THE INTEGRATION OF COMMUNITY ENGAGEMENT AND OUTREACH INTO TEACHING AND LEARNING, RESEARCH AND SERVICE AT MUK, UCU AND UMU IN UGANDA

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ABSTRACT

This study was conducted to with the main objective being establishing the integration of CE&O into teaching and Learning, Research and Service at MUK, UCU and UMU universities in Uganda. The objectives of the study were **;** **t**o examine the models of CE&O used by Makerere, UCU and UMU universities , to establish how CE&O has been institutionalized by Makerere, UCU and UMU universities, to examine how CE&O has been integrated into research and teaching in Makerere, UCU and UMU universities.

A cross sectional design was employed to provide a framework for data collection and analysis. A sequential mixed methods approach was employed, involving a successive application of both qualitative (Key Informant Interviews) and quantitative (questionnaire) data collection methods. Creswell et al (2004) argues that, mixed methods lend themselves to valuable opportunities for data triangulation.

The findings clearly show that universities recognize CE&O as part of the university functioning albeit differences in emphasis with Makerere being more established in comparison to the newer universities UCU and Nkozi. Institutionalization of community engagement and outreach seems low among all the universities. The findings have shown that community engagement in research and community engaged service have the potential to improve teaching.

ACKNOWLEDGEMENT

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1.1 Introduction

Globally, universities are mandated to teach, research and conduct community service or engagement. Nevertheless, there has been a skewed inclination towards either the duet of teaching and research, or any of these two. Bartel, Krasny and Harrison (2003) argue that, "*although the traditional university mission is described as having three components, the real pressures on faculty are often binary-research and teaching*". Consequently, Community

Engagement and Outreach (CE&O) has been treated as a tangential component of university mandate and often times eclipsed by teaching and research, as such universities have portrayed themselves as inaccessible "*ivory towers*" (Weerts & Sandmann, 2008).

In his seminal writings on scholarship of engagement, Boyer (1990) and Boyer (1996) observed that research and teaching have been highly valued at the expense of community engagement and as such, the work of universities appear to be irrelevant to society's civic, social, economic and moral problems. Furco (2010) argues that, community engagement "*serves all parts of the tripartite mission, including facilitating institutions' achievement of their research/discovery and teaching/education goals*". Therefore, the peripheral treatment of CE&O renders the functions of a university and of faculty in particular insufficient, ineffective and divorced from societal realities.

Community engagement denotes "*the collaboration between institutions of higher education and their larger communities (local, regional/state, national and global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity*" (Carnegie Foundation for the Advancement of Teaching, 2006). Conversely, community outreach refers to a one-way delivery of academic knowledge, in which the community is positioned as the recipient of the knowledge and the university as the expert (Holland & Ramaley, 2008).

Community engagement presents a paradigm shift from a conventional expert one-way model of delivering university knowledge to the community, toward a more collaborative two-way model that values the role and the need for university-community partnerships in addressing societal needs and problems (Boyer, 1996, Kellogg Commission, 1999; Weerts & Sandmann, 2008). Nevertheless, Weerts and Sandmann (2008) argue that the third mission of universities has mainly taken the form of one way extension model and two-way integration models of engagement. Therefore, for the purpose of this study, both terminologies will be treated collectively to facilitate a comprehensive analysis of their institutionalization and integration into teaching and research in Makerere University, Uganda Christian University, and Uganda Martyrs University.

CE&O is an approach to scholarship that acknowledges that knowledge and expertise not only resides in institutions of learning, but also in non-academic settings (Fitzgerald et al., 2012) and "*some learning or discovery outcomes require access to external entities with distinctive knowledge and expertise*" (Holland & Ramaley, 2008). Under the CE&O approach, the boundaries of the conventional classroom are expanded to provide contextualized student learning and generation of knowledge that is both relevant to and reflective of communities' lived realities.

The world over, institutions are increasingly under pressure to be relevant to the complex social, economic, and cultural needs faced by community (Ramaley, 2000). In Uganda, each university has a legal obligation "….*to include in its teaching and research programmes, solutions to social and economic problems in the community*" [Article 127, University and Other Tertiary Institutions Act, 2001]. As a result universities including Makerere University, Uganda Christian University (UCU) and Uganda Martyrs University (UMU) among others have adopted the concept of community service in their missions and have carried out outreach programmes in various communities. For example, Makerere University through its colleges has provided career guidance in secondary schools; educated communities on the role of agriculture in Uganda's economy; conducted research with farmers and engaged in outreach activities with diverse stakeholder institutions (Makerere University, 2013).

Furthermore, Uganda Christian University has got outreach programmes that are aimed at equipping students with practical skills and offering service to the community. Some of these programmes include, Community Nursing Outreach Programme, Mission for Civic Awareness and Health, Clinical Legal Education Programme and the Mother-Baby Friendly Hospital Initiative (UCU, 2016). Whilst UMU has established a community social services education programme focusing on improving agronomic practices and knowledge of food utilization among farmers within the university vicinity (UMU, 2015). Although not much information exist on how these universities have institutionalized and embedded CE&O in their teaching and research missions, all indicators suggest existence of CE&O initiatives.

To ensure meaningful and sustainable community engagement and outreach in institutions of higher learning, there is need for deliberate attempts to engrain CE&O into the institutions structures, values and practices (Furco, 2013; Lazarus, Erasmus, Hendricks, Nduna & Slamat, 2008). Extant literature advance the need for a favorable milieu for community engagement to sprout and permeate through university functions and practices. For example, different scholars argue that institutionalization of CE&O requires university leadership's commitment; strategic planning; value of staff and student community based work; allocation of funds; provision of moral support; establishment of infrastructure to support CE&O and mechanism to evaluate staff and students' CE&O activities (Holland & Ramaley, 2008; Ramaley, 2000; Weerts & Sandmann, 2008). Of much significance also is the need to align CE&O with university key institutional processes and structures (Fitzgerald et al., 2012; Mugabi, 2015), and to embrace CE&O initiatives as an essential vehicle to accomplish institutional goals (Fitzgerald et al., 2012).

Admittedly, leadership plays a pivotal role in the institutionalization of community engagement and outreach (Moore & Ward, 2010; Weerts & Sandmann, 2008). The existence of political will from university leadership facilities the alignment of administrative resources, finance and structures to promote a symbiotic relationship between the university and the communities. Nevertheless, though the culture of CE&O can emerge as a result of a single champion, the sustainability of such efforts mostly depends on the wider commitment of everyone in the institution. In cases where this is not achieved, the institutionalization can only be regarded as partial and could not outlive the departure of the key leader (Moore & Ward, 2010). Needless to say, institutionalization of CE&O is a gradual process in which reciprocal knowledge flow occurs through a long-term institutional socialization process that reshapes power relationships with communities (Weerts & Sandmann, 2008) and transcends over sustainability to a development of an institutional culture that accepts and values the practice (Furco, 2013).

Although institutionalization of CE&O is a needed prerequisite for engaged scholarship, Universities are urged to move beyond it and integrate CE&O into teaching and research. Hoyt and Hollister (2013) argue that, the integration of the three core functions of a university, expands the nature and sources of knowledge that is relevant and crucial to dealing with societal

problems. Hoyt and Hollister argue that to achieve this, universities have to move away from being "Ivory Tower" by adopting a blend of their research, teaching and service functions. Engaged teaching and research is viewed as an effective pathway to improved quality of teaching and research at universities and promotes synergetic relationship between CEO, teaching and research that positions CEO in ways that support, rather than compete with teaching and research. In tandem, Lazarus et al (2008) argues that, integration of CE&O enriches and offer deeper contextualization of teaching and research. Against this backdrop, there is need to balance the pendulum between the three core functions of a university that are research, education and community Outreach , if university education is to gain its vitality and relevance.

Although a number of studies on institutionalization of the university's third mission have been carried out in developed countries like United States, diminutive studies exist on universities in Sub Saharan Africa and Ugandan universities in particular. A case in point, studies by Mugabi (2014) and Mugabi (2015) offer insights into understanding CE&O at Makerere, Uganda's biggest and oldest public university. Even with such studies, little is known about the integration of CE&O into teaching and research at this university. Let alone, little is known about the institutionalization and integration of CE&O at private universities like UCU and UMU. Yet the implementation of CE&O in these universities, may present a unique perspective different from that of Makerere. Walters and Openjuru (2013) argued that, African scholarship originated from diverse background, coming from indigenous African, Islamic and European-Christian, each with a unique perception of the world and understanding of community engagement. Therefore, Walters and Openjuru's discovery justified the need for this study to explore the institutionalization and integration of CE&O at the three Universities.

1.2 Research Problem

In response to criticism that higher education was not extending its significant resources toward meeting important community needs (O'Meara & Rice, 2005 in Silka et al, 2013) and the growing pressure on universities to be accountable for their performance (Holland, 2001), an increasing number of universities have started to explore and integrate the concept of "engagement" into their institutional missions (Kaneene, Kirsten, Mugisha & Kabasa, 2014).

Mugabi (2015) divulges that, mission statements of Ugandan universities show that, besides teaching and research, universities aspire to contribute to the socio-economic transformation of society. Nevertheless, such assertions reveal little about the actual commitment of the universities to community engagement and outreach (CE&O) (ibid) and regardless of type of CE&O, these efforts are seldom seen as contributing to the core mission of universities, and are almost always devalued relative to teaching and research (Bartel, Krasny, Harrison, 2003).

Notwithstanding the iterative calls for and discourses on engagement and outreach in higher education in Uganda, research about the subject appears seldom in the literature. Existing research on CE&O in Uganda is limited to institutionalization (Mugabi, 2014) and institutional commitment to CE&O (Mugabi, 2015) in Makerere University. But even with this, little is known about the integration of CE&O into research, teaching and service at Makerere, and at private universities like UCU and UMU. Research specifically on CE&O in private universities in Uganda has attracted little attention from researchers. There is limited knowledge of actual state of CE&O in the studied universities that are MUK, UCU and UMU. Therefore, the studied was aimed at establishing the integration of CE&O into teaching and Learning, Research and Service at MUK, UCU and UMU universities in Uganda

1.3 Research Objectives

1. To examine the models of CE&O used by Makerere, UCU and UMU universities
2. To establish how CE&O has been institutionalized by Makerere, UCU and UMU universities
3. To examine how CE&O has been integrated into research and teaching in Makerere, UCU and UMU universities

1.4 Research Questions

1. What are the models of CE&O used by Makerere, UCU and UMU universities?
2. How has CE&O been institutionalized by Makerere, UCU and UMU universities?
3. To what extent has CE&O been integrated into research and teaching and service in Makerere, UCU and UMU universities?

1.5 Rationale and Significance of the Study

There is much rhetoric surrounding the subject of community engagement and outreach in Ugandan Universities. As a matter of fact, all universities include among their strategic plans and mission the issue of CE&O. Nevertheless, there is diminutive research and documentation about the practices on this subject in Ugandan universities. Therefore, the proposed study is justified by the need to generate knowledge on the CE&O models, strategies and processes for institutionalized integration of CE&O into research and teaching.

The proposed study is significant because, it will help generate knowledge on how best universities especially Uganda Christian University can advance the integration of community engagement and outreach into its teaching and research activities. Additionally, the study will also identify the different facades of CE&O and CE&O strategies, and establish structures and systems that support students engaged scholarship. Furthermore, it will also provide guidance for the design, implementation, and evaluation of CE&O projects to ensure student engaged scholarship and better service to community. The results of this study will be of great use to university faculty and top management in implementing and streamlining future and current CE&O activities. The results of the study may also be of great use to Uganda National Council for Higher Education for setting benchmarks for institutions of higher learning in Uganda.

1.6 Study Scope

The study focused on one public university and two private universities in Uganda which included Makerere University Kampala, Uganda Martyrs University Nkozi an Uganda Christian University Mukono respectively.
Makerere University being the oldest University in Uganda has a niche over UMU Nkozi and UCU in terms of community outreach and engagement. UMU Nkozi has a department for community outreach compared to UCU which has none hence the justifying the selection of each of the institutions . Additionally, There was a need to compare Public and Private Universities in order to find out the level of community engagement and outreach in three universities.

Nkozi University was established in 1993 to serve both the church and the Nation and was

chartered by the Ugandan Government. The University has 16 Bachelors programmes, 2Advanced Diplomas,5 Diplomas, 1 PhD full and Part time, 18 Masters and 18 Post graduate Diploma programmes.

UCU was when the historic Bishop Tucker Theological college was promoted to a University in 1997. BTTC trained clergy and educators during its 84 year history from 1913-1997. The university was the first to be charted by the Government of Uganda as a private-university in 1997. The instruments of identity include Rule of Life, Rule of Prayer and Rule of Faith. The University has the following Faculties: Business Administration, Science and Technology, Education and Arts, Health Sciences, , law, Social Sciences, Research and Post graduate Studies, Bishop Tucker School of Theology.

Makerere University Kampala is the largest and third oldest institution of Higher learning in Uganda. It was first established as at technical school in 192. It was affiliated to the University of London until 1963 when it became one of the three constituent Colleges of the University of East Africa. It became an Independent university in 1970 by Act of Parliament. The statue continued till 2001 when the Universities and Tertiary Institutions Act was enacted. The University has 145 Programmes- 11 Diplomas, 134 Bachelors, 139 Postgraduate Programmes, 17 Postgraduate Diplomas, and 135 Masters programmes. All Academic units offer PHD by Research only or Coursework and dissertation.

2.0 Literature Review

2.1 Community Engagement and Outreach: An Overview

The world is witnessing a growing global movement for support of CE&O, evidenced by a steady growth in the number and type of universities that are expressing a commitment to civic engagement (Hoyt & Hollister, 2013) by among others reviewing their missions and establishing a conducive environment for CE&O to flourish. Nevertheless, CE&O has evolved over time with changing needs of its society (Roper & Hirth, 2005). Roper and Hirth argue that, this evolution began "as service to community in the 1800s, shifted to research in the mid-1950s, then merged with a new form of service in the late twentieth century" (p. 3). This transformation presents a paradigm shift from a conventional expert one-way model of delivering university knowledge to the community, toward a more collaborative two-way model that values the role and the need for university-community partnerships in addressing societal needs and problems (Boyer, 1996, Kellogg Commission, 1999; Holland & Ramaley, 2008; Walters & Openjuru, 2013; Weerts & Sandmann, 2008).

The global shift in focus and attitude toward community engagement work is mainly attributed to the change in thinking about the best approach in which universities can fulfill their civic mission and secure high quality university-community partnerships (Furco, 2010) and the shared interest in addressing local and global issues in ways that enhance community capacity and conditions, increase social capital and participation, and other community benefits, while enhancing university's research and learning outcomes. (Holland & Ramaley, 2008). Institutions of Higher Learning committed to CE&O   are responsive to community needs, opportunities, and goals in ways that are appropriate to the campus' mission and academic strengths (Holland & Ramaley, 2008).

Nevertheless, CE&O has been treated as a tangential component of university mandate and often times eclipsed by teaching and research, as such universities have portrayed themselves as inaccessible "ivory towers" (Weerts & Sandmann, 2008). Walters & Openjuru (2013) argues that, with the exception of South Africa, there exists a limited number of specific community

engagement policies in Africa at the national level. This implies that there is limited university motivation for CE&O. In his seminal writings on scholarship of engagement, Boyer (1990) and Boyer (1996) observed that research and teaching have been highly valued at the expense of community engagement and as such, the work of universities appear to be irrelevant to society's civic, social, economic and moral problems. Similarly, despite the efforts towards institutionalization of CE&O in some universities in Africa a lot remains desired. For example, Makerere in Uganda, CE&O remains "vaguely defined, poorly evaluated and insufficiently funded and numerous community oriented activities and projects are unsupported, unrewarded, unrecorded, and rely on the commitment and involvement of individuals" (Mugabi, 2015).

2.2 CE&O Models Employed by Institutions of Higher Learning

The Silo model: The University's core functions of teaching and learning, research and community service are pursed or implemented independently of the other. In this approach, the third mission of the university viewed as a separate and predominantly voluntary activity of the university (Bender, 2008). The main focus in this model is more on the service were more emphasis is placed on community service oriented activities like community service or outreach, professional service rather than on community engagement as shown in figure 1. For example one the strategic aims of Uganda Christian University is 'Transforming communities through service'. This strategic aim is deeply rooted in Silo's model of CE&O. Similarly at Makerere University, except for field attachment, other forms of CE&O like student's led voluntary community activities are largely unrewarded and undocumented (Mugabi, 2015).

Bender argues that in silo model, community service and engagement is generally confined to community outreach and student/staff volunteerism with no potential to contribute to teaching and learning, and research. Kaneene et al. (2014) argue that, in this type of engagement, is not integrated into student's field of study or staff's field of expertise and mainly takes the form of extra-curricular activities that take place outside of the classroom.

Similarly, "volunteerism sees the students providing a service to the beneficial recipient community and the field of delivery is not necessary his or her field of study" (Krog, Nel & Ben-

David, 2014, p. 38). Across universities in sub-Saharan Africa, the core functions of the university have been implemented at varying degrees with teaching and research being valued over community service.

Figure 1: Silo's *Model of CE&O*
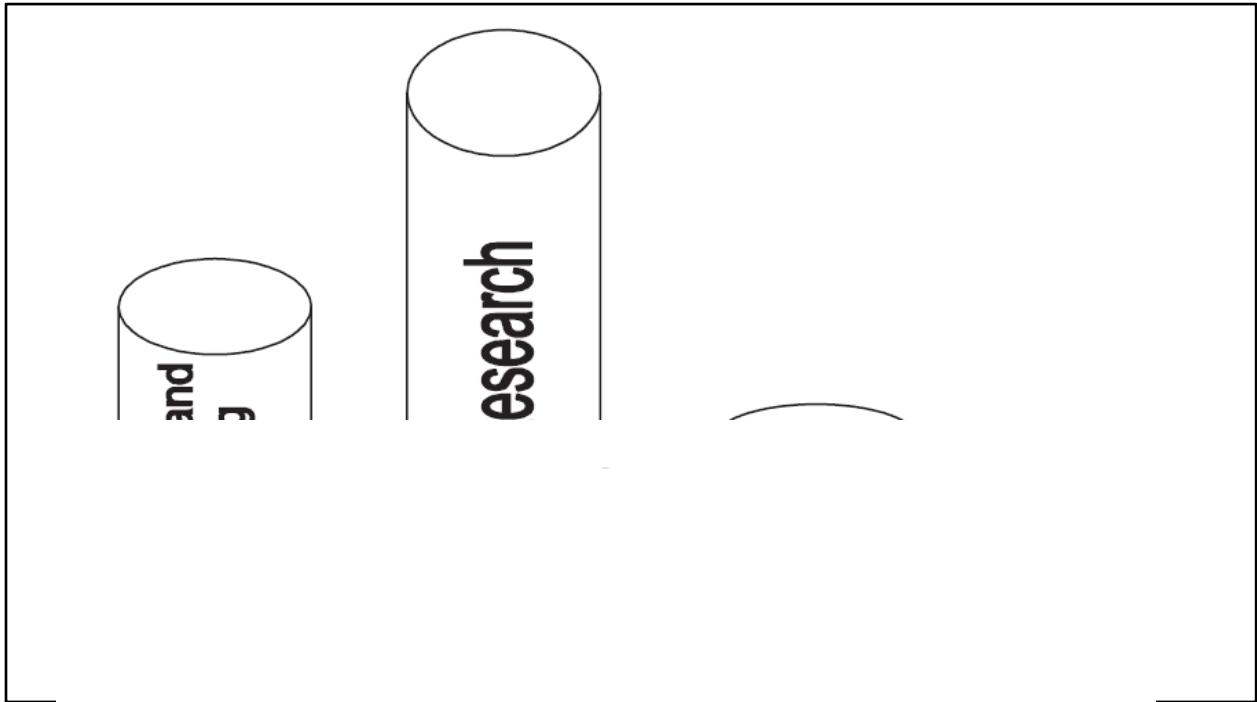
Source: Bender (2008)

The Intersecting model: This model acknowledges the existence of some kind of intersection between the three core functions of the university (teaching and learning, research and service). At the intersection of these functions lies service-learning and community-based research as shown in the figure 2. Community engagement takes the form of distance education, community based research, participatory action research, professional community service and service-learning.

These forms of CE&O emanate from a blend and integration of community service with teaching and learning and research. In this model it's assumed that teaching and research in away involves engagement with the community, be it direct or indirect (Bender, 2008). Bender argues that "the distinguishing feature of this intersectional model of engagement in universities is that it does not require or presuppose a radical shift in the core functions and activities of universities" (p.88),

but to some extent emphasizes the need for the integration of CE&O with teaching and learning and research. This implies that CE&O should inform teaching and learning and research.

Figure 2: The Intersecting Model of CE&O
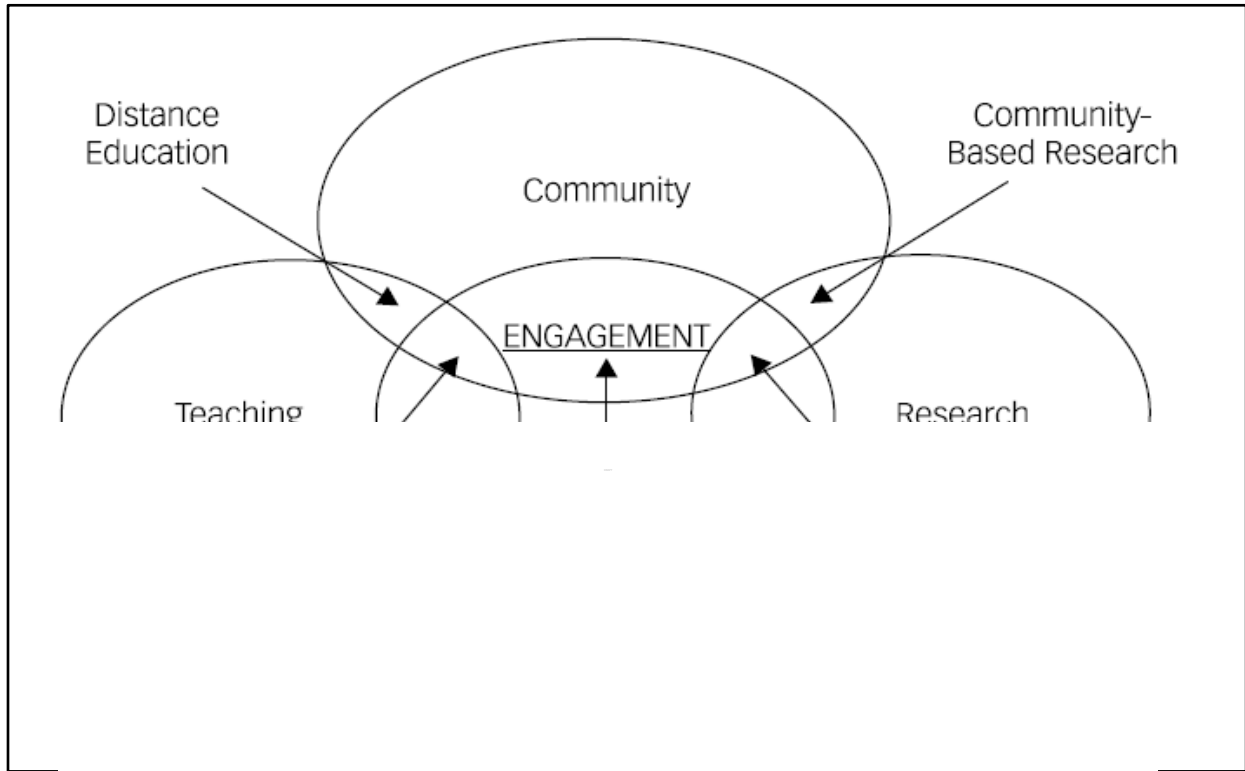
Source: (Bringle, 1999)

As shown in figure 2, Community engagement takes different forms including, community based research, participatory action research, professional community service and service-learning and distance education.

Community-Based Research denotes "research activities that are focused on community issues and may or may not be based in the community" (Furco, 2010), this may take the form of applied research. Whilst, Participatory Action Research denotes community-focused or community-based research activities that are designed to directly serve an identified community need (ibid) taking the form of action research among others.

Professional community service may involve the students or staff offering a specialized service to the community in form of an outreach or voluntary activity. Service learning includes

Academic service-learning, Co-curricular service-learning, Service-based internships. Service learning denotes "course-based teaching and learning activities that engage students in the community both to provide a service that meets a community need and to enhance students' learning of the course content" (Furco, 2010). In all universities in South Africa servicing learning is an entry point for community engagement (Lazarus et al., 2008). The primary beneficiary of service learning are the students and the community, since primary goal is to provide service to the community and to enhance learning through service. Service learning is fully integrated into academic curriculum, is credit based and may take the form of field placement (Kaneene et al., 2014).

The Infusion (cross-cutting) Model: In this model, CE&O denotes "a fundamental idea and perspective infused in and integrated with teaching and learning, and research" (Bender, 2008, p.89). In the infusion model, CE&O is enriched and informed by and conversely informs and enriches teaching and learning, and research (p.89) as shown in figure 3. The intersection of the three functions of the university indicates a point of full integration of these functions. It's this synergetic/interdependent relationship that gives birth to an engaged university.

Figure 3: The Infusion (Cross-cutting) Model of CE&O
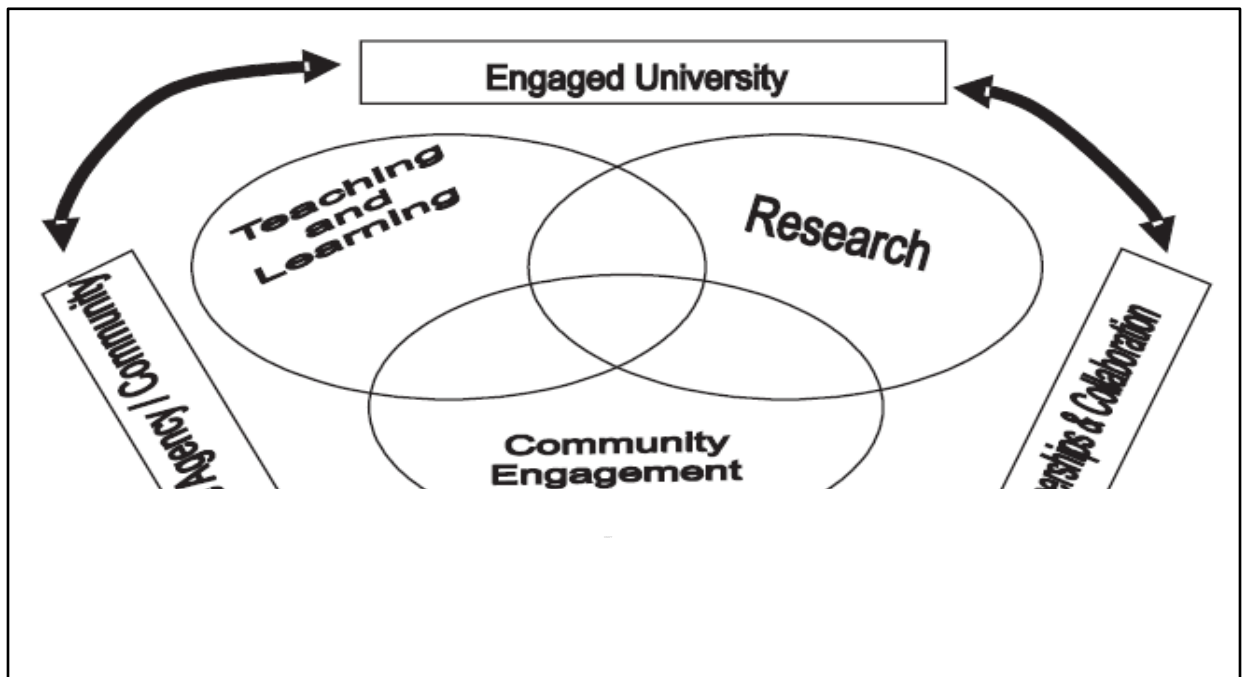
Source: Bender (2008)

In this approach, CE&O/service is perceived as a central overriding goal of higher education, and that needs to be promoted and embedded within all teaching, learning and research functions of the university, in order to improve the quality and relevance of teaching and learning, and research (Bender, 2008) and consequently the quality of university students and of service to community. Furco (2010) argues that, though there are a number of CE&O projects that integrate the tripartite functions of the university, most community engagement experiences do not fall into this category.

The interdependent relationship between teaching and learning, research and service results into different forms of CE&O including community-engaged research, community engaged research and community engaged service and outreach. In community-engaged research, "members of the community participate in the research enterprise not as research subjects, but rather as valued research advisors, partners or co-investigators" (Furco, 2010), involved in all process of research initiatives. Whilst Community-engaged teaching, involves incorporating teaching methodologies in courses that engage students in civic-focused and community-based learning activities (ibid).

The forms of community-engaged teaching approaches includes internships and field based studies. There is increased evidence that, engaged teaching and research is an effective pathway to higher quality teaching and research (Hoyt & Hollister, 2013). In regard to Community-engaged Service and Outreach, Furco argues that,

> "*the building of an engaged campus requires viewing public service and outreach through amore 'engaged' lens whereby assisting community-based agencies with particular issues is viewed as valuable, beneficial, and important to the advancement of faculty, students and the institution*" (p.386).

It's important to note that, within each model of CE&O there exists different kinds and levels of power relations, responsibility for and participation in governance of the CE&O process and decision making between the university and the community (Bender, 2008). Bender notes that, all these model are university-centric, since they are initiated by the university. She advises that, a university could begin with a particular model and gravitate over time to another.

2.3 Institutionalization of CE&O at Institutions of Higher Learning

The institutionalization of CE&O, implies embracing CE&O as a university-wide activity that can survive changes in funding, academic staff and campus leadership (Mugabi, 2014). PRIA and University of Victoria (2015) argues that institutionalizing CE&O in universities is vital, because sporadic efforts or individual demonstration of CE&O is of limited value, especially in absence of validated supportive institutional structures within the university's administration.

To ensure meaningful and sustainable community engagement and outreach in institutions of higher learning, there is need for deliberate attempts to engrain CE&O into the institutions structures, values and practices (Furco, 2013; Lazarus et al., 2008). Extant literature advance the need for a favorable milieu for community engagement to sprout and permeate through university functions and practices. For example, different scholars argue that institutionalization of CE&O requires university leadership's commitment; strategic planning; value of staff and

student community based work; allocation of funds; provision of moral support; establishment of infrastructure to support CE&O and mechanism to evaluate the quality and impact of staff and students' CE&O activities (Holland & Ramaley, 2008; Ramaley, 2000; Weerts & Sandmann, 2008).

Furthermore, there is need to align CE&O with university key institutional processes and structures (Fitzgerald et al., 2012; Mugabi, 2015), and to embrace CE&O initiatives as an essential vehicle to accomplish institutional goals (Fitzgerald et al., 2012). In Uganda, Mugabi (2015) notes that Makerere University has specialized and multidisciplinary units and personnel that coordinate and provide community related activities and services. Mugabi also notes that, the university has incorporated some aspects of CE into its budget, the roles of the academic staff, the undergraduate programmes and the policy on the appointment and promotion of academic staff.

Admittedly, leadership plays a pivotal role in the institutionalization of community engagement and outreach (Moore & Ward, 2010; Weerts & Sandmann, 2008). Bender (2008) argues that CE&O involves a change management process for the university and for the community. This requires proper management skill from the university administration and supportive leadership from senior management. For example, Mugabi (2015) indicates that Makerere University has a "supportive environment for CE&O through policies, structures, programmes and customs that accentuate, coordinate and/or support CE".

The existence of political will from university leadership facilities the alignment of administrative resources, finance and structures to promote a symbiotic relationship between the university and the communities. Nevertheless, though the culture of CE&O can emerge as a result of a single champion, the sustainability of such efforts mostly depends on the wider commitment of everyone in the institution. In cases where this is not achieved, the institutionalization can only be regarded as partial and could not outlive the departure of the key leader (Moore & Ward, 2010). Needless to say, institutionalization of CE&O is a gradual process in which reciprocal knowledge flow occurs through a long-term institutional socialization process that reshapes power relationships with communities (Weerts & Sandmann, 2008) and

transcends over sustainability to a development of an institutional culture that accepts and values the practice (Furco, 2013). It requires a substantial changes in academic organizations, institutional cultures and values in order to develop new attitudes, skills and beliefs about the nature of scholarly work and the role of academia in the production of new knowledge (Holland & Ramaley, 2008).

Due to differences in the factors discussed above, the institutionalization process of CE&O will vary across universities. Nevertheless, PRIA and University of Victoria (2015) indicated that, regardless of differences, there exists commonalities in the steps taken to institutionalize CE&O in universities.

These steps can be classified into pre-institutionalization phase, institutionalization phase, and post-institutionalization phase. The Pre-institutionalization phase, covers all the necessary pre-requisites before the university embarks on the process of institutionalization. Whilst the institutionalization phase is one in which the university actually sets out to establish and operationalizes the structure(s) for CE&O with clear stipulation of the governance and leadership arrangements and the M&E system. Lastly the post-institutionalization phase, mainly entails the sustainability of the institutionalization process (PRIA &University of Victoria, 2015).

Likewise, Braxton, Luckey and Helland (2002) identify three levels of institutionalization of CE&O. These include structural, procedural and incorporation. At the initial level (structural level), "a change is represented in several ways throughout the institution. There is a basic knowledge of the behaviors associated with the innovation, and those involved understand how to perform the behaviors" (Braxton et al., 2002: 5–6). At procedural level, behaviors and policies associated with the innovation become standard for the entire university. The final level of institutionalization is Incorporation, where the values and norms associated with the innovation (in this case CE&O) are incorporated into an organization's culture (p.7). What can be deduced from the above discussion is that, institutionalization of CE&O in universities is a process that needs to be initiated, natured and sustained. As such different universities may express varying levels of CE&O institutionalization given the contextual issues that play in an institution.

2.4 Integration of CE&O into Research, Teaching and Service at Institutions of Higher Learning

The integration of CE&O into Research, Teaching and Service is generally lucking at most if not all universities in Africa. Furco (2010) argues that in a number of universities, there is minimal or no overlap among the functions of the tripartite mission and yet CE&O flourishes and succeeds when it is integrated into the academic fabric of the institution. Similarly, Council on Higher Education (2010) indicates that Universities are involved in many activities structured around research, teaching and outreach that entail engagement with a wide range of communities, but these activities are uncoordinated and are the result of individual initiative, rather than of strategically planned, systematic endeavours. PRIA and University of Victoria. (2015) indicate that, in order to bridge the gap between higher education and public life there is need to move beyond service and outreach to actual 'engagement'.

Hoyt and Hollister (2013) argues that, universities are moving beyond the ivory tower, blending research, teaching and service functions with guidance and support from local community partners.

The integration of CE&O into teaching and learning, research and service at universities requires universities to adopt the infusion model of CE&O. In this model CE&O/service is perceived as a central overriding goal of higher education, and that needs to be promoted and embedded within all teaching, learning and research functions of the university, in order to improve the quality and relevance of teaching and learning, and research (Bender, 2008) and consequently the quality of university students and of service to community. Furco (2010) argues that, though there are a number of CE&O projects that integrate the tripartite functions of the university, most community engagement experiences do not fall into this category. It should be noted that, the depth of community engagement differs substantially between universities, as some universities have stronger community relationships than others (Jacob, Sutin, Weidman, & Yeager, 2015).

2.5 Conclusion

In most universities across the globe, research and teaching have been highly valued at the expense of CE&O, and as such universities have become "Ivory towers" with no or little connection with the needs and aspirations of the communities they serve. Consequently, universities are being challenged to be more responsive to the needs of their communities and indeed most universities are raising up to this challenge by exploring and integrating CE&O in their institutional missions and pursuing different models of CE&O. In Uganda limited research exists on the CE&O models pursed by different universities. Though research elsewhere indicate much focus of most universities on the Silo approach, where the university's core mission of teaching and learning, research and community service are implemented independently of the other and less on the more desired approaches of intersection and infusion. However, it should be noted that, for integration of CE&O to take root in a university there is need for institutionalization of CE&O into the institutional fabric of the university, with supportive mechanism and structures to aid the activity. Little research exist about the institutionalization and integration of CE&O in teaching and learning, research and service at Ugandan universities. Therefore, this study aimed at addressing these knowledge gaps by examining the CE&O models pursued by universities, the institutionalization, and integration of CE&O into teaching and learning, research, and service at selected universities in Uganda.

3.0 Methodological Approach

A cross sectional design was employed to provide a framework for data collection and analysis. A sequential mixed methods approach was employed, involving a successive application of both qualitative (Key Informant Interviews) and quantitative (questionnaire) data collection methods. Creswell et al (2004) argues that, mixed methods lend themselves to valuable opportunities for data triangulation.

The population of study was 2,001, and it included both full-time and part-time academic staff at different levels in the three universities. MUK has 1,380 academic staff (Makerere University, 2014), UCU 444[1] and UMU 177 (UMU, 2015). All staff at these universities are mandated to

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1 Researcher's compilation from UCU Human Resource Directorate database (2016)

carry out CE&O as part of their academic responsibilities in contribution to the fulfillment of their respective university's third mission. The Sample size for the study was determined at 185

academic staff, using Yamane's sample size determination formula $\frac{N}{1+N(¿2¿¿)}$ (Yamane,

1967), using a confidence level of 93% and margin of error of ±7%. The sample for the quantitative component of the study was selected using proportionate stratified sampling. The population was stratified into strata based on universities and proportion to size sample was determined (see table 1). The final sample from each university (stratum) was selected using simple random sampling.

Table 1: Sample Distribution across the three Universities

Institution	No. of Academic Staff	Sample size
MUK	1,380	128
UCU	444	41
UMU	177	16
Total (N)	**2001**	**185**

Nevertheless, the sample for the qualitative component of the study was not statically determined, because the qualitative component was to offer in-depth information on CE&O, rather than drawing statistical inferences. Therefore, 20 key informants were selected for the study. These included: These key informants were purposefully selected, based on their perceived knowledge of CE&O in the selected universities and Uganda in general.

A dual trajectory for data analysis was undertaken. This involved application of both quantitative and qualitative data analysis approaches. In the quantitative data analysis approach, data generated from questionnaires was edited, coded and entered into the computer with the help of

Statistical Package for Social Scientists (SPSS). Data was analyzed at three levels. At Univariate analysis level, descriptive statistics in terms of frequencies, percentages, mean and standard deviations were used to give a summary description of the key variables of the study. At Bi-variate analysis level, cross tabulations were used to draw comparisons of specific CE&O variables across the three universities. Lastly at multi-variate analysis level, multinomial logistic regression analysis was conducted to estimate the relationship among specific CE&O variables. Qualitative data generated from key informant interviews was transcribed, examined, edited and analyzed using content analysis. Data was categorized in a systematic way using topical headings drawn in reference to the objectives of the study. The categorization of data was aimed at facilitating the examination, comparison, conceptualization and analysis of the findings. Results from both analyses are triangulated to arrive at valid conclusions and recommendations.

4.0 Findings and Discussions

This section presents data analysis, interpretation and presentation of study findings. The section presents characteristic of respondent's background followed by presentation of study findings on the study objectives. The researchers discussed the presented findings after the data analysis. The findings are presented beginning with the background information and followed by the order of the objectives of the study.

Background information

Table 2: The table below indicates background information

| | Gender in percentage | |
University	Male	Female
Makerere University Kampala	43	40.5
Uganda Christian University	36.7	45.6
Uganda Martyrs University Nkozi	20.2	13.9
TOTAL	100	100

The table above indicates gender aspect of the respondents, out of the total number of respondents Makerere University constituted 43% male and 41 % female which means that more male lecturers were accessed. UCU response indicated 36.7% male and 45.6% female which means that unlike MUK more female were accessed for the response in UCU than MUK. Out of the total respondent from UMU, 20.2% were male and 13.9% were female.

Table 3: The table below indicates the current position held by the respondents

University	current position held by respondents (%)					
	Teaching Assistant	**Assistant Lecturer**	**Lecturer**	**Senior Lecturer**	**Associate Professor**	**Professor**
MUK	32.60%	56.00%	25.00%	56.00%	64.30%	93.30%
UCU	65.10%	16.00%	48.70%	17.00%	21.40%	0.00%
UMU	2.30%	28.00%	26.30%	27.00%	14.30%	6.70%
TOTAL	100	100	100	100	100	100

The table above shows the current position of the respondents in the respective institutions of service. MUK had the biggest number of professors with 93.3% , UMU 6.7% and UCU never had a professor participating in the study. The study also indicates that MUK had more senior lecturers and associate professors than UCU and UMU.

Table 4: **The table below indicates Engaged Services in MUK, UCU and UMU.**

Engaged Service Variables	N	Minimum	Maximum	Mean	Std. Deviation
Conduct presentations to community groups	188	1	5	3.49	1.230
Liaise with community groups around place of work	188	1	5	3.42	1.197
Provide community service/ volunteer work in the organizations	188	1	5	3.76	1.091
Offer consultancies to the community	188	1	5	3.45	1.180
Participate in public debates	187	1	5	3.26	1.270
Conduct collaborative research for my community	188	1	5	3.34	1.206
Membership in community and organization boards	188	1	5	3.43	1.360
Valid N (listwise)	187				

The table above shows how universities engage with the community through service. The mean score for conducting presentations to the community groups is 3.49 with standard deviation 1.230. This implies that on average the respondents in Makerere, UCU and Nkozi universities do conduct presentations and there is a small deviation from the mean which indicates that individual responses above average do conduct presentations to community groups. Liaising with community groups around places of work as a form of engaged service attracted a high score with a mean of 3.42 with standard deviation 1.197 this indicates way above average most respondents do liaise with community around their universities. Findings from the data indicate that the three universities under study do provide community service/ volunteer work and as well offer consultancies to the community, the mean score and were 3.76 and 3.45 means respectively and 1.09 and 1.18 standard deviation respectively. From the personal interviews conducted academic staff do consult on personal grounds though not on behalf of the institutions they work for. Findings also indicate that public debates, collaborative research and being members on community and organization boards as forms of engaged service are a common practice by many respondents across board with a mean of 3.26, 3.34 and 3.43 respectively with a small standard deviation of 1.2 on average. However on the three variables from the interviews conducted respondents from Nkozi and UCU are not so engaged in public debates compared to Makerere.

Table 5: Table below indicates percentages of responses on engaged services among the universities.

Universities	Engaged Services of the total Response (%)				
	Strongly Disagree	**Disagree**	**Not Sure**	**Agree**	**Strongly Agree**
MUK	2.7	6.4	7.0	16.0	10.2
UCU	13.9	10.2	8.6	7.0	0.5
UMU	3.2	2.7	3.7	5.9	2.1
Total	**19.8**	**19.3**	**19.3**	**28.9**	**12.8**

Source: Primary

The table above shows the response on engaged services from the three surveyed universities. It is revealed that out of the total responses on community engaged services, Makerere University

reported the highest percentage on having community engaged services with 26.2 percent followed by Nkozi with 8.0 percent and 7.0 percent respectively. Uganda Christian University scored the highest percentage in disagreement with engaged service. This implies that the biggest number of academic staff do not carry out engaged services as part of their community engagement and outreach.

Table 6: The table below indicates Engaged Research as a form of community engagement and outreach in MUK, UCU and UMU.

Engaged Research Variables	N	Minimum	Maximum	Mean	Std. Deviation
Engaged in community research	188	1	5	3.94	1.148
Collaborate and participate in research with community partners	188	1	5	3.69	1.147
Conducted action oriented research	188	1	5	3.60	1.154
Introduced strategies to bridge scholarly research and community outcomes	188	1	5	3.57	1.170
Involved in demonstration project in the community	188	1	5	3.50	1.172
Integrate my research with community engagement	188	1	5	3.63	1.089
Conduct research for community organizations	188	1	5	3.45	1.259
Valid N (listwise)	188				

Table 5 shows the engagement of universities in research. It is revealed that on average majority of the respondents agree that they engage in community research and this shown by the mean score of 3.94. However, the response of each respondent differs from the mean response by 1.148. This implies that the academic staff in the three universities engage in community research. The mean response of respondents on collaboration and partnership with community partners was 3.69 which shows that majority of the respondents do agree that they do carry out collaborations and partnerships with community partners. Interestingly, the standard deviation 1.147 shows deference each respondent from mean response. This implies that above average

respondents in the surveyed universities do agree that they collaborate and participate in research with community partners.

Above average, majority of the respondents do agree to have conducted action oriented research in their institutions and this is revealed by mean score of 3.60. The response of each individual that conducted action oriented research differs from the mean response by 1.154. This implies that on average universities do conduct action oriented research.

The survey also show that on average the respondents do agree that their institutions introduced strategies to bridge scholarly research and community outcomes and this revealed by a mean score of 3.57 and a standard deviation of 1.17. This implies that universities above average introduced strategies to bridge scholarly research with community outcomes. Furthermore, on average it is reported that respondents in their respective institutions involved themselves in demonstration projects in community and this shown by the mean score of 3.5. and a standard deviation of 1.172. This implies that universities have engaged demonstration projects in community but the interviews indicate still that Makerere leads in have demonstration projects in community and Nkozi. UCU have not have demonstration projects in communities around the university but a few faculties have tried in up country. Additionally, mean score of respondents on integrating their research with community engagement is 3.63. This implies that majority of them do always integrate their research with community engagement. However, the response of each individual differs from the mean score by 1.089. This therefore means that surveyed universities do integrate their research with community engagement. Lastly, the study shows that on average the respondents in the surveyed universities do not conduct research for community organizations and this shown by the mean score of 3.45. However, the score of each respondent differs from the mean score by 1.259. This implies that universities do not conduct research for community organizations.

Table 7: The table below indicates Research Engagement as a form of community engagement and outreach.

Universities	Research Engagement Response out the total Response (%)				
	Strongly	**Disagree**	**Not Sure**	**Agree**	**Strongly Agree**

	Disagree				
MUK	0.5	0.0	10.1	14.9	16.5
UCU	1.1	0.5	34.0	3.2	1.6
UMU	0.0	0.0	9.6	6.9	1.1
Total	**1.6**	**0.5**	**53.7**	**25.0**	**19.1**

Table 6 shows the response of universities on research engagements. It is revealed that out of the total response from the study, Makerere University reported the highest percentage of 31.4 for engaging in community research, followed by Nkozi university with 8.0 percent and UCU with 4.8 percent. Thus, there is little or no engagement in community research in UCU Compared to Makerere and Nkozi universities. From the above findings UCU registered highest response of 34.0% not being sure whether they engage in community research because there is no active engagement with by respondents in this form of community outreach. The results are statistically significant at 0.01 levels implying that it can be generalized to the entire population.

Table 8: Indicates Engaged Teaching and community engagement and outreach

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
CE&O is part of teaching	188	1	5	3.77	1.113	1.239
Students' CE&O activities are assessed	188	1	5	3.63	1.024	1.048
Valid N (listwise)	188					

Table 8 shows the engagement of the surveyed universities in community teaching. The mean score of respondents on community engagement being part of their teaching is 3.77 which imply that on average the respondents in their respective universities agree to engage in community teaching. However, the score of each individual differs from the mean score by 1.113. Thus, it is revealed that surveyed universities do carry out community teaching.

Also the study show that mean score of respondents on community engagement activities is 3.63 which implies that majority of the respondents do carry out community engagement activities. However, the individual score of each respondent on this aspect differs from the mean score by 1.024. Therefore, results reveal that the universities do engage in community activities.

Table 9: The table below indicates of responses engaged community teaching as part of community engagement and outreach.

Universities	Community teaching out the total Responses (%)				
	Strongly Disagree	**Disagree**	**Not Sure**	**Agree**	**Strongly Agree**
MUK	0.0	2.1	5.3	11.7	22.9
UCU	0.5	10.1	5.9	20.2	3.7
UMU	0.0	1.1	4.3	9.6	2.7
Total	**0.5**	**13.3**	**15.5**	**41.5**	**29.3**

Table 9 above the response of the surveyed universities in community teaching and the results show that Makerere University scored highly on carrying out community teaching with 34.6 percent , followed by UCU with 23.9 percent and lastly Nkozi with 12.3 percent. This shows of the three surveyed universities, Makerere engages more in Community teaching compared with UCU and Nkozi universities. But still 10% disagreed that they do not engage with community teaching from UCU which is a noticeable percentage which indicates that a significant number of responses that do not engage in community teaching. The results are also statistically significant 0.01 levels.

Table 10 : Below shows the institutional environment about community engagement and outreach in the MUK, UCU and UMU.

Institutional Environment Variables	**N**	**Min**	**Max**	**Mean**	**Std. Deviation**
Instructional Mechanism for documentation of CE&O Exists	188	1	5	3.48	1.092
University's Leadership Supports& promote CE&O	188	1	5	3.76	1.009
Promotion & renewal of contract considers staff CE& O	188	1	5	3.53	1.047
CE&O professional development support is offered to staff	188	1	5	3.40	1.097

CE&O is considered in recruitment policies	188	1	5	3.51	1.016
M&E mechanism to measure impact of CE&O exists	188	1	5	3.38	.977
Supportive policies for CE&O exist	188	1	5	3.48	.939
Annual job evaluation reviews consider CE&O	188	1	5	3.49	1.005
A university division or office for community engagement exist	188	1	5	3.56	1.060
Rewards for involvement in CE&O exist	188	1	5	3.45	1.061
Valid N (listwise)	188				

The mean and standard deviation were used to explain evidence with regard to whether the institutional environment favors community engagement and outreach on a scale of 1 to 5. It is revealed that the mean score of the universities on having institutional mechanism for documentation of CE& O is 3.48. This implies that majority of the respondents do agree that their institutions do have institutional mechanisms for documentation of CE&O. However, the individual score on this aspect deviates from the mean score by 1.092 which indicates a positive close deviation of individual response.

The mean score of respondents on universities' leadership support and promotion of CE&O is 3.7 and the score of the individual differ from the mean by 1.009. This implies that majority of the respondents agree that there is presence of universities' leadership support and promotion of CE&O in their respective institutions.

The survey also revealed 3.5 as the mean score of responds on promotion and renewal of contracts taking into consideration the staffs of CE&O. The individual responses of respondents differ from the mean score by 1.047. This implies that majority of the respondents in the surveyed institutions agree on the existence of promotion and renewal of contract while taking into consideration the staff for CE&O.

Interestingly the study indicates that with in the institutions there is monitoring and evaluation mechanism to measure impact of CE&O exists and Supportive policies for CE&O exist with a mean value of 3.38 and 3.48 respectively. A small deviation run against the two variables was less than one which indicates a very close positive divergence of individual response in from the mean in agreement that the two exists.

From table 9, the data indicates that in the three institutions of study under on the three variables of whether annual job evaluation reviews of academic staff considers CE&O , whether offices

for community engagement exist and whether there institutional reward for the staff who get involved in CE&O exist the means to these findings were 3.49, 3.56 and 3.45 respectively with a standard deviations of 1.005, 1.060 and 1.061 respectively. This is a clear indication that the university top administration puts up a conducive environment   do exist which explains a conducive environment for in institutions for community engagement and outreach.

Table 11: Indicates the institutionalization index.

University		Institutionalization index			Total
		Disagree	**Not Sure**	**Agree**	
Makerere university	Count	1	28	50	**79**
	% within Institutionalization index	5.3%	28.6%	71.4%	**42.2%**
	% of Total	0.5%	15.0%	26.7%	**42.2%**
Uganda Christin University	Count	16	53	6	**75**
	% within Institutionalization index	84.2%	54.1%	8.6%	**40.1%**
	% of Total	8.6%	28.3%	3.2%	**40.1%**
Nkozi University	Count	2	17	14	**33**
	% within Institutionalization index	10.5%	17.3%	20.0%	**17.6%**
	% of Total	1.1%	9.1%	7.5%	**17.6%**
Total	**Count**	**19**	**98**	**70**	**187**
	% within Institutionalization index	**100.0%**	**100.0%**	**100.0%**	**100.0%**
	% of Total	**10.2%**	**52.4%**	**37.4%**	**100.0%**

In the table 10 above, the researchers Computed the variables that measured institutionalization of community engagement and outreach into one variable the institutionalization index. The index was statistically computed on a scale of 1 to 3 to indicate the respondent's opinions in the three institutions on the level of institutionalization.

From table 8. Above, 37.4% were in agreement of institutionalization of community engagement and outreach 52.4% were not sure and 10.2% disagreed. It was found that in three institutions community engagement and outreach was institutionalized and the data indicates that out of the total respondents that agreed 26% from Makerere university were in agreement of community engagement and outreach being institutionalized which is 76% within the Makerere response in agreement with in Makerere. Within Makerere 28% of the respondents were not sure which means that they are aware about the community engagement activities but not sure if they are deliberate institutional attempts and only 5.3% were in disagreement of community engagement and being institutionalized.

The table also indicates that from the total respondents of the three institutions only 3.2% from UCU agreed that community engagement and outreach was institutionalized. Only 8.6% of the respondents from UCU indicate the awareness of community engagement and outreach being institutionalized and rest were not sure and others disagreed. This indicates that majority of the academic staff at UCU disagree and others not sure of community engagement and outreach being institutionalized. Majority of the respondents that were not sure were from UCU with a percentage 28.3% from the total respondents and 54.1% from within the respondents of UCU.

Out of the total response Nkozi university indicated 7.5% in agreement of community engagement, 9.1% not sure and only 1.1% disagreed. From the table, data indicates that from the responses Nkozi attracted 20% in agreement, 17.5% not sure and 10.5% in disagreement of institutionalization of community engagement and outreach.

Table 12:The table below indicate the different forms of community engagement and outreach used by Makerere, UCU and Nkozi University.

Forms of CE&O	N	Minimum	Maximum	Mean	Std. Deviation
Faculty/department runs community based courses	187	1	5	4.14	.846
Faculty/department offers internship opportunities to our students	187	1	5	4.06	1.053

Faculty/department offers field based learning	188	1	5	4.16	.869
Students are involved in community engaged research	188	2	5	3.96	.912
Action research is conducted in courses we offer	187	1	5	3.83	.978
Participatory curriculum development is carried out	188	1	5	3.90	.884
There non-credit classes and programs in the university	188	1	5	3.46	.983
We offer educational enrichment programs for the public and alumni	188	1	5	3.67	1.054
We offer Collaborative community-based research programmes	188	1	5	3.73	1.036
Valid N (list wise)	**186**				

The mean and standard deviation were used to explain evidence with regard to the forms used to community engagement and outreach. For this particular aspect the validity of the mean for this analysis is supported by the acceptable levels of standard deviation.

Judging from the standard deviation figures which ranges from 0.869 to 1.054 which indicates that the variation of the raw data were not large enough to disqualify the use of mean.

From the table above, there is evidence that the three institutions under study above average do under take community based courses, internship opportunities and field based learning commonly as forms of community engagement and outreach. On a scale of 1-5, students in all the studied universities are involved in community engaged research with the minimum being 2 and a standard deviation of 0.912 from the mean of 3.96.

It was clearly indicated that action research, participatory curriculum development and offering of non-credit classes and programs in the university are used across board as forms of community engagement and outreach. A standard deviation of less than one on the three variable was less than one which indicate a true mean in agreement. It is clear from the findings that all the three universities offer collaborative community-based research programs.

Table 13; Correlations between community engagement and outreach against the variables of engagement.

The Pearson product-moment correlation coefficient (Pearson's correlation, for short) was run to measure the strength and direction of association that exists between community engagement and all the other four forms of engagement.

		Community engagement activity	Community engagement / Outreach in Teaching	Community Engagement in Research	Community Engaged Service	Institutional Environment for Community Engagement
Community engagement activity	Pearson Correlation Sig. (2-tailed) N	1 188	.126 .085 188	.229[**] .002 188	.210[**] .004 188	.188[**] .010 188
Community engagement/ Outreach in Teaching	Pearson Correlation Sig. (2-tailed) N	.126 .085 188	1 188	.422[**] .000 188	.342[**] .000 188	.348[**] .000 188
Community Engagement in Research	Pearson Correlation Sig. (2-tailed) N	.229[**] .002 188	.422[**] .000 188	1 188	.400[**] .000 188	.322[**] .000 188
Community Engaged Service	Pearson Correlation Sig. (2-tailed) N	.210[**] .004 188	.342[**] .000 188	.400[**] .000 188	1 188	.330[**] .000 188

Institutional Environment for Community Engagement	Pearson Correlation Sig. (2-tailed) N	.188** .010 188	.348** .000 188	.322** .000 188	.330** .000 188	1 188

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

The table above represents the correlation amongst the variables. There is a weak but positive relationship between community engagement activities and community engagement in research (0.229), community engaged service (0.210), and institutional environment for community engagement (0.188). However these are all statistically significant at 0.01 levels.

This implies that community engagement in research, community engaged service and institutional environment for community engagement lead to an increase in community engagement activities by a small magnitude.

There is also a weak positive relationship between community engagement/ outreach in teaching and Community engagement in research (0.422), community engaged service (0.342) and institutional environment for community engagement (0.348). However these are all statically significant at 0.01 levels. This implies that community engagement in research, community engaged service and institutional environment for community engagement cause a small change/ increment in community outreach in teaching.

Furthermore, there is a small positive relationship between community engagement in research and community engagement/outreach in teaching (0.422), community engaged service (0.400) and institutional environment for community engagement (0.322). However these are statistically significant at 0.01 levels. This implies that community engagement/outreach in teaching, community engaged service and institutional environment for community engagement cause a small increment in community engagement in research.

Lastly, there is a small positive relationship between community engaged service and community engagement/outreach in teaching (0.342), community engagement in research (0.400) and institutional environment for community engagement (0.330). However, these are statistically significant at 0.01 levels. This implies that when community engagement/outreach in teaching, community engagement in research and institutional environment for community engagement cause a small increment in community engaged service.

Outreach activities

The study made assumptions that there are outreach activities being conducted by lecturers in the studied Universities. However, some of the activities assumed to be outreach activities may not be in that category and therefore the researchers first assessed co-linearity of the assumed activities and below are the results:

Table 14: Correration.

Correlations

		faculty/department offers field based learning	our students are involved in community engaged research	action research is conducted in courses we offer	outreach and engagement are accepted as a role of the academic staff	there is community-university networks for learning/dissemination/knowledge exchange	participatory curriculum development is carried out	there non-credit classes and programs in the university	we offer educational enrichment programs for the public and alumni	the university website has a community engagement webpage	there is collabprative community-based research programmes responsive to community-indentified needs
faculty/department offers field based learning	Pearson Correlation	1	.467**	.413**	.309**	.397**	.354**	.170*	.356**	.273**	.303**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.020	.000	.000	.000
	N	188	188	187	188	188	188	188	188	187	188
our students are involved in community engaged research	Pearson Correlation	.467**	1	.509**	.361**	.351**	.452**	.272**	.425**	.332**	.367**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000
	N	188	188	187	188	188	188	188	188	187	188
action research is conducted in courses we offer	Pearson Correlation	.413**	.509**	1	.290**	.392**	.459**	.301**	.457**	.369**	.448**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000
	N	187	187	187	187	187	187	187	187	187	187
outreach and engagement are accepted as a role of the academic staff	Pearson Correlation	.309**	.361**	.290**	1	.272**	.437**	.225**	.283**	.105	.292**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.002	.000	.151	.000
	N	188	188	187	188	188	188	188	188	187	188
there is community-university networks for learning/dissemination/knowledge exchange	Pearson Correlation	.397**	.351**	.392**	.272**	1	.418**	.224**	.358**	.286**	.396**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.002	.000	.000	.000
	N	188	188	187	188	188	188	188	188	187	188
participatory curriculum	Correlation	.354**	.452**	.459**	.437**	.418**	1	.187*	.333**	.263**	.316**

Correlations

|		our students are involved in community engaged research / faculty/department offers field based learning	our students are involved in community engaged research	action research is conducted in courses we offer	outreach and engagement are accepted as a role of the academic staff	there is community-university networks for learning/ dissemination/knowle dge exchange	participato ry curriculum developme nt is carried out	there non-credit classes and program s in the universit y	we offer education al enrichme nt programs for the public and alumni	the university website has a communit y engageme nt webpage	there is collabprati ve community -based research programme s responsive to community -indentified needs
faculty/department offers field based learning	Pearson Correlati on	1	.467**	.413**	.309**	.397**	.354**	.170*	.356**	.273**	.303**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.020	.000	.000	.000
	N	188	188	187	188	188	188	188	188	187	188
our students are involved in community engaged research	Pearson Correlati on	.467**	1	.509**	.361**	.351**	.452**	.272**	.425**	.332**	.367**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000
	N	188	188	187	188	188	188	188	188	187	188
action research is conducted in courses we offer	Pearson Correlati on	.413**	.509**	1	.290**	.392**	.459**	.301**	.457**	.369**	.448**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000
	N	187	187	187	187	187	187	187	187	187	187
outreach and engagement are accepted as a role of the academic staff	Pearson Correlati on	.309**	.361**	.290**	1	.272**	.437**	.225**	.283**	.105	.292**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.002	.000	.151	.000
	N	188	188	187	188	188	188	188	188	187	188
there is community-university networks for learning/ dissemination/knowle dge exchange	Pearson Correlati on	.397**	.351**	.392**	.272**	1	.418**	.224**	.358**	.286**	.396**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.002	.000	.000	.000
	N	188	188	187	188	188	188	188	188	187	188
participatory curriculum	Pearson Correlati	.354**	.452**	.459**	.437**	.418**	1	.187*	.333**	.263**	.316**

As observed from the data, there are no activities are very highly correlating implying or inversely correlating that if such a situation prevailed, then they would need to be eliminated from the distribution as they would be measuring the same thing or contrary measuring a variable of interest respectively. The results therefore imply that the assumed activities fall in the category of outreach activities and therefore are worth investigating as to whether they influence teaching and learning outcomes as per the major purpose of the study.

Faculty Community engagement activities and influence on teaching and research outcomes: Kendal's tau-b non-parametric relational statistics

The study sought to assess whether community engagement activities have an influence on teaching. However, before computing this correlation, there was need to generate composite indices for community engagement activities and teaching related constructs and below are the results of the two dimensional non-parametric variables. The composite variables generated are: COMMENGAGE for community engagement, TEACHING AND RESEARCH. This was proceeded by running relational non-parametric test as this data is ordinal. However, another condition for running Kendal's taub non-parametric test is linearity and below are the scatter plots to evidence this assumption:

Figure 4: Kendal's tau-b non-parametric relational statistics
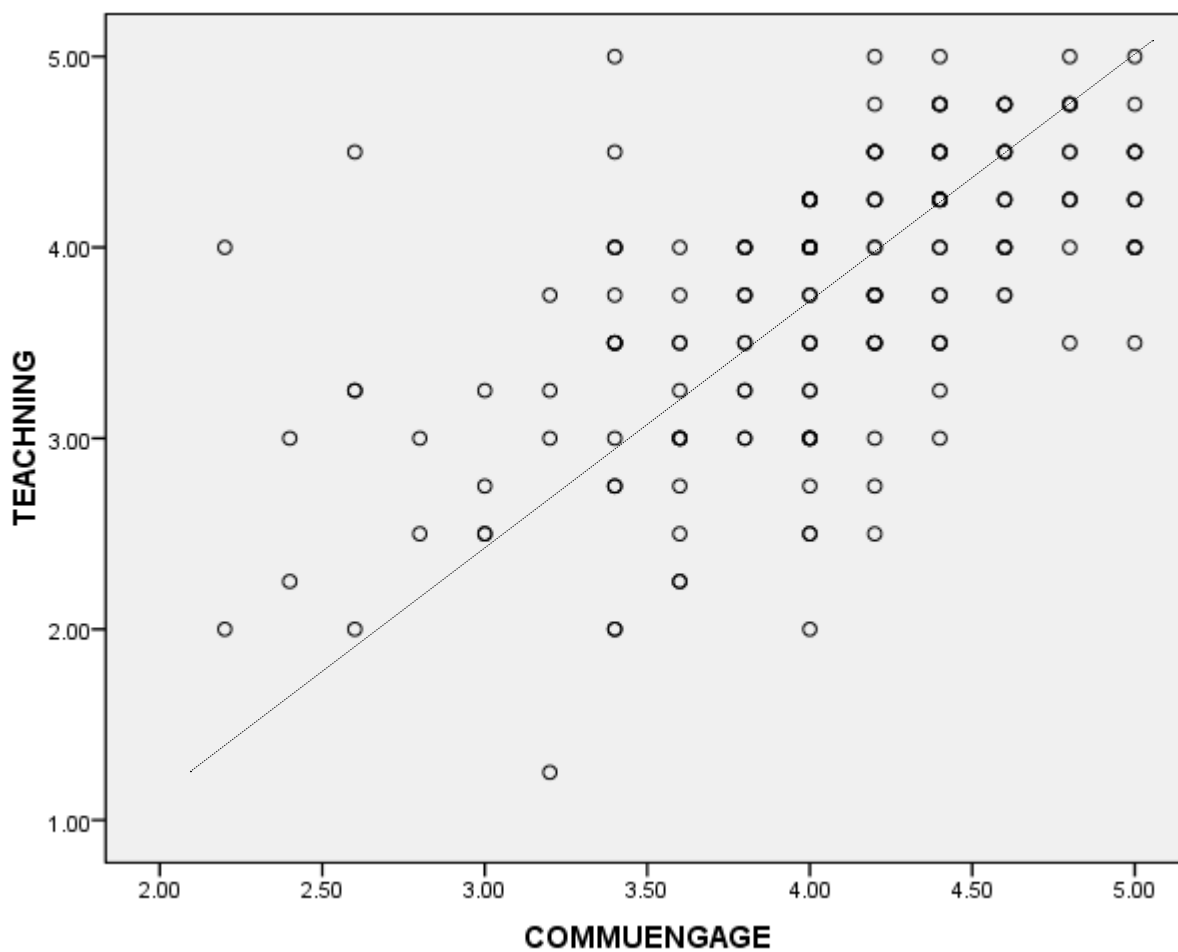
Since a line of best fit could be drawn into the data to generate two congruent parts, there seem to be a positive relationship between community engagement activities and teaching outcomes of staff.

Figure 5: Kendal's tau-b non-parametric relational statistics 2
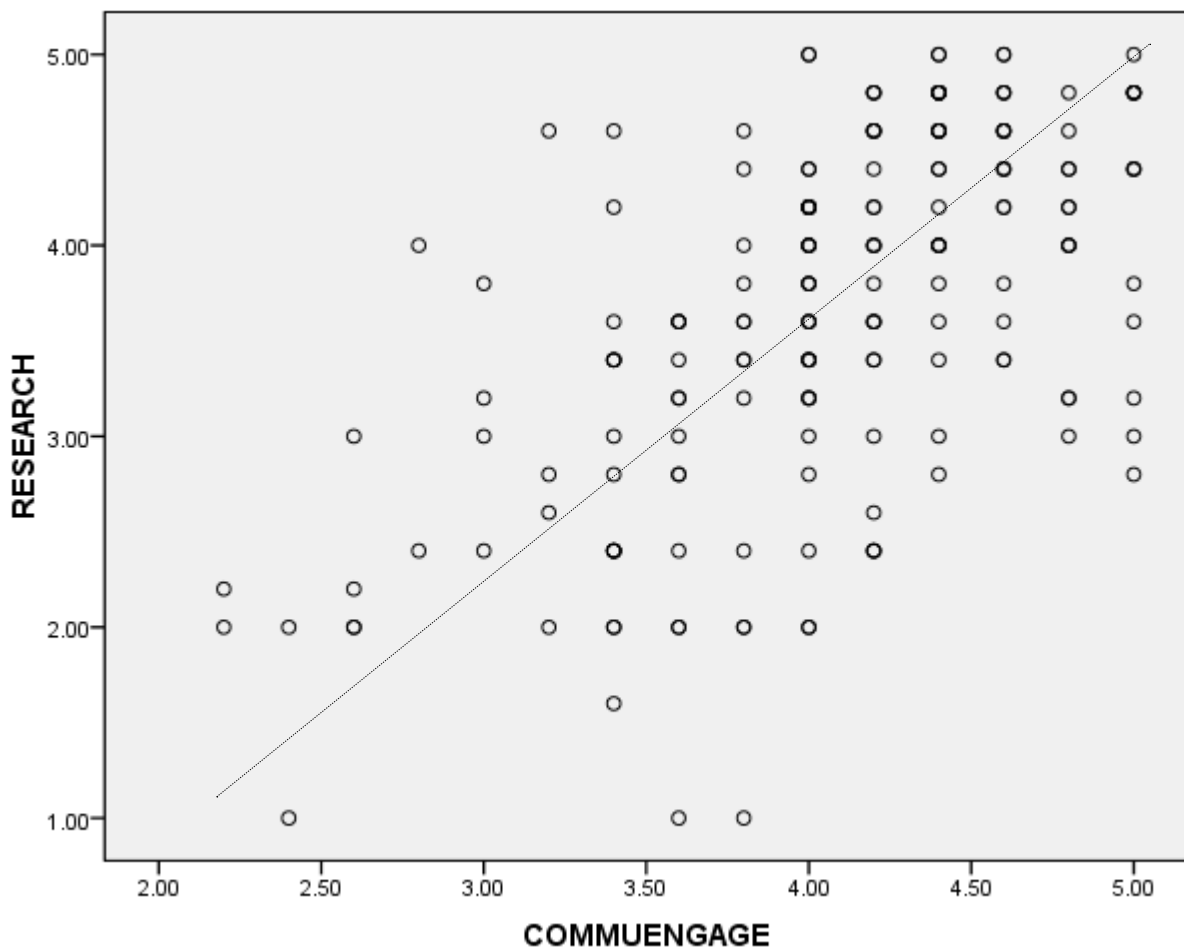
Since a line of best fit could be drawn into the data to generate two congruent parts, there seem to be a positive relationship between community engagement activities and research outcomes of staff at UCU.

Upon fulfilling the two conditions for application of Kendal's taub non-parametric test, below are the correlational results:

Table 15: Correlation

			COMMUENGAGE	TEACHNING	RESEARCH
Kendall's tau_b	COMMUENGAGE	Correlation Coefficient	1.000	.486**	.442**
		Sig. (2-tailed)	.	.000	.000
		N	187	187	187
	TEACHNING	Correlation Coefficient	.486**	1.000	.457**
		Sig. (2-tailed)	.000	.	.000
		N	187	188	188
	RESEARCH	Correlation Coefficient	.442**	.457**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	187	188	188

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

There is a positive significant relationship between community engagement activities and teaching and research outcomes at UCU. As referenced to the data, community engagement and teaching reveals sig value of 0.000 and 0.486 which is over and above r-critical from the relational critical tables; and community engagement activities and research yield a sig. value of 0.000 and r of 0.442 which is also over and above the critical results from the relational critical tables.

We conclude that there is a significant positive relationship between faculty engagement in community outreach activities and teaching and research activities. In other words, the more faculties get involved in community engagement activities, the more there is improvement in teaching and research.

Individual Staff engagement in community service and teaching and research outcomes

Apart from having significant positive relations on faculty teaching and research outcomes, below is data relating to individual staff:

Table 16: Correlations 3

			TEACHNING	RESEARCH	UCUSTAFF
Kendall's tau_b	TEACHNING	Correlation Coefficient	1.000	.457**	.431**
		Sig. (2-tailed)	.	.000	.000
		N	188	188	188
	RESEARCH	Correlation Coefficient	.457**	1.000	.495**
		Sig. (2-tailed)	.000	.	.000
		N	188	188	188
	UCUSTAFF	Correlation Coefficient	.431**	.495**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	188	188	188

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

The data reveals that staff engagement into community activities positively relates to their teaching and research outcomes. There is a positive significant relationship between community engagement activities and staff teaching and research outcomes at UCU. As referenced to the data, community engagement and staff teaching reveals sig value of 0.000 and 0.431 which is over and above r-critical from the relational critical tables; and community engagement activities and staff research yield a sig. value of 0.000 and r of 0.495 which is also over and above the critical results from the relational critical tables.

We conclude that there is a significant positive relationship between staff engagement in community outreach activities and their teaching and research outcomes. In other words, the more staff get involved in community engagement activities, the more there is improvement in their teaching and research. However, community engagement activities have more significant outcomes on the research outcomes of staff.

Discussion of the findings

The findings clearly show that universities recognize CE&O as part of the university functioning albeit differences in emphasis with Makerere being more established in comparison to the newer universities UCU and Nkozi. The Silo Model (Bender, 2008; Mugabi, 2015) was common among all the universities as demonstrated by the fact that all universities undertake community based courses, internship opportunities and field based learning, community engaged research but the relationship between the various forms of engagement vary among the three universities.

Institutionalization of community engagement and outreach seems low among all the universities. Makerere had a response of 36%, Nkozi 7.5% and UCU 3.2%. This does not mean the absence of community engagement activities or the institutionalization of CE&O. It could be the limited appreciation of this institutionalization by the various actors.

The findings have shown that community engagement in research and community engaged service have the potential to improve teaching. The reality is that there is limited integration of community engagement and outreach into teaching in all the universities of the study. This may be due to the poor appreciation around the institutionalization and probably understanding of the role of CE&O in teaching and the actual model that is being used (Bender, 2008; Mugabi, 2015; Kaneene et al., 2014). The findings suggest CE&O activities have improved the research outcomes of staff.

 Scholars have linked the limited integration of CE&O into teaching to lack of policies, and the non-valuing of the same by universities (Boyer, 1990; Boyer, 1996) This study departs from this view in that it is suggesting that community engagement in research, community engaged service

and institutional environment for community engagement cause a small increment in community engagement in teaching. The find rather suggest that what is likely to contribute to improved teaching and research is the increased involvement of faculties in community engagement activities.

5.0 Conclusions and Recommendations

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