriate teaching methods.					
C3.3	Prior to my lesson, I draw a plan on how to use the selected teaching methods.					
C3.4	At the beginning of my lessons/lectures, I let my students know of lesson objectives.					
C3.5	While teaching, I make an effort to follow the lesson/lecture objectives.					
C3.6	I use MUELE platform for online teaching for as a lecturer.					
C3.7	I use AIMS platform for feeding in examinations results.					
C3.8	I find AIMS platform user friendly for feeding in examinations results.					
C3.9	I take into account different students learning styles while teaching (visual, audio-visual, physical, logical, social learning, etc…….)					
C3.10	When teaching, I use appropriate visual aid and practical sessions in my lessons/lectures.					
C3.11	When I am teaching, I encourage student's participation and					

	interaction.					
C3.12	When I am teaching, I consider students background i.e. the cognitive, effective and psychomotor needs (e.g. student's motivations, attitude, intelligence, aptitude, disabilities, etc…)					

C4. Classroom management practices

	Classroom management practices	1	2	3	4	5
C4.1	For every first lesson in a semester, I take my students through the course requirements (e.g. expectation from students, assessment procedures, times lines, field work etc…..)					
C4.2	During the first interaction with my students, we agree and establish classroom regulations that are conducive to teaching and learning.					
C4.3	During the first interaction with my students, we agree and remind each other of consequences for failure to abide by the set classroom regulations.					
C4.4	I make effort to learn student's names for identify and rapport purposes.					
C4.5	I make purposeful movement in the classroom to check what students are doing.					
C4.6	I reward students for being active in class or for good performance (e.g. with a thanks you, gifts. etc.)					
C4.7	When I am teaching, students are free to ask questions/make comments for clarity on the content taught.					
C4.8	I manage classroom time effectively (starting on time and ending the lesson in time)					

Thank you for your valuable time

Appendix 2: Interview guide for Principals, Deans, Heads of Department and Course Coordinators on Professional Development Programmes and Academic Staff Pedagogical practices.

I am John Kalule, a student of Makerere University (Registration Number 2016/HD04/19076U) conducting a study on Professional Development Programmes and Academic Staff Pedagogical practices. You have been selected to participate in this study as one the key informants. The information you provide would only be used for academic purposes. You are therefore requested to answer these interview questions to the best of your knowledge. All your views and opinion would be respected and kept confidential.

Research Questions

What is the influence of Professional Development Programmes on academic staff's content knowledge practices?

1) What are the existing Professional Development Programmes for academic staff in your College?
2) How are Professional Development Programmes for academic staff organised and administered in your College?
3) How competent are the academic staff in their specific disciplines that they teach in your College?
4) How does the provision and administration of Professional Development Programmes influence on content knowledge practices of academic staff in their specific disciplines?

What is the influence of Professional Development Programmes on academic staff's course organization practices?

How do academic staff exercise course organisation practices during teaching and learning?

How does the provision and administration of Professional Development Programmes influence on course organization practices of academic staff in their specific disciplines?

What is the influence of Professional Development Programmes on academic staff's knowledge of pedagogical approaches?

How do academic staff use knowledge of pedagogical approaches during teaching and learning?

How does the provision and administration of Professional Development Programmes influence on knowledge of pedagogical approaches of academic staff in their specific disciplines?

What is the influence of Professional Development Programmes on academic staff's classroom management practices?

What classroom management practices do academic staff use during teaching and learning?

What is the influence of Professional Development Programmes on classroom management practices of academic staff in their specific disciplines?

Thank you for your co-operation

Appendix 3: Focused Group Discussion Guide for Academic Staff on Professional Development Programmes and Academic Staff Pedagogical practices.

I am John Kalule, a student of Makerere University (Registration Number 2016/HD04/19076U) conducting a study on Professional Development Programmes and Academic Staff Pedagogical practices. You have been purposively selected to participate in this study and the information you provide would only be used for academic purposes. You are therefore requested to answer these interview questions to the best of your knowledge. All your views and opinion would be respected and kept confidential.

Research Questions

What is the influence of Professional Development Programmes on academic staff's content knowledge practices?

1) What are the existing Professional Development Programmes for you as an academic staff in your College?
2) How are Professional Development Programmes for you as an academic staff organised and administered in your College?
3) How do you prepare the teaching and learning materials for your learners?
4) How does the provision and administration of Professional Development Programmes influence on content knowledge practices of academic staff in your discipline?

What is the influence of Professional Development Programmes on academic staff's course organization practices?

5) Do you follow the course structure as you prepare the teaching and learning materials?
6) What mode of assessment do you use in your teaching and learning process?

7) How does the provision and administration of Professional Development Programmes influence your course organization practices?

What is the influence of Professional Development Programmes on academic staff's knowledge of pedagogical approaches?

8) What are the main teaching methods that you use during teaching and learning?
9) How does the provision and administration of Professional Development Programmes influence your pedagogical approaches during teaching and learning process?

What is the influence of Professional Development Programmes on academic staff's classroom management practices?

10) How do you ensure a conducive teaching and learning environment in your classroom?
11) What is the influence of Professional Development Programmes on your classroom management practices?

Thank you for your co-operation.

Appendix 4: Focused Group Discussion Guide for Undergraduate Students on Academic Staff Pedagogical practices.

I am John Kalule, a student of Makerere University (Registration Number 2016/HD04/19076U) conducting a study on Professional Development Programmes and Academic Staff Pedagogical practices. You have been purposively selected to participate in this study and the information you provide would only be used for academic purposes. You are therefore requested to answer these interview questions to the best of your knowledge. All your views and opinion would be respected and kept confidential.

……..

John Kalule

Themes

Content Knowledge Practices of Academic Staff

1) What kind of reading materials do your lecturers provide and recommend?
2) Do your lecturers exhibit masterly of the subject matter?

Course Organisation Practices of Academic Staff

3) Do your lecturers provide and follow the course outline for a particular course unit?
4) In a semester, when do your lecturers give mid-term assessment: in terms of tests, course works, assignments? Is it in the 3rd week of the semester or in the 8th week or in 12th week?
5) Do you always receive your test or course work results in time? Say after one week or two weeks after doing the test or course work. Or you get your test results at the end of the semester or after doing end of semester exams? Do you always get feedback from your lecturers as way of enabling you to improve?

Knowledge of Pedagogical Approaches of Academic Staff

5) What kind of teaching methods are your lecturers using during teaching and learning?
6) Do your lecturers use relevant illustrations and teaching aids while teaching?
7) Do your lecturers allow you to ask questions as they teach? Or do you engage in any discussions with them?
8) How are you rewarded by your lecturers when you do something positive or good in class?

Classroom Management Practices of Academic Staff

9) How do lecturers ensure a conducive teaching and learning environment?
10) Do your lecturers come for lectures on time and leave in time?
11) Do your lecturers use classroom time efficiently during teaching and learning?

Thank you for your co-operation.

Appendix 5: Interview guide for Administrative staff (DVC AA, Director HR, Director Quality Assurance) on Professional Development Programmes and Academic Staff Pedagogical practices.

I am John Kalule, a student of Makerere University (Registration Number 2016/HD04/19076U) conducting a study on Professional Development Programmes and Academic Staff Pedagogical practices. You have been selected to participate in this study as one the key informants. The information you provide would only be used for academic purposes. You are therefore requested to answer these interview questions to the best of your knowledge. All your views and opinion would be respected and kept confidential.

1. Does the university have a policy on staff development? Probe; Do you think the academic staff are aware of this policy?
2. What is embedded in the academic staff development policy?
3. What are the existing PDP for academic staff at the university?
4. What has been the main focus of the academic staff development policy in this University? Probe; does the academic staff development policy offer equal opportunities to academic staff in regard to pedagogical training?
5. What changes in pedagogical practices have you observed in academic staff that have participated in PDP?
6. In your view, how should PDP be differently organised to enhance academic staff pedagogical practices?

Thank you for your co-operation

Appendix 6: Observation Checklist for Academic Staff Pedagogical Practices

Item	Done	Not done
1. Content Knowledge		
Being able to select appropriate course content		
Being able to select adequate course content		
Being able to clearly state course objectives		
Being able to select appropriate reading materials		
Being able to able to thoroughly do research		
2. Course Organisation Practices		
Being able to follow the course outline		
Clarity of explanation and instruction		
Questioning techniques' (relevance, clarity, frequency, distribution and answerability)		
Being able create a conducive classroom learning environment		
Relevant assessment and feedback given		
3. Knowledge of pedagogical approaches		
Use appropriate teaching methods		
Clarity of explanation and instruction		
Use of relevant teaching aids/ resources		
Use of collaborative students learning methods		
Integration of E-learning techniques		
4. Classroom management		
Taking students through the course unit requirements		
Being able to effectively manage and control student		
Making purposeful movement during teaching and learning process		
Being able to effectively organise the classroom		
Being able to appropriately re-enforce learners		
Being able to effectively use and manage classroom time		

End

Appendix 7: Participant Research Tracking Chart

Participant full name and pseudonym (alias) ……

Contact information (email and phone number) ……

Consent Form (Y/N)……..

Participant Research Tracking Chart

Activity	**Due date**	**Status**					**Supportive Feedback /Comments / Reflection Notes**
		Yes	No	Not done	In Progress	Done	
First Interview							
Member Checking							
Follow-up reminder							
Second Phase Interview							
Transcription status							
Final follow-up/Thank you for participating							
Supportive Feedback Reflection notes							

Appendix 8: Documents to be reviewed for this Study at Makerere University – CHUSS & COVAB

No	Document	Information
1	Human Resource Manual	• Number of academic staff • Promotion • Teaching Load • Class Size
2	Departmental Reports	• Load allocation • Teaching Aids • Support offered
3	Visitation Reports	• Methods of instruction • Teaching competencies • Resource provisions
4	Curriculum Reports	• Subjects offered • Units • Instructional methodologies preferred • Assessment modes

Appendix 9: Academic Staff by College and Rank at Mak by 2018

College/Rank	Professor		Associate Professor		Senior Lecturer		Lecturer		Assistant Lecturer		Teaching Assistant		Sub-Total		Total
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	
CAES	1	22	6	24	10	26	9	37	10	21	0	0	36	130	166
CEDAT	0	2	2	11	5	6	8	42	20	54	1	1	36	116	152
CEES	1	6	2	9	5	7	19	22	14	37	0	0	41	81	122
CHS	6	16	6	23	21	36	42	94	8	28	1	5	84	202	286
CHUSS	3	10	10	20	13	17	22	67	34	65	1	0	83	179	262
COBAMS	0	1	0	6	5	13	8	29	18	41	0	0	31	90	121
COCIS	0	2	1	4	2	5	13	11	23	30	1	0	40	52	92
CONAS	1	5	3	11	8	21	11	46	14	34	2	1	39	118	157
COVAB	0	11	1	13	5	2	11	23	4	24	0	0	21	73	94
SOL	1	6	1	4	2	0	3	6	9	8	0	0	16	24	40

Adapted from Mak Annual Report 2018

Appendix 10: Table for Determining the Sample Size of the Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	275	159	750	256	2600	335	100000	384

Note: "N" is population size

"S" is sample size.

Krejcie, Robert V.,Morgan, DaryleW., "Determining Sample Size for Research Activities", Educational and Psychological Measurement, 1970.

Appendix 11: Introductory Letter

MAKERERE UNIVERSITY

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COLLEGE OF EDUCATION AND EXTERNAL STUDIES
SCHOOL OF EDUCATION
DEAN'S OFFICE

27th January, 2021

TO WHOM IT MAY CONCERN

RE: KALULE JOHN (2016/HD04/19076U)

Mr. Kalule John is a PhD student in the School of Education, College of Education and External Studies, Makerere University. He is proceeding to collect data for his dissertation titled: "***Implications of Professional Development Schemes for Academic Staff Pedagogical Practices at Makerere University".***

Any assistance rendered to him will be highly appreciated.

Yours Sincerely,

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27 JAN 2021
DEAN
SCHOOL OF EDUCATION

Assoc. Prof. Betty Ezati
DEAN