



MAKERERE

UNIVERSITY

COLLEGE OF EDUCATION AND EXTERNAL STUDIES

**Mapping Research in Education
*A Baseline Study on PhD Completion
and Emerging Research Themes***

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PREFACE

This report on mapping research in education intends to ignite debate on completion of doctoral studies to improve on doctoral throughput, and reflect on emerging research themes in order to strengthen and increase on evidence-based research from the College of Education and External Studies (CEES) that can address a myriad of education related challenges in Uganda and beyond. The College of Education and External Studies (CEES) is one of the ten (10) constituent colleges of Makerere University. Makerere University aspires to be research-led in the current strategic period, 2020-2030 and as CEES journeys 'Towards a Research-led College', it is prudent to take stock of research capacity by analyzing PhD graduates of the period 2012-2024 and continuing PhD students admitted by 2022/2023 as well as the emerging research themes in CEES.

First, the total number of PhD completers was 121 in the period 2012-2024 out of whom only six (6) completed in less than 5 years, which is only 5 percent. This is a worrying statistic since at Makerere University, an institutional average of 41% of registered PhD students is reported to complete within four (4) years. Apparently, majority of the completers in CEES complete in 5-9 years represented by 86 PhD graduates. In the same way, among the continuing PhD students, only 59 out of 194 PhD students have spent 3-4 years on the programme perhaps because their year of admission is relatively recent. Second, the research themes that the doctoral research focuses on were explored. Nineteen (19) out of 121 PhD graduates had researched on human resource management, eleven (11) focused on technology in education, eleven (11) on pedagogy/teaching and learning, and only five (5) on inclusive education among others. In the continuing student cohort, there is a surge in students researching on pedagogy /teaching and learning (24), technology in education (20), inclusive education (16), and emergence of a research theme on STEM Education/ TVET (17) out of 194 continuing PhD students.

To compound the research themes at CEES, PhD student and academic staff research funded by the Government of Uganda through Makerere University Research and Innovation Fund (MakRIF) focused on quite similar themes. Finally, areas of research that have been dominant across specialities in CEES in the last and next 5-10 years were highlighted by 28 academic staff at different ranks who responded to a survey. Overall, this report presents us with an opportunity to further reflect on the CEES Research Agenda, how to tap and maximize the potential of expertise in CEES, how to harness the diverse PhD research in education and research by academic staff in order to strongly generate impactful research and innovations, and contribute to policy and practice through policy briefs, knowledge briefs, and guidelines for uptake in education and the education system.



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LIST OF ACRONYMS

AI	Artificial Intelligence
CEES	College of Education and External Studies
DRGT	Directorate of Research and Graduate Training
DSTVE	Department of Science, Technical and Vocational Education
DFCS	Department of Foundations and Curriculum Studies
DHLE	Department of Humanities and Language Education
DACE	Department of Adult and Community Education
EASHESD	East African School of Higher Education Studies and Development
HR	Human Resource
IODeL	Institute of Open, Distance and eLearning
MakRIF	Makerere Research and Innovation Fund
RIMS	Research Information Management System
SoDLL	School of Distance and Lifelong Learning
SoE	School of Education
STEM	Science, Technology, Engineering and Mathematics
TVET	Technical Vocational Education and Training

SECTION ONE

INTRODUCTION

1.0 Background

Research is essential for the generation of knowledge and innovations with potential to address the socio-economic asymmetries. Makerere University has explicitly expressed its aspiration of becoming research-led in the current strategic plan 2020-2030. Increasing the proportion of graduate students to 30%-40% of the student population by 2030 is one of the strategies for realizing the research-led mantra. Consistent with the University's aspiration to be research-led by 2030, CEES is re-imagining her research terrain by analyzing PhD completion in terms of the number of years between the year of admission and year of graduation for graduates of 2012-2024 and the continuing PhD students in CEES. Additionally, the study explores the emerging research themes in PhD research, the themes of the research projects funded by the Government of Uganda under the Makerere University Research and Innovation Fund (MakRIF), as well as academic staff perspectives on research themes and trends in their respective fields or specialties.

The College of Education and External Studies (CEES) is one of the ten (10) constituent colleges that comprise Makerere University. The College has three schools namely; the School of Education (SoE), the School of Distance and Lifelong Learning (SoDLL) and the East African School of Higher Education Studies and Development (EASHESD), which all offer PhDs by Research only, the exception being the PhD in Educational Management by coursework and dissertation at EASHESD. The PhD in Educational Management was the first PhD by coursework and dissertation in Makerere University commencing in 2002 in the Department of Higher Education under the School of Education (SoE). It is currently a programme under the East African School of Higher Education Studies and Development (EASHESD). The EASHESD and SoE have the highest number of PhDs by completion and continuing students compared to the SoDLL which is yet to graduate a PhD and still with relatively low enrolment as that level.

There are several broad areas of research in education in the respective departments, institutes and schools including; teacher education, humanities and language education, science, vocational and technical education, adult and community education, distance education, digital education, early childhood education, and higher education among others. Staff from these specialisations and a number of doctoral students working on a range of themes have received research grants funded by the Government of Uganda through MakRIF. It is important to analyse the research themes of MakRIF projects, the current expertise of academic staff across the research fields in CEES and ascertain their perspectives on the dominant research themes in their respective specialities in order to harness research capacity.

1.1 Purpose

The purpose for Mapping Research in Education is *to explore the status of completion of PhD studies and research themes in the College of Education and External Studies (CEES).*

1.2 Objectives

The objectives for mapping research in education are:

1. To explore the completion of PhD studies in 2012-2024 and the continuing PhD students in CEES
2. To explore the emerging research themes from PhD research, MakRIF research projects and academic staff perspectives in CEES

1.3 Research Questions

The research questions for mapping research in education are:

1. What is the status of completion of PhD studies in 2012-2024 and the continuing PhD students in CEES?
2. What are the emerging research themes from PhD research, MakRIF research projects and academic staff perspectives in CEES?

SECTION TWO

METHODOLOGY

2.0. Introduction

This section highlights the study design, data source, data collection and data analysis to answer the research questions in the baseline study.

2.1 Methods

The study was conducted in CEES specifically; the SoE, the SoDLL and the EASHESD. The study adopted an exploratory design drawing on qualitative and quantitative methods to generate descriptive statistics and themes according to the research objectives. First, the completion of the PhD degree was conceptualized as the number of years between year of admission and the year of graduation for graduates in the period 2012-2024. The continuing PhD students were also surveyed to ascertain the number of years so far spent on the PhD programme. Data was collected from graduation booklets, available records of provisional admission, students' lists and supervisor allocation lists. Secondly, the emerging research themes were based on the areas of research focus extracted from PhD students' research topics/areas of research interest and PhD citations in graduation booklets. In addition, research projects funded by the Government of Uganda through MakRIF were analyzed basing on the lists of awardees at CEES for the two cycles of PhD funding for research and the five cycles (RIF 1 to RIF 5) for research by the academic staff. Finally, a total of 28 academic staff at the ranks of professor, associate professor, senior lecturer and lecturer participated in a survey on their areas of expertise/speciality and the research themes that they thought had dominated or that are likely to dominate the last or next 5-10 years respectively. The next section presents findings according to the research objectives.

2.2 Limitations

This limitations for this baseline study include:

1. The study focused on only the PhD graduates of 2012-2024 and whose names were in the graduation booklets.
2. The study focused on the continuing PhD students who had been admitted, attended class or were making progress basing on accessible records across the three schools.
3. The research themes or areas of research focus for the PhD graduates and the continuing PhD students are based on the citations or working titles of the theses/dissertations but these may change over time.
4. The study only included research projects funded by the Government of Uganda through Makerere University Research and Innovation Fund to ensure consistence.

SECTION THREE

FINDINGS

3.0 Introduction

This section presents findings on the PhDs that graduated from CEES in the period 2012-2024 and the continuing PhD students who had been admitted until the 2022/2023 academic year. It also elaborates the different research themes the PhD graduates focused on and those that the continuing PhD students are focusing on. In the same way, the section analyses and maps the projects funded by the government of Uganda through MakRIF (RIF 1 to RIF 5) against the emerging research themes at CEES. Finally, this section maps the academic staff perspective on the research themes in CEES. It should be noted that the findings in this report are based on data that changes over time but the patterns in the different aspects handled in this baseline study are generally consistent.

3.1 PhD Completion at CEES 2012-2024

This section presents the total number of PhDs that graduated in CEES from 2012 to 2024. The distribution of these PhDs is according to schools, gender and years spent on the programme.

3.1.1 PhD completion annually

The number of PhDs that graduated annually since 2012 is presented in Table 3.1, the highest number of PhD graduates was in 2021 and the lowest was in 2016.

Table 3. 1: Distribution of PhDs graduates from 2012 to 2024

Years (2000)	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	Total
No. of graduates	10	12	6	6	4	8	11	11	5	23	6	12	7	121

3.1.2 PhD completion by gender

The distribution of PhD graduates by gender shows 73 males (60%) and 48 females (40%). In 2012 and 2023, there was a significant number of males graduating. Conversely, in the year 2018, the number of females graduating almost doubled the number of the males. Moreover, there were slightly more females graduating in 2020 and 2023 compared to males as shown in Table 3.2.

Table 3. 2 : Distribution of PhDs graduates in CEES by gender

Years (2000)	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	Total
Female	2	5	3	2	2	4	8	4	3	7	1	3	4	48
Male	8	7	3	4	2	4	3	7	2	16	5	9	3	73
Total	10	12	6	6	4	8	11	11	5	23	6	12	7	121

3.1.3 PhD completion by school

Two out of the three schools in CEES produced 121 PhDs in the period 2012-2024. The EASHESD had 64 PhDs and the School of Education (SoE) had 57 PhDs as shown in Table 3.3.

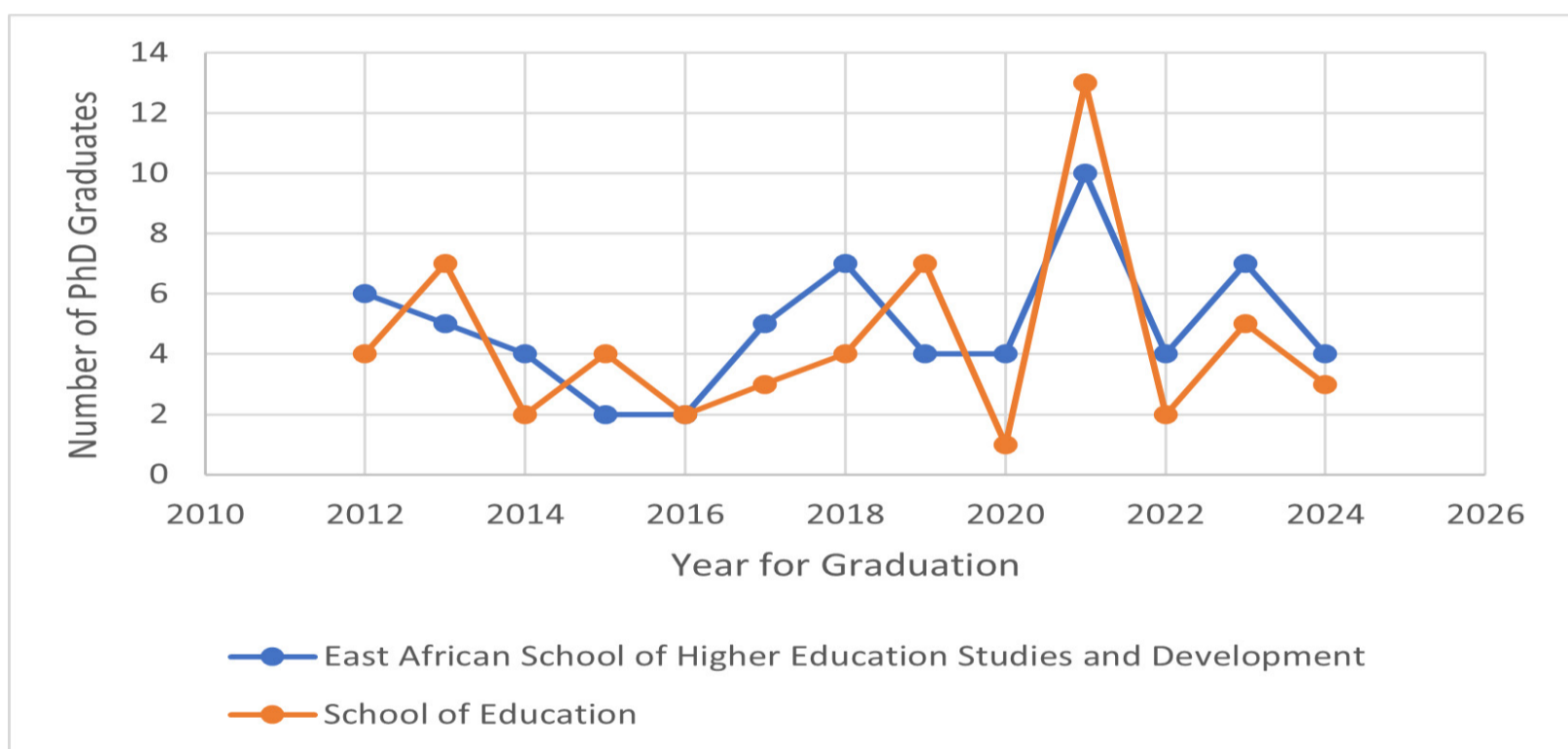
Table 3. 3: Distribution of PhDs graduates by School in CEES

School	Frequency	Percentage
School of Education	57	47.1
East African School of Higher Education Studies and Development	64	52.9
Total	121	100

Note: *The PhD in Educational Management programme in EASHESD was the first taught PhD programme in Makerere University with its first enrolment in 2002.
 **The School of Distance and Lifelong Learning (SoDLL) did not have a PhD student completing in the period 2012-2024.

Furthermore, the PhD graduates from each school each year since 2012 are presented in Figure 3.1. The EASHESD which offers only graduate programmes and the SoE have produced at least one PhD in a given year over the period 2012-2024. The biggest graduation year at CEES was 2021, with 23 PhD graduates; 10 from EASHESD and 13 from SoE. While the lowest point noted throughout the graduation process was in 2016 where each school (EASHESD and SoE) each registered only 2 PhD graduates making a total of only four (4) PhD graduates from CEES in 2016.

Figure 3.1: Distribution of PhD graduates according to year of graduation



3.1.4. PhD completion by school according to gender

As described in Table 3.4 below, the period of 2012-2024 recorded 48 female graduates and 73 male graduates. Besides, there was parity in the number of PhDs graduating from the East African School of Higher Education Studies and Development (EASHESD) registering 32 female and 32 male PhD graduates in 2012-2024. Conversely, the School of Education registered only 16 female PhDs compared to the 41 males PhDs that graduated in 2012 to 2024.

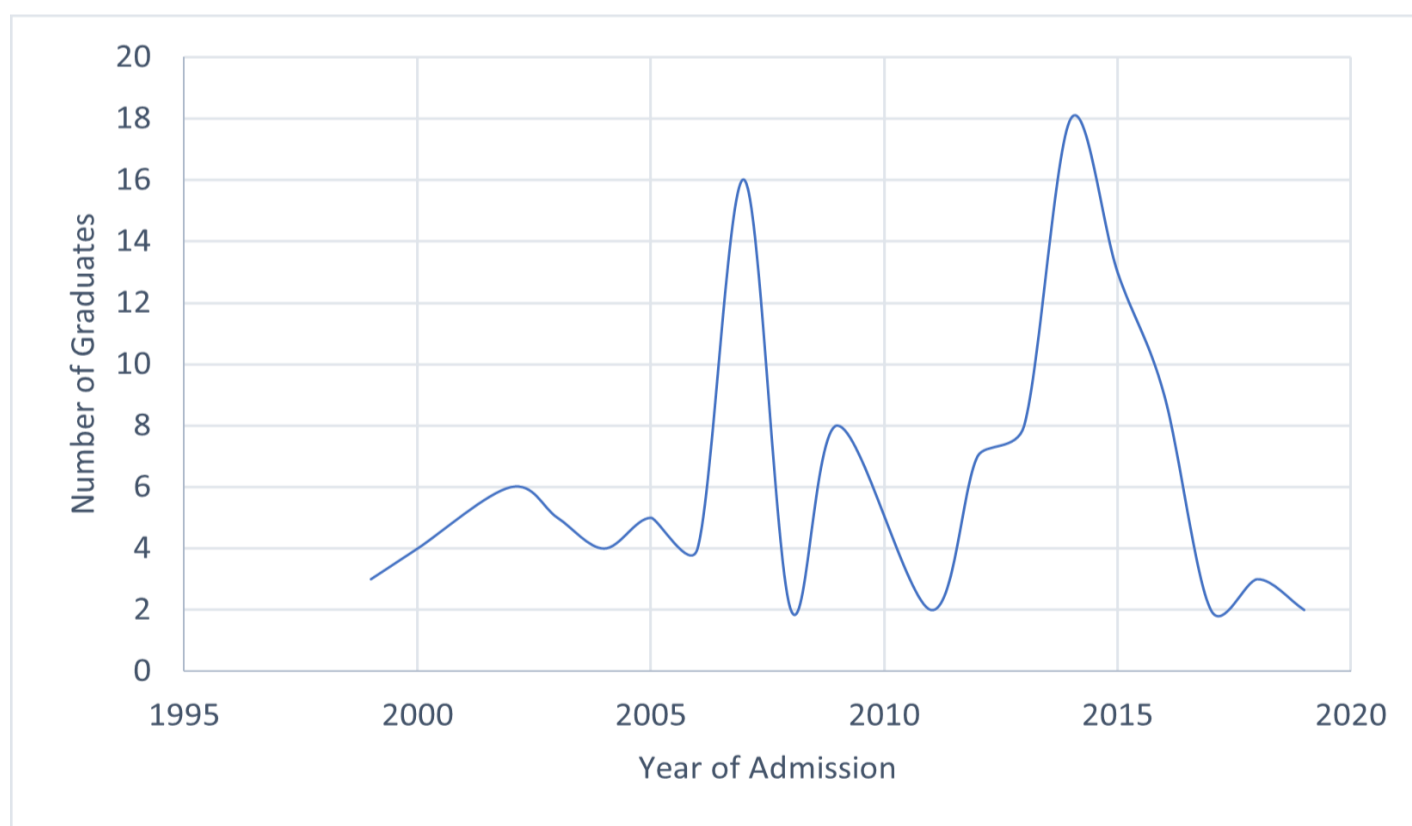
Table 3. 4: Distribution of PhD graduates by school according to gender

School	Female	Male	Total
East African School of Higher Education Studies and Development	32	32	64
School of Education	16	41	57
Total	48	73	121

3.1.5 Duration of PhD studies at CEES according to graduates of 2012-2024

The time spent on doctoral studies by PhD graduates at CEES in the period 2012-2024 is based on the number of years between the year of admission and the year of graduation. In Figure 3.2, the distribution of PhD graduates whose year of admission, according to the dataset, was in the period 1999-2019, is presented.

Figure 3.2: Distribution of PhD graduates according to year of admission



The highest percentages of PhD graduates who had graduated were those who had registered in the year 2014 (18, 14.9%) and 2007 (16,

13.2%). The lowest percentages are in the period 2017-2019 (1.7-2.5%) which implies that, perhaps the majority of students admitted then have not yet completed. The study did not establish the numbers of students registered in each year since the focus was on the period between admission and graduation.

In CEES, completion of the PhD ranges between 3-17 years according to the graduates of the period 2012-2024 with the majority completing in 5-9 years as shown in Table 3.5.

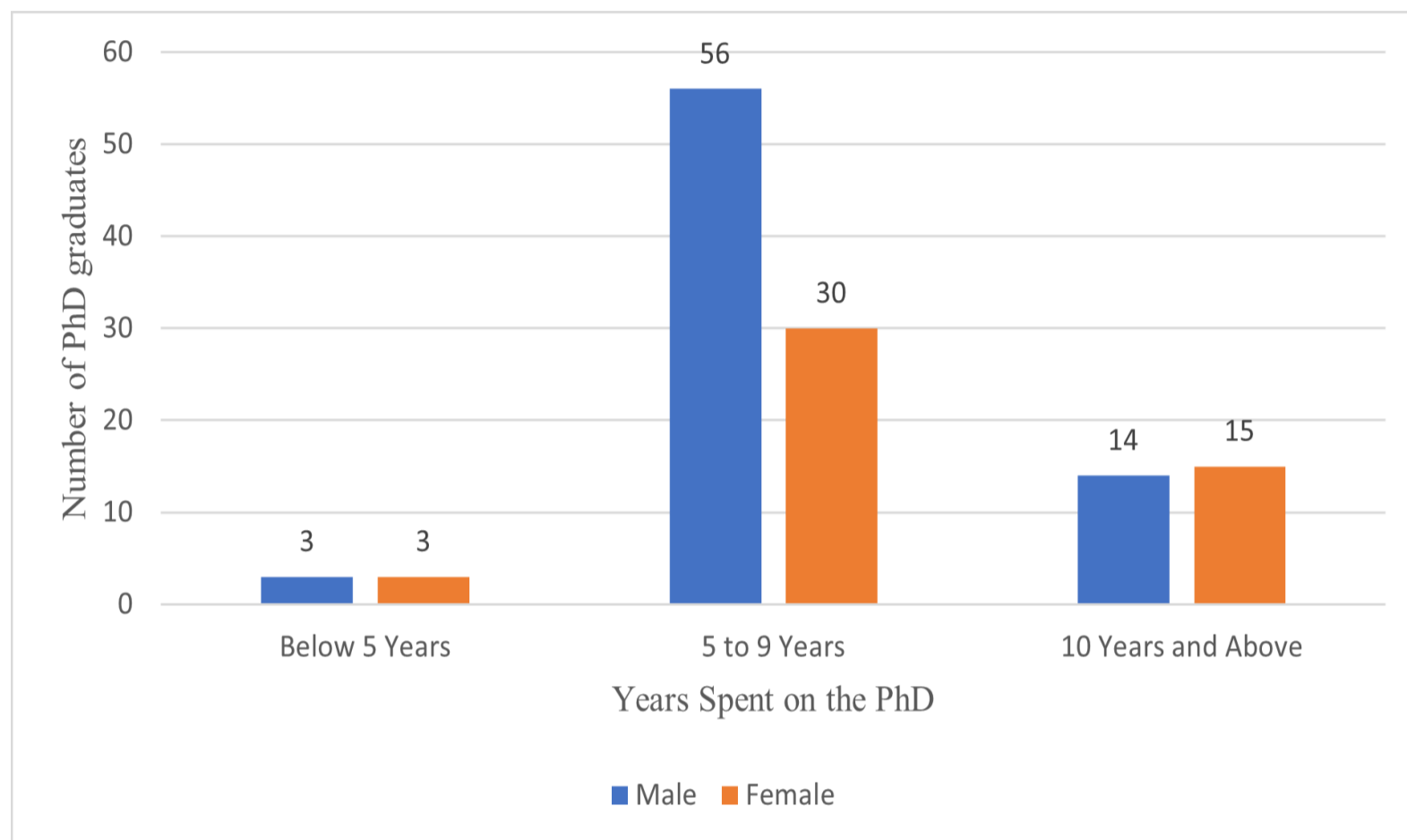
Table 3. 5: Distribution of PhD graduates according to years spent on PhD Programme

Years spent on the PhD	Number of graduates who completed		
	Female	Male	Total
3	0	1	1
4	3	2	5
5	4	11	15
6	7	11	18
7	5	12	17
8	9	9	18
9	5	13	18
10	1	4	5
11	2	2	4
12	3	3	6
13	0	2	2
14	4	2	6
15	3	1	4
16	1	0	1
17	1	0	1
	48	73	121

3.1.6 Duration on studies by PhD graduates according to gender

In CEES, there are instances of equal or almost equal proportions of females and males completing PhD studies at specific intervals among graduates of 2012-2024 as illustrated in Figure 3.3.

Figure 3. 3: Duration on students by PhD graduates from 2012 to 2024 by gender



For instance, 3 (6%) females out of the 48 and 3 (4%) out of 73 males PhD graduates had completed studies in less than five (5) years. Apparently, 30 (63%) female PhDs and 56 (77%) male PhDs completed studies in 5-9 years. Finally, 15 (31%) female PhDs and 14 (19%) male PhDs completed in 10 or more years.

3.2. Continuing PhD Students at CEES

This section presents data on the continuing PhD students in the College of Education and External Studies (CEES). The distribution of these continuing PhD students is according to admission/ enrolment year, schools, gender and years spent on the programme. The narrative is based on records including provisional admission letters, class lists, supervision allocation lists accessible by 31st October, 2023.

3.2.1. Continuing PhD students according to enrolment/admission year

The number of continuing PhD students in CEES according to the year of admission/enrolment year is presented in Table 3.6. The enrolment trend among the continuing PhD students is quite stable in the period 2017-2022 accounting for 80% of the total continuing PhD student enrolment.

Table 3. 6: Distribution of continuing PhD students according year of entry/admission

Year of Entry (2000)	'08	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	Total
No. of PhD students	2	1	3	8	12	13	20	19	28	29	29	30	194

3.2.2 Continuing PhD students according to year of admission and gender

The distribution of PhD continuing students by year of admission and gender shows that 129 (66.5%) are males while females are 65 (33.5%) as shown in Table 3.7.

Table 3. 7: Distribution of continuing PhD students by year of admission and gender

Year of Entry (2000)	'08	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	Total
Female	-	1	-	2	2	5	2	10	11	7	12	13	65
Male	2	-	3	6	10	8	18	9	17	22	17	17	129

The gender disparity in enrolment as per the accessible dataset was significant in the 2017 and 2020 enrolment years hence accounting for relatively low number of females admitted/enrolled. In 2018, the females enrolled/admitted were slightly more than the males. Apparently, the trend of admission/enrolment years of continuing PhD students shows

that a good number that had enrolled in the period 2008-2013 had perhaps completed.

3.2.3 Continuing PhD students by school in CEES

A total of 194 PhD students at different stages of their PhD studies distributed across the three schools; SoDLL, SoE, and the EASHESD. The biggest share of continuing PhD students is at EASHESD (103 students), followed by School of Education with (85 students), and the School of Distance and Lifelong Learning (six (6) students) as shown in Table 3.8.

Table 3. 8: Distribution of continuing PhD students by school in CEES

School	Number of students	Percentage
School of Education	85	43.8
East African School of Higher Education Studies and Development	103	53.1
School of Distance and Lifelong	6	3.1
Total	194	100

Note: The statistics may have changed due to dropouts or admissions of PhD students

3.2.4 Continuing PhD students by school and gender

As described in Table 3.9 below, the majority of continuing students are male. Out of 194 continuing PhD students, 129 are males and 65 are females. What is quite worrisome is that, gender disparity is even more evident according to schools. For instance, out of the 85 continuing PhD students at School of Education, only 26 are female. Similarly, in the East African School of Higher Education Studies and Development, there are only 38 female compared to 65 male continuing PhD students according to the dataset. The situation is not any better in the School of Distance and Lifelong Learning.

Table 3. 9: Distribution of continuing PhD students by school and gender

School	Female	Male	Total
School of Education	26	59	85
East African School of Higher Education Studies and Development	38	65	103
School of Distance and Lifelong Learning	1	5	6
Total	65	129	194

3.2.5 Distribution of continuing PhD students according to year of admission

In CEES, the years so far spent on PhD programmes by continuing students ranges between 3-17 years, that is, students admitted in 2022 and those admitted in 2008. This duration on the PhD programme is based on the number of years between the year of admission and the next/nearest graduation year in this 2025. This implies that some students will have spent 17 years on the PhD programme as shown in Figure 3.4.

Figure 3. 4: Distribution of continuing PhD students according to year of admission



3.2.6 Distribution of continuing PhD students according to years spent on a PhD

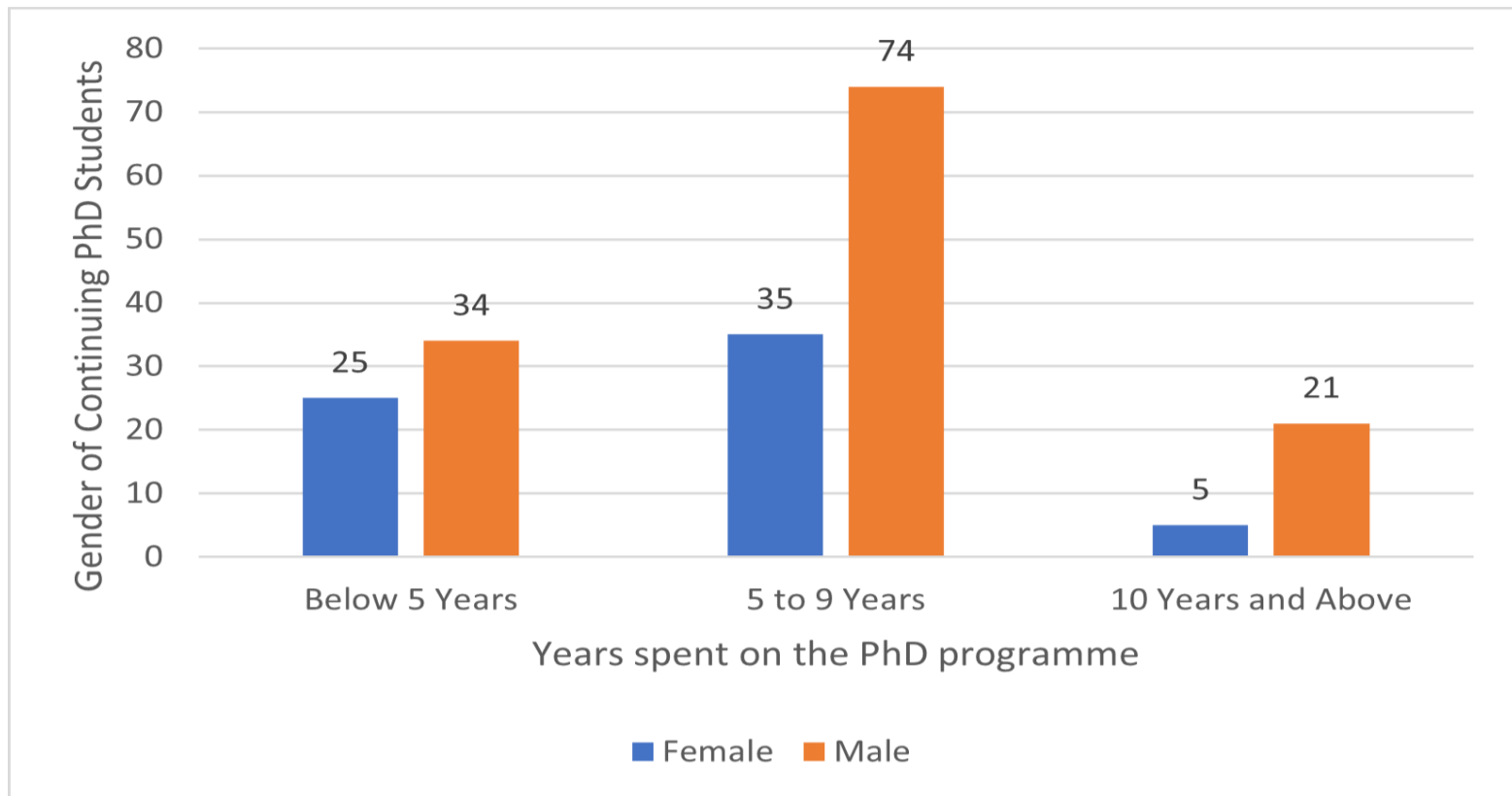
According to Table 3.10 below, only 59 students out of the 194 continuing PhD students have spent less than five years on their doctoral programmes. Even then, we still have continuing PhD students in CEES that have spent 10-17 years on the PhD.

Table 3. 10: Distribution of continuing PhD students according to years spent on a PhD

Years Spent on a PhD	3	4	5	6	7	8	9	10	11	12	13	17	Total
Female	13	12	7	11	10	2	5	2	2	-	1	-	65
Male	17	17	22	17	9	18	8	10	6	3	-	2	129
Grand Total	30	29	29	28	19	20	13	12	8	3	1	2	194

With specific reference to gender, Figure 3.4 further illustrates the time spent on a PhD by each gender. A total of 25 (38.46%) of the 65 female and 34 (26.35%) of the 129 male continuing PhD students have so far spent less than five (5) years on their PhD programme. Apparently, 35 (53.84%) female and 74 (57.36%) male continuing PhD students are in the range of 5-9 years already. Finally, 5 (7.7%) female PhDs and 21 (16.29%) male PhDs completed in 10 or more years. However, there is an extreme outlier of 2 male continuing PhD students who have spent 17 years on the PhD programme as shown in Table 3.10.

Figure 3. 5: Duration on PhD studies by continuing students by gender.



3.3 Research Themes/Areas of Research Focus

3.3.0. Introduction

This section elaborates the research themes that PhD graduates (2012-2024) focused on, the research themes that the continuing PhD students are focusing on, and the dominant themes of the research for doctoral students and academic staff funded by the Government of Uganda through Makerere University Research and Innovation Fund (MakRIF). In the same way, the section illuminates the areas of research that the academic staff across specialities in CEES have found dominant in the past 5-10 years and the research themes likely to dominate the next 5-10 years in their academic fields. This detailed analysis of thematic focus of research in education at CEES is based on the frequencies on the PhD graduates, continuing students, projects funded through MakRIF (for students and Staff) and perspectives of the 28 academic staff across ranks and specialties in CEES who responded to the survey.

3.3.1. Research themes of PhD graduates 2012-2024

The PhD graduates in the period 2012 to 2024 focused on a variety

of research themes in education. However, all these researches were categorized or coded into 13 major themes that represented similarity across all the 121 candidates that were awarded the PhDs. The focuses were a result of a review of the citations in the graduate booklets and the research topics of the dissertations/ theses of the PhD graduates. Table 3.11 shows the frequency of research themes of the PhD graduates.

Table 3. 11: Research themes among the PhD graduates in CEES (2012-2024)

SN.	Research Themes/Area of Focus (Study)	Frequency	Percentage
1	Civic (history/political) Education	8	6.6
2	HumanResourceManagement/Development	19	15.7
3	Inclusive Education	5	4.1
4	Leadership/Governance in Higher Education	6	5
5	Management (Change/Resources/ Curriculum/Assessment)	7	5.8
6	Others	12	9.9
7	Pedagogy/Teaching & Learning	12	9.9
8	Quality of Education/Quality Education	12	9.9
9	Research, Innovation and Sustainable Development	9	7.4
10	School Effectiveness and Efficiency	9	7.4
11	Student Achievement/Performance/ Satisfaction	6	5
12	Teacher Development or Preparation	5	4.1
13	Technology in Education	11	9.1
Total		121	100

Note: Others = Graduate Employment (1), Policy Studies in Higher Education (2), Student Affairs (2), Teacher Education (1), Internationalization of Higher Education (1), Higher Education and Development (3).

Apparently, the areas most researched by the 121 PhD graduates from CEES in the period 2012-2024 include; human resource management/ development (19), pedagogy/teaching and learning (12), quality of education/quality education (12) and technology in education (11). On the other hand, the areas least researched by the PhD graduates were inclusive education (5) and teacher development or preparation (5). The category of 'others' is a collection of areas that were not included in the

12 thematic areas (see Table 3.11 above).

3.3.2. Research themes of Continuing PhD students in CEES

The continuing PhD students in CEES focus on 16 broad themes research themes compared to the 13 research themes that the PhD graduates of 2012-2024 researched on. The three (3) additional research themes that the continuing PhD students in CEES are focusing on are; Early Childhood Development/Education, Graduate Employment/Employability and STEM Education/TVET. Data was obtained from graduate supervisor allocation lists, PhD student class lists, and student admission records for students on the doctoral programmes in CEES. The frequency of the research themes is shown in Table 3.12.

Table 3. 12: Research themes among the continuing PhD students in CEES

SN.	Research Themes/Area of Focus (Study)	Frequency	Percentage
1.	Civic (history/political) Education	6	3.1
2.	Human Resource Management/ Development	15	7.8
3.	Inclusive Education	16	8.3
4.	Leadership/Governance in Higher Education	9	4.7
5.	Management (Change/Resources/ Curriculum/Assessment)	17	8.8
6.	Others	7	3.6
7.	Pedagogy/Teaching & Learning	24	12.4
8.	Quality of Education/Quality Education	11	5.7
9.	Research, Innovation and Sustainable Development	13	6.7
10.	School Effectiveness and Efficiency	8	4.2
11.	Student Achievement/Performance/Satisfaction	14	7.3
12.	Teacher Development or Preparation	4	2.1
13.	Technology in Education	20	10.4
14.	Early Childhood Development/Education	6	3.1
15.	Graduate Employment/Employability	6	3.1
16.	STEM Education/TVET	17	8.8
Total		193	100

Note: *Others* - Internationalization of Higher Education (3), Policy Studies in Higher Education (1), Ethics in Higher Education (1), Student Affairs (1), Management of Staff Association and Unions (1)

The most researched themes by the continuing PhD students include; pedagogy/teaching & learning (24), technology in education (20), STEM Education/TVET (17), Management of Change /Resources/ Curriculum/Assessment (17), and inclusive education (16). Moreover, human resource management/development remains quite a popular research theme (15). Perhaps the most notable difference in the research themes of the PhD graduates (2012-2024) and the continuing PhD students is the emergence of STEM Education/TVET as a new and dominant research theme, the increase in the number of PhD students researching on inclusive education as well as management of change/

resources/curriculum/assessment. Conversely, teacher development or preparation is the least researched research theme (4)! The category of 'others' is a collection of areas that were not included in the other 15 thematic areas (see Table 3.12 above).

Suffice to add, under the theme of 'others' in both Table 3.11 and 3.12 has undergone changes. For instance, the research theme 'graduate employment/employability' has six (6) researchers among the continuing PhD students compared to one (1) PhD graduate who had researched the theme. Similarly, the number of graduates researching 'internationalization of higher education' has increased to three (3) continuing PhD students from one (1) PhD graduate.

3.4. CEES Research Projects funded by the Government of Uganda through MakRIF

This section highlights that research and in a way the research themes funded by the Government of Uganda through the Makerere University Research and Innovation Fund (MakRIF). The funded research projects are categorized into two; funded projects for PhD students and funded projects for the academic staff across the five (5) cycles namely MakRIF 1 to MakRIF 5. It illuminates the thematic focus of the funded research projects and the extent these resonate with the emerging research themes in PhD research.

3.4.1 PhD Students' Research Projects funded through MakRIF

According to data accessed at the time of the study, a total of eighteen (18) projects had been awarded to PhD students from CEES. The highest number of projects funded focus on the pedagogy/teaching and learning research theme (4) followed by technology in education (3) and research, innovation and sustainable development (3). Early childhood development/education and leadership/governance in Higher Education have the least number of awardees with each research theme having one recipient as shown in Table 3.13.

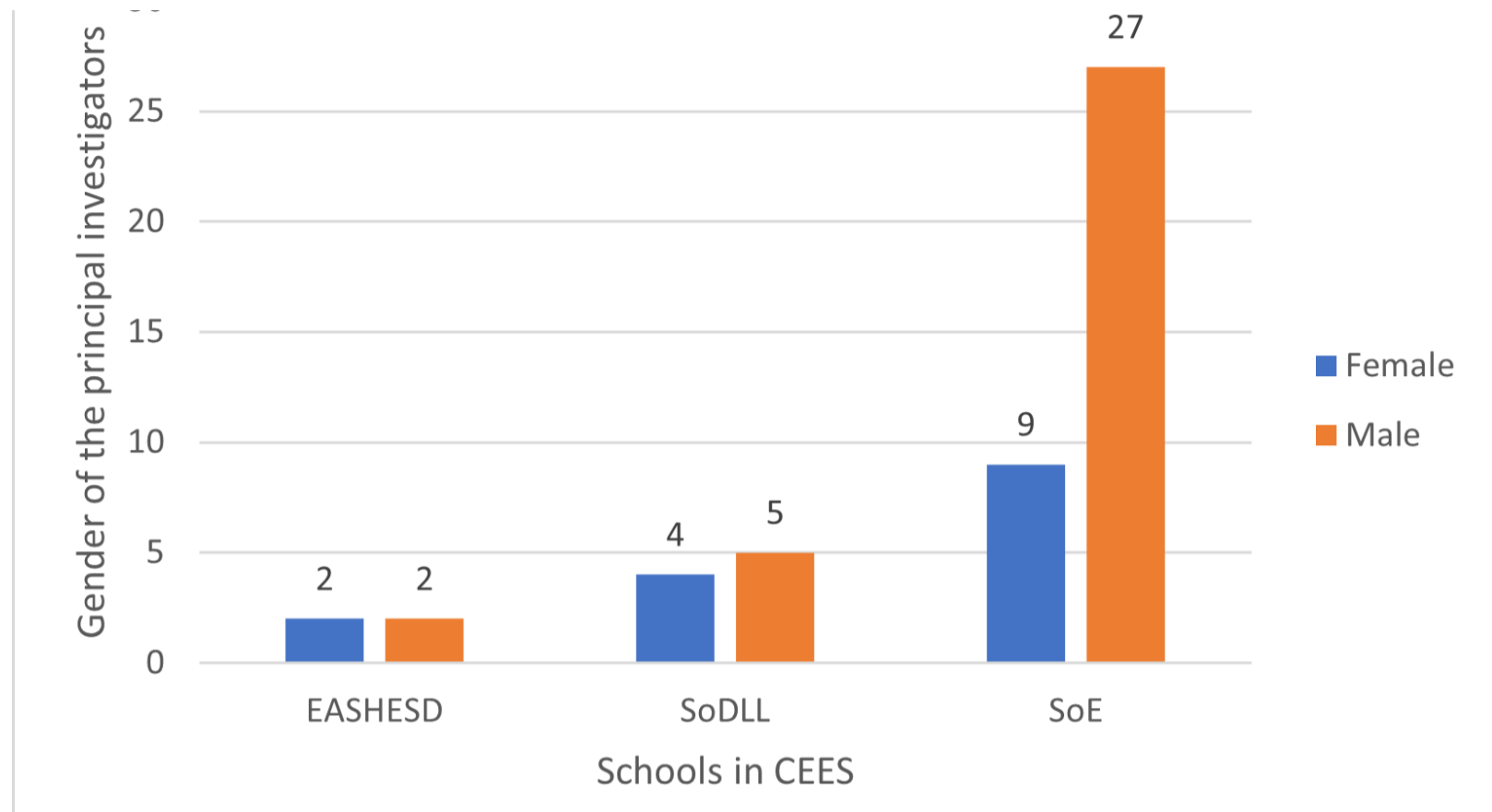
Table 3. 13: Research themes of PhD projects funded through MakRIF

SN	Area of Focus/Study/Research	Frequency	Percentage
1.	Human Resource Management/Development	2	11.1
2.	Inclusive Education	2	11.1
3.	Leadership/Governance in Higher Education	1	5.6
4.	Pedagogy/Teaching & Learning	4	22.2
5.	Research, Innovation and Sustainable Development	3	16.7
6.	Technology in Education	3	16.7
7.	Early Childhood Development/Education	1	5.6
8.	Graduate Employment/Employability	2	11.1
Total		18	100

3.4.2 Academic Staff Research Projects funded through MakRIF

The College of Education and External Studies (CEES) has received a total of 49 grants from the Government of Uganda through Makerere University Research and Innovation Fund (MakRIF) distributed across the three schools as shown in Figure 3.5. The School of Education received the highest number of grants totaling to 36 (73.5%), the School of Distance and Lifelong Learning 9 (18.4%) and the East African School of Higher Education Studies and Development 4 (8.16%). Furthermore, the representation of awarded grants is tending towards the male staff – with a total of 34 males awarded the MakRIF grants whereas the females received or won only 15 grants..

Figure 3. 6: Distribution of MakRIF grants by school and gender in CEES



The 49 MakRIF projects implemented by the academic staff tackle a range of research themes. For instance, the highest number of projects focus on pedagogy/teaching & learning (12), technology in education (6), civic (history/political) education (6), and STEM/TVET (5). Conversely, research themes on Early Childhood Development/Education, Quality of Education/Quality Education, Management of Change/Resources/Curriculum/Assessment, and Leadership/ Governance in Higher Education, each had one (1) research project funded as shown in Table 3.14 below

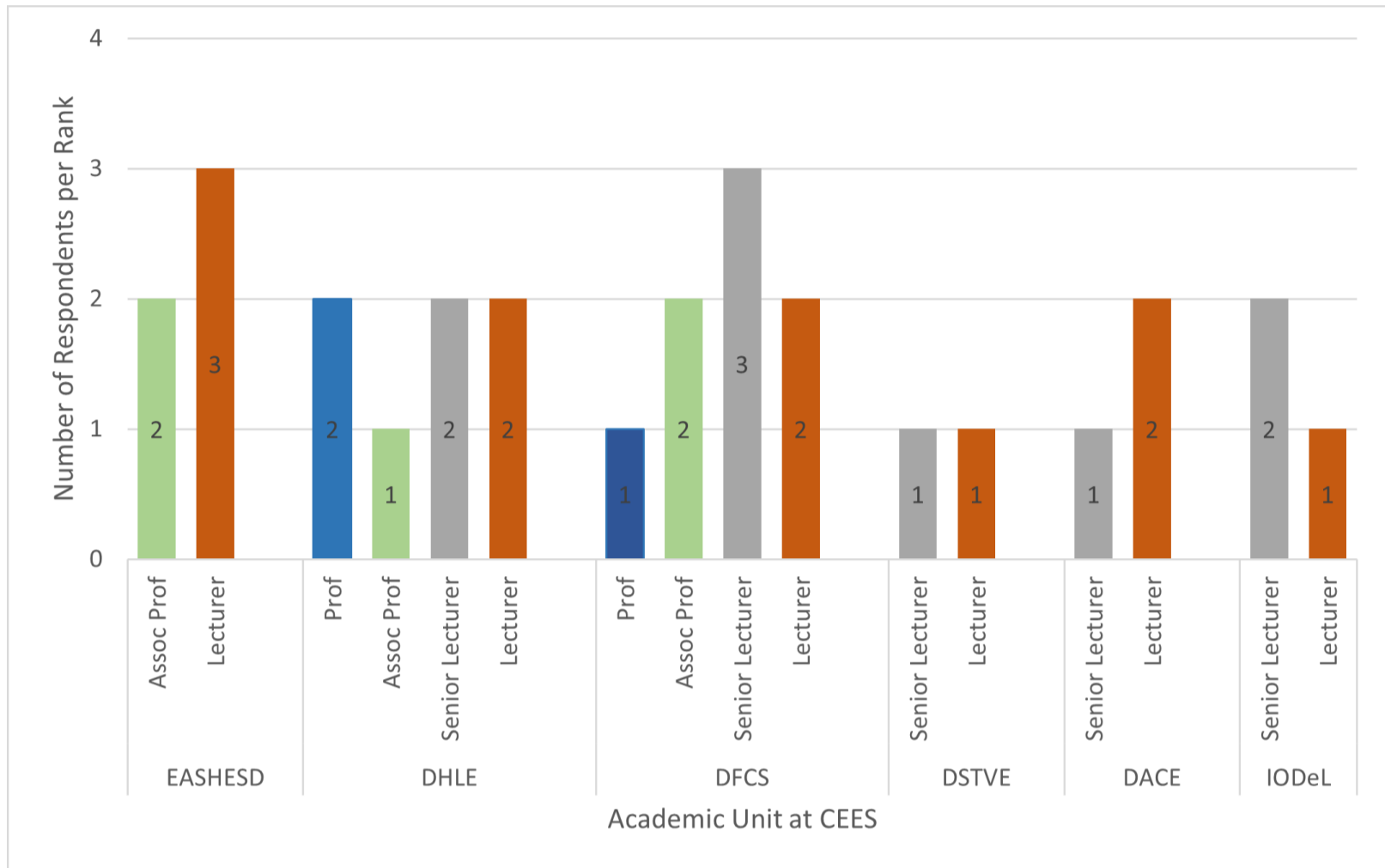
Table 3. 14: Distribution of Area of Study/Research/Focus under MakRIF Projects.

SN	Area of Focus/Study/Research	Frequency	Percentage
1.	Civic (history/political) Education	6	12.24
2.	Inclusive Education	3	6.12
3.	Leadership/Governance in Higher Education	1	2.04
4.	Management (Change/Resources/Curriculum/Assessment)	1	2.04
5.	Pedagogy/Teaching & Learning	12	24.5
6.	Quality of Education/Quality Education	1	2.04
7.	Research, Innovation and Sustainable Development	5	10.20
8.	School Effectiveness and Efficiency	2	4.08
9.	Technology in Education	6	12.24
10.	Early Childhood Development/Education	1	2.04
11.	Graduate Employment/Employability	6	12.24
12.	STEM Education/TVET	5	10.20
Total		49	100

3.4. Academic Staff Perspectives on the Research Themes in Education

Academic staff perspectives were sought through a survey of 28 academic staff drawn from academic units or fields in CEES. The respondents included; three (3) professors, five (5) associate professors, nine (9) senior lecturers, and eleven (11) lecturers. In terms of gender, there were 12 female and 16 male academic staff from the Department of Humanities and Language Education (DHLE), Department of Foundations and Curriculum Studies (DFCS), Department of Science, Technical and Vocational Education (DSTVE), Department of Adult and Community Education (DACE), the Institute of Open, Distance and eLearning (ODeL), the East African School of Higher Education Studies and Development (EASHESD) as shown in Figure 3.7.

Figure 3. 7: A bar graph showing respondents according to ranks in CEES.



In addition, data on the respondents' expertise was obtained, and their perspectives on the research themes in education in the last 5-10 years and the emerging themes for the next 5-10 years in the respective fields are presented in Table 3.15. Analysis of expertise shows that academic staff have expertise across fields which has potential for interdisciplinary or multidisciplinary research within education and beyond. Few research themes in the last 5-10 years resonate the PhDs that graduated in the period 2012-2024. Apparently, the emerging research themes (in the next 5-10 years) are quite diverse with some alignment with the themes being pursued by the continuing PhD students. The findings point to a need for CEES academic units and staff to make concrete choices of thematic areas per field/academic unit or across fields and also identify cross-cutting areas that can be consolidated into a robust CEES research agenda for more focused and intentional relevant and impactful research with clear timelines aligned to the strategic period

Table 3. 15: Academic Staff Perspectives on Expertise and (Emerging)Research Themes

Academic Unit/field	Areas of expertise	Key Research Themes in the last 5-10 years	Emerging Research Themes in the next 5-10 years
Foundations and Curriculum Studies	<ul style="list-style-type: none"> - Education leadership and management - Curriculum and Learning - Research in curriculum studies and contemporary issues in education - Economics of Education - ICTs in Education - Pedagogical Practices - Foundations – historical studies, teacher education - Curriculum design and development 	<ul style="list-style-type: none"> - Research in inequalities of access to education - Education in disadvantaged areas - Expenditure in education - Employee motivation - Organisational performance - Resource mobilisation - Learner centred pedagogy - Inclusive education - Curriculum in higher education - ICT in education – online and blended pedagogy, eLearning, emerging technologies, digital learning solutions and digital poverty - Competence-based teaching and learning practices - Curriculum design and development - Play based pedagogy - Teacher quality, teacher practice, and teacher wellbeing 	<ul style="list-style-type: none"> - Educational entrepreneurship - strategic human resource management - leadership development. - Government expenditure on education - Student loans - Equity and inclusion in Education - Integration of emerging technologies in teaching and learning in higher education as well as research like Internet of Things, ChatGPT, Big data, ethics in AI - Teacher ownership of competence-based curriculum, its implementation and assessment - Foundational learning, digital poverty and curriculum design and development - Early childhood education and care - Teacher wellbeing and mental health, teacher quality, teacher practice

Humanities and Language Education	<ul style="list-style-type: none"> - Luganda Language Education - English, Literature and Educational qualitative research - Emerging technologies and Pedagogies - History Education - Instructional materials - Gender in Education - Geography Education 	<ul style="list-style-type: none"> - Curriculum development - Language Policy - Teacher education - Early literacy development, - ICTs in language education emerging technologies - Pedagogies in Luganda language education - Cultural heritage education - Historical thinking and decolonization - Curriculum, teaching methods and teacher education - Youth literacy - Entrepreneurship skills for teacher trainees, youth and secondary school students - Language teaching methodologies, curricula issues, 	<ul style="list-style-type: none"> - Innovations in teacher education and curriculum reforms - Digitalising teaching and learning - Language and culture - Early literacy development - ICTs in language education emerging technologies - Pedagogies in Luganda language education - Digital humanities, democratic citizenship and museology - Technology, curriculum and teacher preparation integrating the community in education - Learner-centred teaching - Transformative pedagogy - Interventional research to support vulnerable groups - Youth literacy - Competence-based curriculum
Science, Technical and Vocational Education	<ul style="list-style-type: none"> - Ecology - Mathematics teacher knowledge and pedagogy 	<ul style="list-style-type: none"> - Climate change education, - Biodiversity, ecosystems services and community engagement - Teaching mathematics concepts - ICT in mathematics education - Gender issues in mathematics education 	<ul style="list-style-type: none"> - Climate change education, - Biodiversity, ecosystems services and community engagement - AI in mathematics education - Equity in mathematics education

<p>Higher Education Studies and Development</p>	<ul style="list-style-type: none"> - Policy and Planning - Governance, Leadership and Management - Organisation Change - Teaching and Learning - Research Leadership and Management - Innovation and knowledge transfer - Higher Education and Socio-economic development - Capacity building 	<ul style="list-style-type: none"> - Governance reforms in higher education - Quality Assurance in higher education - Rankings in higher education - Leadership in higher education - Internationalization in higher education - Equality, equity and accessibility in higher education including refugees in higher education - Learner and teacher autonomy in higher education - Academic freedom in higher education - Policy analysis in higher education - Performance and motivation of academic staff - Organizational behavior 	<ul style="list-style-type: none"> - Workforce development and skills training. - Innovations in higher education - Research leadership development focusing on doctoral and postdoctoral education etc - Integration of technologies such as Artificial Intelligence - Diversity, Equity and Inclusion. - Leadership and Management of Knowledge Production, Research and Innovations in Higher Education - Higher Education and Socioeconomic Development - Internationalization and decolonization of higher education. - Afri-centric epistemology - Academic writing in higher education
<p>Adult and Community Education</p>	<ul style="list-style-type: none"> - Adult and Community Education - Citizenship studies, grassroots learning, and participatory change - Sexual reproductive health and education 	<ul style="list-style-type: none"> - Citizenship education - Critical emancipatory research, participatory research - Lifelong learning - Functional adult literacy - Socio-economic transformation and empowerment. - Citizenship in constrained settings - NGOs and grassroots learning 	<ul style="list-style-type: none"> - Mindset change - Spirituality and adult education - Post-qualitative research methodology where the process becomes a collaboration rather than researcher-driven - Youth education - Digital education / literacy - Health Education - Digitisation in rural development and learning - Everyday dissent and resistance among the marginalised - Adult education in the post-SDG era

Open, Distance and e-Learning	<ul style="list-style-type: none">- Marketing- Online learning- Distance Education	<ul style="list-style-type: none">- E-learning, Instructional design and History education- Customer relationship management- Instructional Design for online learning- Learning Analytics- Online Learning Groups	<ul style="list-style-type: none">- E- business- Green marketing- Instructional design and technology- Lifelong learning- AI for Education- Instructional Design for Online Learning content development- Learning Analytics
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SECTION FOUR

CONCLUSIONS AND RECOMMENDATIONS

4.0. Introduction

In this section, conclusions from this baseline study are presented and recommendations or action points are proposed for consideration by the stakeholders in CEES as we aspire Towards a Research-Led College.

4.1. Conclusions

The conclusions are as follows:

1. Majority of the PhDs in CEES spend between 5-9 years since admission to the doctoral programme to graduate e.g. 86 out of 121 PhDs who graduated in the period 2012-2024.
2. Only six (6) out of 121 PhDs have graduated in less than five (5) years of study in CEES in the period 2012-2024. This accounts for only five percent (5%) of the 121 completers. This is low compared to 41% of the registered PhD students who complete their doctoral studies within four (4) years in Makerere University¹.
3. Majority of the continuing PhD students (109 out of 194) have spent 5-9 years already on the doctoral programme in CEES.
4. Majority of the students researched on human resource management (19), technology in education (11), pedagogy/teaching and learning (11) and there was limited research in inclusive education (5).
5. A number of continuing PhD students is currently researching on pedagogy/teaching and learning (24), technology in education (20), inclusive education (16) and an emerging theme of STEM Education/

¹ Misinde, C. (2023), *The position of Makerere University in the World University Ranking 2023*. Directorate of Quality Assurance: Makerere University.

TVET (17).

6. Eighteen (18) PhD students who had received funding from MakRIF distributed across themes such as pedagogy/teaching and learning (4) and technology in education (3) among others.
7. Out of the 49 MakRIF projects for academic staff, School of Education (SoE) has 36, School of Distance and Lifelong Learning (SoDLL) has nine (9) and the East African School of Higher Education Studies and Development (EASHESD) has only four (4).
8. Pedagogy/teaching and learning (12) and technology in education (6) are dominant themes across the 49 MakRIF projects implemented by the academic staff in CEES
9. The academic staff expertise and their perspectives on (emerging) research themes are diverse with potential for interdisciplinary and impactful research.
10. Gender disparity is evident in the PhD graduates with 48 females compared to 73 males; among the continuing PhD students with 65 females and 129 males.

4.2. Recommendations

This baseline study on 'Mapping Research in Education' has potential to ignite debate on how to strengthen research in CEES and propose sustainable new ways of action that can trigger more relevant and impactful research and innovation with potential to transform the education system. For a start, the following action points/recommendations are proposed for CEES in her aspiration Towards a Research-Led College:

1. Develop and implement a CEES Research Agenda

There is need to develop and implement a comprehensive research agenda for CEES that is aligned to the research-led mantra of the University. This research agenda should draw on the (emerging) research themes and the existential challenges in Uganda's education system to

drive CEES into impactful research and innovation for evidence-based interventions needed in the education sector.

2. Harness Research Expertise

The diverse research expertise of academic staff in CEES should be appropriately harnessed by:

a) Establishing strong and/or strengthening existing research groups in CEES that are interdisciplinary or problem/issue-based (crossing-cutting) in nature as expressed in the University Policy (<https://policies.mak.ac.ug/sites/default/files/policies/Policy-on-Establishment-of-Research-Entities.pdf>)

b) Training in grant writing for all current and prospective interdisciplinary research groups in CEES.

c) Optimizing the potential and mandate of existing entities like Makerere Institute for Teacher Education and Research (MITER) in CEES.

3. Nurture a culture of research-based background/position papers

Each academic unit and/or research group should nurture a culture of writing background/position papers on a topical or an emergent issue in the education sector to ignite research and evidence-based policy debates aimed at finding workable interventions for education challenges. This activity should be intentionally facilitated as one of the key deliverables by research groups.

4. Establish an intentional mentorship program

CEES should embark on establishing an intentional mentorship programme to build sustainable capacity for research and graduate supervision. This may be through operationalization of the policy on graduate fellows where specific targets are set including research output and timely completion. This initiative will be gradually mainstreamed through small research groups working on a research theme or sub-

theme comprising of a mentor (senior academic staff), peer mentor (PhD student) and a mentee (masters student) with concrete work packages.

5. Set up a college graduate students support desk/office

Given the nature of graduate students who enrol in CEES, there is need to set up a college graduate students' support desk/office with an administrative assistant to provide support services such as sharing information on policy, regulations, registration, stages of research, seminars, cross-cutting courses, public defences, small grant calls, student exchange opportunities, specialized trainings like policy brief writing etc. This can be through dedicated and open channels of communication like WhatsApp groups, emails, and other platforms. The desk/office should work in liaison with the PhD or graduate programme coordinators to initiate and organize/coordinate events such as an education graduate students' conference or symposia, writing workshops, seminars among others.

6. Strengthen graduate training and research data management:

The Directorate of Research and Graduate Training (DRGT) should roll out the Research Information Management System (RIMS) in CEES and train all staff in the use of the RIMS especially the package on tracking of graduate students among others. This has potential to improve on the monitoring and evaluation of students' progress and propose mitigation measures to address challenges they may be facing.

Overall, the baseline study on mapping research in education is not by any means conclusive nor exhaustive. It is just one of the many angles we can attempt to understand the current research terrain at CEES basing on parameters such as; PhD completion (2012-2024), themes in doctoral research, themes in the Government of Uganda funded

research projects through MakRIF, expertise of the academic staff in CEES and some of the research themes in their respective fields. The study's broader intention is to ignite evidence-based debate on workable strategies to harness and align the rich expertise, research capacity and endeavors in CEES. It is our expectation that the stakeholders will interrogate the journey of CEES Towards a Research-Led College and discuss ways to contribute more relevant and impactful research to transform education and the education system.

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