

Research Application Summary

Community-engaged pedagogy: Learning experiences of RUFORUM-supported students in field attachments: The case of Gulu and Egerton Universities

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Abstract

Traditionally, Higher Education Institutions (HEIs) have the mandate of undertaking teaching, training and learning; research, innovation and scholarship; and, outreach/community development. Amongst these mandates outreach is often considered autonomous of the teaching function which subsequently receives more preeminence amongst universities. However, beyond considering universities as places where teaching and research occur, they must be recognized as a valuable intellectual resource that directly and intentionally contributes to national issues and priorities. Universities ought to be better known as knowledge hubs and catalysts for future prosperity, wellbeing and sustainable development. This therefore justified the rationale for several universities including Gulu and Egerton Universities devising strategies for incorporating community engagement into the training curricular in order to equip students with practical skills in their fields of study. This document explores the value and experiences garnered by Gulu and Egerton University students in a field attachment undertaking in several locations in Uganda and Kenya under the support of RUFORUM. The study was descriptive and qualitative in nature, providing narrative summary of student experiences in community engagement. The key question investigated was whether community engagement has helped students to develop explicit university graduate attributes. The study revealed that students appreciated community engagement as an effective strategy for imparting real and applicable skills including technical skills, management & planning skills, communication skills, people skills and cognitive skills. Student attachments to communities therefore need to be intensified to amongst several elements enable students harvest the much-needed skills vital in maintaining and securing durable relationships between universities and the farming communities.

Key words: Community engagement, experiential learning, reflection, service learning, skills

Résumé

Les établissements d'enseignement supérieur (EES) ont pour mission d'assurer l'enseignement, la formation et l'apprentissage, la recherche, l'innovation et les bourses, et le développement communautaire. Parmi ces mandats, la vulgarisation est souvent considérée comme autonome par rapport à la fonction d'enseignement qui elle reçoit plus d'importance au niveau des universités. Cependant, au-delà de la considération des universités comme des lieux d'enseignement et de recherche, elles doivent être reconnues comme une ressource intellectuelle précieuse qui contribue directement aux questions et priorités nationales. Les universités devraient être mieux connues en

tant que centres de connaissances et d'assurance de la prospérité, du bien-être et du développement durable. Ainsi, plusieurs universités, dont celles de Gulu et d'Egerton, ont élaboré des stratégies visant à intégrer l'engagement communautaire dans les programmes de formation afin de doter les étudiants de compétences pratiques dans leurs domaines d'étude. Ce document explore la valeur et les expériences acquises par les étudiants des universités de Gulu et d'Egerton dans le cadre de programme de stage professionnelle d'attachement au terrain dans plusieurs régions d'Ouganda et du Kenya, avec le soutien du RUFORUM. L'étude était de nature descriptive et qualitative, fournissant un résumé narratif des expériences des étudiants en matière d'engagement communautaire. La question clé étudiée était de savoir si l'engagement communautaire a aidé les étudiants à développer des attributs explicites de diplômés universitaires. L'étude a révélé que les étudiants perçoivent l'engagement communautaire comme une stratégie efficace pour transmettre des compétences réelles et applicables, notamment des compétences techniques, des compétences de gestion et de planification, des compétences de communication, des compétences relationnelles et des compétences cognitives. L'attachement des étudiants aux communautés doit donc être intensifié afin, entre autres, de permettre aux étudiants de se doter des compétences indispensables au maintien et à l'établissement de relations durables entre les universités et les communautés agricoles.

Mots clés : Engagement communautaire, apprentissage par l'expérience, réflexion, apprentissage par le service, compétences

Background

Globally, Universities and other higher education institutions (HEIs) are increasingly tasked to demonstrate their economic and societal relevance as a diversion from the old fashioned approach where research activities tend to be concentrated around laboratories (Pinheiro, 2015). This is partly catalyzed by the escalating focus on knowledge-based economies as well as to the swelling enrolments in vocational institutions and universities, resulting into concerns about social relevance of curriculum, inclusion of indigenous knowledge, and direct contribution to solve problems in their communities (Molla and Cuthbert, 2017). Further, development partners supporting African agricultural research and education expect HEIs to engage with communities while recognizing and valuing researchers and academic staff for their involvement in civic engagement interventions. Altogether, these pressures have resulted into renewed efforts by HEIs to genuinely engage with communities, conduct socially relevant research and foster social responsibility amongst students, as part of their core mission. Community engagement in this case constitutes a “new paradigm” adopted and embedded in the missions of several HEIs and encompasses a shift from simply teaching and research towards embracing direct relations with communities. This new paradigm can only be achieved through university outreach which has evolved and taken various forms to make university knowledge and expertise available to end users. Apart from outreach, several networks and alliances have also emerged with focus on community-university partnerships. Through these initiatives, diversification of higher education in all its numerous dimensions, forms and contents, as well as an increased awareness of its vital importance for sociocultural and economic development, and for building the future, for which the younger generations will need to be equipped with new skills, knowledge and ideas has ensued. Despite all these avenues there has been limited documentation of the student learning outcomes from the community engagements, and they are highly critical in the success of higher education as an important tool for addressing societal problems. One of the measures for harvesting the learning outcomes is undertaking reflections to enable students become more cognizant of what they learnt (Fink, 2016).

This article focuses on the reflections of students on their learning experiences garnered from the field attachments. This is expected to generate key lessons that can be exploited for the future improvement of the attachment programmes. The objective was to establish the personal value of the field attachments in terms of developing the desired graduate attributes.

Study description

This study takes place in the context of higher education and is descriptive and qualitative, providing narrative summary of student experiences in the community engagement. The data were collected through online interviews with students that participated in the field attachments as well as documentary review of field attachment reports of Gulu and Egerton Universities. Data was analyzed through content analysis to establish emerging themes, and while doing so, the Kolb’s theory of experiential learning (Kolb, 1984) was followed as indicated in Figure 1.

Research application

Degree programme of study by the respondents. Results indicated that majority of the students were undertaking MSc. Agri-enterprises Development programme as compared to the rest of the other programmes (Table 1). This could be attributed to the fact that this degree programme is undertaken at both Gulu and Egerton Universities.

Number of students engaged during field attachments. The study targeted cohort 1 students that undertook field attachments under the support of the TAGDev programme. During cohort 1, 30 students were recruited, including 15 students each at Gulu and Egerton University. However, as indicated in the table below all the 15 students at Gulu University were engaged during the community engagement, while only 5 out of the 15 cohort 1 students at Egerton University were engaged (Table 2). The fewer number of students at Egerton University is attributed to the fact that undergraduate field /Industrial attachment are undertaken after three (3) and four (4) years of study for the respective undergraduate degree programmes. This is however not the case at Gulu University where students are attached to communities during the recess term periods.

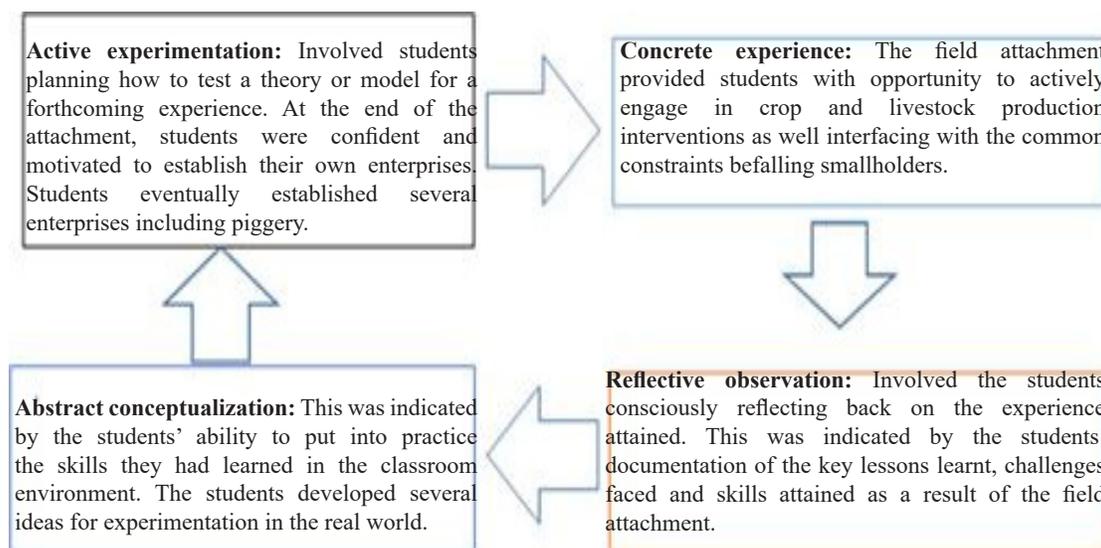


Figure 1. Kolb’s experiential learning cycle as applied to the current study

Table 1. Degree programmes undertaken by students under the attachments

University	Degree programme			Grand total
	BSc. food and agribusiness	BSc. Agri-Entrepreneurship & Communication Management	MSc. Agri-enterprises Development	
Egerton University			5 (25 %)	5 (25 %)
Gulu University	5	5	5 (25 %)	15 (75 %)
Grand total	5 (25 %)	5 (25 %)	10 (50 %)	20

Table 2. Proportion of students engaged under field attachments at Gulu and Egerton Universities

University	Female	Male	Grand total
Egerton University	3 (25 %)	2 (25 %)	5 (25 %)
Gulu University	9 (75 %)	6 (75 %)	15 (75 %)
Grand total	12	8	20

Characterization of the field attachment sites. Before attachment, students are made aware of the different regulations at the industries, firms, and farm families to which they will be attached. This includes briefing them on the safety and risk management, logistical needs, work hours, and personal behaviors amongst others. Students are also availed with relevant documents such as brochures, industrial/field attachment manual as a way of sensitization and aligning the interest of the student to the interest of the identified industry or farm. The matching between industry/ farmers and students is done by faculty staff on the basis of language skills and (if possible) interests of individual students/ the nature of the farm and industry. Since the university has to balance the skills and interests of a great number of students, students are not always attached to a farmer or industry of choice.

Table 3 shows the types of the attachment sites for the students at the two universities. The table indicated that Egerton University students were attached to progressive farms, while Gulu University students were attached to a variety of attachment sites to ensure relevance to the students' degree programme undertaken.

Table 3. Categories of attachment sites for the students

University	Farm family	Progressive farms	Radio stations	Newspaper	Grand total
Egerton University		5			5 (18 %)
Gulu University	10	8	4	1	23 (82 %)
Grand total	10 (36 %)	13 (46 %)	4 (14 %)	1(3%)	28

Mapping skills attained by the students while at the field attachment. Several stakeholders in the higher education space including policy makers, students and universities are highly interested in a successful higher education sector. Students' success models have therefore been developed and encompass the influence of students' habitus on their success, where habitus refers to a matrix of perceptions, appreciations and actions of a particular class of individuals to accomplish a given task (Bourdieu, 1977). The actions in this case constitute the skills needed by the students in order to accomplish a given task. Integrating statistics on these skills which form part of non-academic success factors into the student success models provides insight into the personal attributes of students vital for their success. These skills are generally characterized into people skills; communication skills; technical skills; management & planning skills; and cognitive skills. Results of the analysis indicated that students mainly attained technical skills, management and planning skills, people skills, communication skills and least attained cognitive skills (Fig. 1). This implies that the students mostly attained and exploited the technical skills in various aspects of crop and animal production. This further implies that devoted efforts need to be invested to build the cognitive skills of the students.

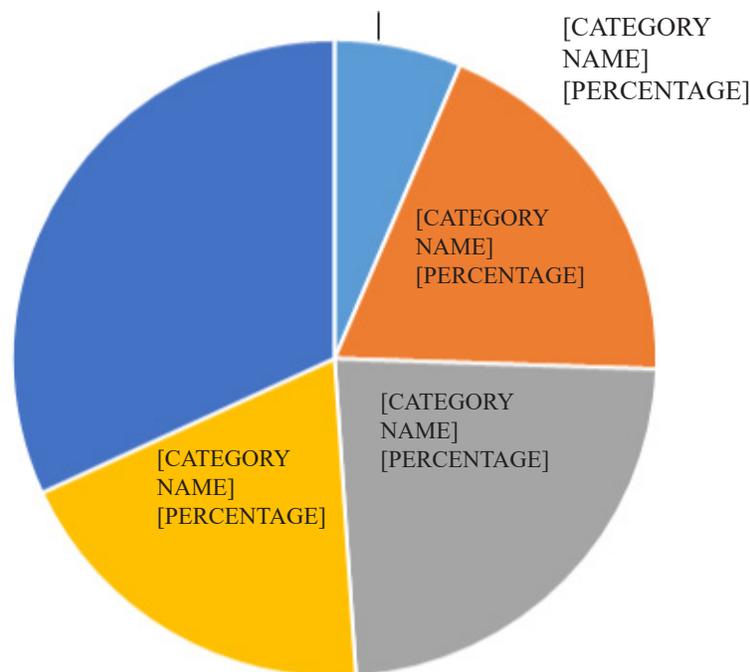


Figure 2. Skill categories obtained and exploited by the students

Technical skills. These skills include artistic skills, physical skills, technical skills, machine operation, and musical skills. During the field attachments, technical skills were the main category highly manifested by the students in aspects such as crop and livestock management practices including apiary management, nursery bed management, piggery management practices, aquaculture, dairy routine management and organic fertilizer production. Specifically, students attached to progressive farms such as Tatton agricultural park attained skills in piggery management which eventually resulted into the establishment of several enterprises including piggery enterprises. The student specifically indicated that;

“I obtained the skill of managing and looking after livestock pigs in particular and also the growing of rice because it was the major crop on the farm”.

Generally, students replicated aspects they learnt from the attachments through establishing their own enterprises resulting into the creation of job opportunities to the local community. Apart from attaining technical skills, students reported improvements in other technical agricultural skills where one stated; *I have improved my technical agricultural skills including manipulation of the local environment for production, use of dams to store water for farming; and, "how to make bee hives using wasted car tyres"*.

These findings imply that in subsequent attachments, other technical skills especially machine operation need to be inculcated into the students though attachment to agricultural mechanization firms.

Management and planning skills. These skills include management, project management, financial management, administration, and business process design. As a result of the field attachment, students attained human resource management skills where students reported to have supervised several casual workers at the attachment sites. Students further attained risk evasion skills in business including enterprise diversification, development of annual production plan calendar, producing as contracted farmer, and applying for tenders to supply produce. As part of uplifting the entrepreneurship potential of the students, they reported the attachment to have enhanced their *entrepreneurial skills in farming including financial management, record keeping, enterprise diversification and land leasing to increase production for contracts and tenders; and, commitment and accountability in business*. These results imply that the students attained skills vital in the entrepreneurship aspects of their studies. However, the administrative skills of the students need to be enhanced as they are expected to be future agricultural leaders spearheading agricultural transformation projects.

People skills. These skills generally include coaching/mentoring (effectively assisting others to develop themselves by means of setting and achieving goals.), people skills (ability to effectively communicate and interact with people within the working environment), caregiving, negotiation, and social media. During the community engagement, people skills of the students were enhanced/built through interaction with the communities which amongst several aspects provided students with the opportunity to concretize their research findings, since by the time of the attachment the Masters' students had already commenced research. The students further obtained skills of interaction with different individuals especially how to handle and motivate employees for quality work. Students further manifested mutual relationship with the farming communities through cross learning during the field attachment sessions where students attained skills on crop, poultry and livestock farming for commercial purposes and marketing avenues such as contract farming and producing for institutional tenders. This was evidenced by several narratives from the students including;

"I have had a symbiotic relationship with the community. I have learned from them especially through the field attachment sessions. I have learned and gained skills on crop, poultry and livestock farming for commercial purposes and marketing avenues such as contract farming and producing for institutional tenders.

The people skills of the students are a very important aspect in their transformation process since they are expected to engage with communities via a two-way communication process.

Communication skills. Embedded under communication skills are facilitation skills, presenting skills, selling skills, verbal skills, and writing skills. These skills especially facilitation skills were

manifested by the students' initiative to train farmers in various crop and livestock production aspects including the utilization of locally available resources for production. As a result of effective facilitation skills by the students, farmers willingly provided information regarding their agricultural practices, a situation which was enabled by the effective presentation skills of students. Students further manifested presentation, verbal and writing skills through enlightening smallholders about the good practices in preparation, maintenance and utilization of farm records. Students specifically indicated that; *"I have seen that farmers are willing to learn from us as students, especially if we go back after our researches and share with them our findings"*. This implied that immersion of students into the communities enabled two-way communication between the students and the farmers, an aspect that is important in ensuring that farmers learn from the students to guarantee uptake of new technologies for subsequent adoption. Students further noted: *"I have learnt that sharing of knowledge is a two way thing. Usually farmers have much experience and we should listen to what they say and give advice where we can."*; *"how to address farmers, how to carry out interview with farmers, what knowledge they have and others"*

These results imply that during the course of study at the university, continuous enhancement of the communication skills is essential as a gateway to enabling students confidently interface with several stakeholders in the agricultural space.

Cognitive skills. These skills include training, computer literacy, IT, maths and planning skills. These skills were manifested by the students through providing them with the opportunity to impart knowledge and new agricultural skills unto the farmers. During the attachment, students had opportunity to train farmers on record keeping as a way of enabling them account for the profitability of each enterprise to eventually focus on the most profitable venture. Farmers had overlooked record keeping due to the high conspicuousness of the losses incurred, but by the end of the attachment they had incorporated proper record keeping into their farm enterprises. Students further undertook extension training to the farm families depending the constraints they had observed during the period of attachment at the farm family. Apart from extension, students further trained farmers in computing the profitability of their businesses resulting into the farmers obtaining insight into the profitability of their respective ventures.

Despite the attainment of the skills as indicated above, students reported several challenges experienced while undertaking community engagement, and amongst these included unfavorable weather conditions for farm activities as prolonged sunshine made them obtain limited exposure. Additionally, instances of collision of time tables of farm attachment days and days for on campus activities were reported. This was largely due to the disrupted semester, a situation which calls for better planning of the activities. The farm families also had limited enterprises as well as limited working tools for practical engagement. This eventually limited student experiences during the engagement. Finally, language barrier affected efficient communication between students and the smallholders.

Discussion

The results of this study exemplify the steps taken by RUFORUM in strengthening the universities' capacity to produce transformative graduates capable of engaging with communities to address the needs of smallholders. This study established that through engaging with the communities, students acquired the five targeted skills categories (Shadowmatch, 2019). Amongst the people skills category communication and interaction skills were most highly manifested as exemplified by the two-way communication that existed between students and the farming communities. This aspect is very important in the transformation journey of the students who are expected to undertake research that addresses the

needs of the smallholders, and as well go back and give back to the communities. Closely related to the personal skills, students also manifested communication skills most notably facilitation and presentation skills. These aspects are very important in enabling students fully appreciate community issues/problems around which they are facilitating and then technically guide the communities in addressing the problem. This also implies that within the university training curricular, technical skills need to be fully embedded (Kalule and Ongeng, 2016), in order to generate practical graduates vital in the transformation of the agricultural sector in Africa. As potential leaders in the agricultural landscape, management, planning and training skills including human resource management and financial management were manifested by the students. This is highly vital because the students emerging out of RUFORUM are expected to be aspirational and inspirational to initiate and implement activities including peer capacity building, enterprise development and general societal value and ethical transmission as part of giving back to communities.

Conclusion

The purpose of this study was to explore the community-engaged learning experiences of Gulu and Egerton University students in a field attachment undertaking in several locations in Uganda and Kenya. The study found that students appreciated community engagement as an effective strategy for imparting real and applicable skills vital for rendering them relevant in addressing community development challenges. The cognitive skills of the students need to be strengthened to build-up their confidence while engaging various stakeholders along the agricultural value chain. Further, appropriate scheduling of the field attachments is needed to enable students and the farming communities harvest the much-needed skills vital in maintaining and securing durable relationships between universities and the farming communities.

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