



How University Education in Uganda Can Be Improved To Prepare Economically Productive Graduates

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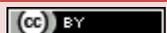
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Abstract

Every country invests in university education to develop and empower its citizens with the high-level capacity needed to practically work and transform their surrounding environmental resources into productive employment after graduation. The high and growing rate of graduate unemployment in Uganda implies, however, that most of the university education graduates are not practical enough to turn their local environmental resources into gainful work and effective contribution to national development; it shows a glaring conflict between the internal and external efficiency in university education in Uganda. It is argued in this paper that the failure of most graduates to be practical would not have occurred had the management of Uganda's university education made effective use of the activity-based informal training when preparing their products (graduates). Consequently, the paper examines the level at which this type of training is used in Uganda's university education with a view of proposing a way forward. It is based on a study conducted in 2013 using a representative sample of universities selected from central Uganda. The findings indicate that the level of interactive learning is very low involving only the use of activities selected and controlled by lecturers. Students' self-directed and proactive learning using environment-based activities is negligible in almost all the selected universities, to the detriment of the students' future roles and responsibilities at the place of work. Based on these findings, the paper recommends promotion of activity-based mode of learning as a way of ensuring that universities in Uganda prepare more productive graduates, hence reconciling the conflict between internal and external efficiency of university education in Uganda.

Keywords: Economics of education, Informal training, University education.



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1. Introduction

The genesis of university education in Uganda is traced to the inception of Makerere University in 1922 (Lejeun, 2005). This education was akin to the British university education (Kasenene, 2003); (Kasozi, 2003). It was entrenched as a highly classroom-based education that slowly promoted a colonial mentality of despising African civilization (Nabayego, 2011). The mentality led to a deliberate, yet imperceptible, abandonment of informal training activities which, according to Gorski and Covert (2004), would have facilitated hands-on learning, thereby preparing learners to become practical enough to do similar activities that would have improved their productivity and employability after graduation.

Indeed Smith (2008) observed that with informal training activities, a need, problem or task is first identified from the surrounding environment either by the trainers or by the learners themselves. The learners then begin to deal with the identified problem, need, or task by conducting the activities necessary to solve it. The need, problem or task could be physical, social, economic, political, recreational, or work-related (Loima, 2006); (Göran-Folkestad, 2006). As they carry out the activities germane to addressing the problem, learners develop the practical competencies needed to perform analogous activities should a similar problem resurface later in life. The problem can in fact rematerialize in future in form of a specialized job, implying that those attending to it after training are actually employed and engaged in a job, and certainly, doing it in a productive manner (Fahrni, 2006). Accordingly, using the activity-based approach helps to prepare productive university graduates if adopted.

Unfortunately, instead of using the above-described training and learning activities, the university education introduced in Uganda exposes students to largely classroom-based learning activities. Such an approach disempowers many Ugandan graduates in various ways, notwithstanding the fact that it only enables some of the graduates to perform an array of white-collar jobs in the public sector, especially after Uganda's political independence up to date (Kasozi, 2003). At the time of independence, most of the jobs graduates could do were in public administration, teaching, health work, and other jobs in revered companies and organizations (Kasenene, 2003). Students were trained in a way that detached them from their local environments so much that they even started perceiving informal activity-based training as backward training meant for the formally uneducated (Nabayego, 2011). Most of the students graduated having acquired little or no knowledge and skills required to enable them to practically engage in productive and entrepreneurial activities based on their surrounding environments. Even Ugandans out there started perceiving university graduates as people who could only work in government and respectable companies. Graduates who attempted to do jobs outside the formal employment sector were perceived as failures that had wasted time at university. This is because the knowledge and skills they applied had been acquired not so much from university education, but informally through home-based training.

Such type of graduates continued to be produced until the Uganda Government realized that university education so detached students from the realities of Uganda that it could not enable most learners to develop hands-on knowledge and skills required to participate productively in the societal development process (Kamuhangire, 2011), (Kawere, 2010); (Ministry of Education and Sports, 2003); (Museveni, 1995). Most of Uganda's university education students could not easily create or find jobs after graduation (Government White Paper, 1992). Only less than 30 percent of the graduates could find jobs. Graduate unemployment started rising as more and more university education institutions produced more graduates. Consequently, the government instituted the Education Policy Review Commission (EPRC) to review Uganda's education policy, including the university education policy, and make recommendations for promoting practical education. (Education Policy Review Commission, 1989) reached various recommendations one of which was to promote activity-based training rooted in students' local environments. The Commission reiterated that adopting this recommendation would enable Uganda's education generally and university education in particular, to develop practical and hands-on knowledge and skills needed by students to become productively employed after graduation. Government adopted the recommendation and started to redesign the national curricula and syllabi with intent to promote this kind of education (Bitamazire, 2005).

Graduate unemployment has, however, continued to rise, standing at over 80 percent today (Fagil, 2012). This implies that majority of the graduates are not productively employed, which casts doubt at the use of activity-based informal training in the management of university education in Uganda. Furthermore, it clearly shows the glaring conflict between internal and external efficiency of university education in Uganda ((Itaaga, 2013); (Natarajan, 1993); Hillman and Jenkner (2004). That much as the universities are churning out products, which implies internal efficiency, such products cannot be consumed by society (external inefficiency) The main objective of this study was therefore to analyze the level at which activity-based informal training is used in Uganda's university education to prepare students to be productive after graduation. The paper also proposes a useful way forward based on the findings obtained from the analysis. The objective was met by reviewing literature for purposes of identifying the measures of the level and also by testing a null hypothesis (*H₀*) using the methodology presented after the review of literature presented in the next section.

2. Literature Review

Gorski and Covert (2004) described activity-based training as a form of informal education that can enhance formal education, particularly university education by enabling instructors to engage learners in various out-of-classroom activities as a means of developing knowledge, skills and abilities that the learners need in order to carry out similar activities later in life and on their own. These scholars pointed out that the activities that can be used range over a wide spectrum but only those relevant to developing a particular skill or ability are simultaneously identified and selected, taught, and corrective measures taken whenever learners make errors. These scholars noted further that educators in these institutions supplement university education with activity-based informal training by involving students in community, workplace, and group-based activities. This, according to Smith (1994), was achieved by merging academic studies with out-of-classroom work and social activities, especially through contact between the institutions and surrounding communities. To note of these observations is that they covered the use of activity-based informal training in university education institutions of American, Asian and European countries.

While the interest of [Gorski and Covert \(2004\)](#) was in how Asian countries, particularly Israel, made use of informal education training to improve their education generally and university education in particular; that of [Smith \(1994\)](#) was in analyzing Buckingham's local community education and how it had improved through conversation and action. Certainly, Uganda's case for university education was not covered.

In another study, [Gorski \(2004\)](#) found out that in European educational institutions, particularly in university education institutions, students had been made to study academics in the morning and to socialize and work in the afternoon hours, all in cooperation and collaboration with members of the surrounding communities. This resulted into producing graduates possessing the very knowledge and skills required to solve the needs and problems encountered in daily life and surrounding environment, better than it was before. [Gorski \(2004\)](#) substantiated his observation by noting that on completion, students found it easy to apply their skills and work in service occupations, manufacturing, agriculture, commerce and trade. What is noted about [Gorski \(2004\)](#) observations is that despite being well illustrated in terms of how the adoption of the activity-based informal training can enhance university education to produce productive graduates, they do not spell out any specific training activities. Moreover, the observations were made based on a study conducted in Europe and the United States of America but not in Uganda.

[Porat \(1985\)](#) and [Boal \(1992\)](#) identified and described a number of examples of the activities that activity-based training can contribute to university education so as to develop the desired knowledge and skills. They considered activities like: painting, drawing, games, sports, making arts and crafts, and engaging in puzzles and quizzes. Other identified training activities included: singing, dancing, storytelling, writing, citing poems, playing piano, playing a guitar, typing, designing and programming in information and communication technology, computing, drumming, playing xylophones, sweeping a compound, preparing food, mulching, assembling or repairing machines, flower gardening, cultivation, animal rearing, driving, flying airplanes, military training activities, bricklaying and concrete practice, surveying, plumbing, carpentry and joinery, and a lot of other learning activities ([Fahrni, 2006](#); [Smith, 2006;2008](#)); ([Göran-Folkestad, 2006](#)); ([Loima, 2006](#)); ([Hazler, 1998](#)); ([Bentley, 1998](#)); ([Boud and Miller, 1997](#)); ([Gibson and Clarke, 1995](#)); ([Caffarella, 1994](#)); ([Brown, 1993](#)). [Boal \(1992\)](#) in particular argued that if learners carry out such activities, it is likely that they will develop the knowledge and skills needed to help them conduct similar activities on their own, especially after their graduation from the training. It however, remains unclear whether such activities are used to enhance and make formal education in Uganda develop productive graduates; hence the need to find out empirically.

[Mambili \(2004\)](#) made similar observations, adding that activity-based informal training continues to play an effective role in meeting the learning needs of students who would otherwise have missed out. Activity-based informal training is the alternative mode of education which is crucial for increasing access and bridging gaps between classroom-based learning and the environment out there. Informal activity-based training, continued [Mambili \(2004\)](#), develops even the innovativeness and inventiveness of learners because it practically involves learners carrying out learning tasks or exercises with their own hands, legs or any other relevant part of the body (like the waist in the case of dancing or vocal codes in the case of singing). He further observed that such training prepares learners for real life work activities met in future because once an individual learns how to do something; it is very unlikely that they will forget to do the same thing across different circumstances, time and space. [Mambili \(2004\)](#) concluded by stressing that once activity-based training is made use of, it can supplement and complement education, particularly university education to make it more relevant to producing practically productive graduates. Unfortunately, added [Mambili \(2004\)](#), most of the education systems in Africa do not make use of these activities. [Mambili \(2004\)](#), however, did not address the case of university education in Uganda. His concern was about analyzing the position of non-formal education in Kenya's Kakamega district in the face of declared free universal primary education; and how students could access quality education through this form of education. The gap about the case in Uganda remained, which indicates the need for this study to fill it.

In an attempt to establish how informal education operates in practice, [Smith \(2008\)](#) explored a range of settings in which activity-based informal training can be carried out. Noting that it is very easy for most people to dismiss the notion that schools, colleges and university institutions of learning can offer informal education simply because many school systems ignore it, [Smith \(2008\)](#) maintained that these institutions are amongst the settings where the activity-based informal training can take place. He argued that since learners spend most of the time in these formal institutions, their involvement in informal activity-based training could be encouraged in such settings in a bid to nurture practical knowledge and skills.

The following were the ways that [Smith \(2008\)](#) suggested to help adopt activity-based training in formal education generally and university education in particular: working with students to set up study groups as though they were homework groups; encouraging and supporting the development of groups around enthusiasms and interests such as music and sound systems, environmental issues, and cross-community reconciliation; developing alternative practical educational provision for students experiencing difficulties in mainline classrooms; working with individuals around the personal difficulties they are experiencing in their lives (this could be to do with family relationships and friendships, schooling, health or around thinking about their future). Other ways [Smith \(2008\)](#) suggested include: opening up avenues for students to practically engage in different life philosophies and ways of life such as debating clubs or leadership systems like school councils and youth forums; assisting with the development of an inclusive education (this may be through activities that encourage students to accept others, and to make practical sense of their schools' internal and surrounding environments); developing practical programs whose activities link schools (such as university educational institutions) with local communities and homes (this can be achieved by developing the activity programs inviting respectable people and parents to talk to students and encourage their competency development in matters of discipline, hard work, morals, social competence and empathy); working with community groups to design and run programs using school resources; and working with school staff to develop new social and educational opportunities.

Although this paper adopts the logic of [Smith \(2008\)](#) arguments and even though this scholar pointed out a number of ways through which activity-based informal training is used in formal education, his approach was

general. Moreover, he was interested in establishing how informal education works out in practice but not in how it can enhance university education in order to produce productive graduates in Uganda. As to whether the ways he pointed out are also used to enhance this education or not, remains therefore a matter to be empirically established in the case of Uganda; hence the justification of this paper.

In general, literature indicates that using activity-based informal training facilitates university education to produce productive graduates, hence enhancing the education system's external efficiency. It is however, silent about the case of university education in Uganda, thereby calling for the need to address it.

3. Methodology

This study adopted a descriptive cross-sectional survey design. This design was adopted because according to Sekaran (2001), it triangulates both quantitative and qualitative approaches, thereby permitting collection and analysis of both first hand qualitative and quantitative data collected at one in time in the year 2013. It therefore allowed administration of both interviews and questionnaires to a large number of respondents selected from different categories that made up the study population. It also permitted the use of descriptive and inferential techniques of data analysis (Amin, 2005).

The population consisted of all stakeholders who participate in university education as lecturers, students and employers of those who graduate from this education. The size of this population was 498,648 (Uganda Bureau of Statistics, 2009). The expected size of the sample was determined using Krejcie and Morgan (1970) Sample Determination Table cited in Amin (2005). This table indicates that the minimum sample size required to represent this population sample should be 384 respondents. This implies that any sample size below this number was not statistically representative, but any sample size greater than 384 was acceptable since it increased the statistical representativeness (Kothari, 2005). Consequently, the actual sample consisted of 390 respondents, including 95 lecturers, 215 students and 80 employers. This sample was selected from nine out of the eleven universities operating in central Uganda. Central Uganda was preferred because the largest number of universities in Uganda is located in this region. Therefore, not only was a region a good representative of all other regions in the country but the universities located therein were also easily accessible. The universities were selected using simple random sampling as each of them had an equal chance of being selected. Those selected included Makerere University, Ndejje University, Uganda Martyrs University Nkozi, Uganda Christian University Mukono, Kampala International University, Kampala University, Muteesa I Royal University, Cavendish University, and Victoria University.

University lecturers were selected because of the role they play in managing university education as its planners and implementers, and therefore people responsible for preparing students who subsequently graduate from university education. Their views were therefore considered representative of what was happening in university education as far as the use of activity-based informal training was concerned. University students were selected because of their role as learners exposed to university education that prepares them to become graduates. Employers were selected because of the role they play as evaluators and further trainers of the graduates produced from university education. They included officers in charge of human resource management in companies and businesses operating in both the formal and informal sectors. They were selected to provide data regarding how far graduates demonstrated having been exposed to activity-based informal training.

All the respondents were selected using judgmental random sampling, which according to Amin (2005) is used to select respondents at random but prudently so that only those judged to be in a position to provide required data are selected. Selection was carried out more or less like purposive sampling because it was based on judgment that creates bias in selection; but it was different in the sense that any respondent in a particular category could be selected (randomness) as long as the respondent qualified on the considered criterion. In short, judgmental random sampling was used because there was need to exercise judgment in selecting respondents at random. The following were the criteria:

Data was collected by the researchers and five field assistants with the aid of an introductory letter obtained from the Dean, School of Education at Makerere University. The data was collected using a self administered semi-structured questionnaire designed according to the main themes of the study. The questionnaire was administered to students. More data was collected using interview schedules designed and administered to employers and university lecturers. Questionnaires and interview schedules were used because all targeted respondents were literate enough to read the questions and write answers based on their opinions. All the administered instruments were first tested for validity. Questionnaires were also first tested for reliability using a pilot study involving 10 respondents not included in the study. The computed validity indices and reliability coefficients are summarized in Table 1.

Table-1. Validity Indices and Reliability coefficient of Research Instruments

| Research Instrument | (CVI) | α |
|---|-------|----------|
| Interview Schedule for University Lecturers | 0.875 | |
| Questionnaire for Students | 0.809 | 0.875 |
| Interview Schedule for Formal Employers | 0.870 | |

Table 1 indicates that the Content Validity index (CVI) of each research instrument and the Cronbach Alpha coefficient (α) were greater than 0.7, which is the minimum acceptable threshold (Amin, 2005). The instruments were therefore highly valid.

The collected data was analyzed using both qualitative and quantitative techniques. Qualitative techniques were applied to analyze qualitative data collected in form of open-ended interview and questionnaire responses. It involved transcribing and describing given responses using the thematic approach. The developed themes were then categorized according to the relevant variables of the study. The quantitative techniques used included: descriptive analysis, factor analysis, the Analysis Of Variance (ANOVA) and Chi Square techniques of the Statistical Package for Social Scientists (SPSS) (Sekaran, 2001). Specifically, the descriptive technique was used to generate frequency

distributions regarding the developed themes. The generated frequencies were transferred to the Excel program to generate a bar graph showing the reported activities. This was carried out to improve the quality of data presentation. Based on explanations given by Kothari (2005), factor analysis was used to determine the reliable and independent indicators of respondents' perception of how the activity-based training was used to manage university education. The Chi Square technique was used to test the hypothesis because it assumed independence of variables (Amin, 2005).

ANOVA was used to establish at once how the different categories of selected respondents perceived the level of using the activity-based informal education training in the management of university education in Uganda (Amin, 2005); (Kothari, 2005). This was necessary to determine whether the perception of using this training differed across the respondent categories.

4. Findings

The objective of this study was to examine the level at which activity-based informal training was used to prepare students who graduate from university education in Uganda. The objective was met by asking respondents to use a Likert scale of responses running from Strongly Disagree (SD = 1) through Disagree (D = 2), Neither Agree nor Disagree (NN =3), Agree (A = 4) to Strongly Agree (SA = 5) and indicate whether the various training activities were used when preparing students pursuing university education in Uganda. Descriptive statistics obtained from the analysis of the responses appear in Table 2.

Table-2. Respondents' Description of the Level of Using Activity-based Informal Training in University Education in Uganda

| Informal Education activity-based practices | Descriptions (Responses) | % of respondents per description (N = 390) | Mean | Standard Deviation |
|---|--------------------------|--|------|--------------------|
| Teachers identifying tasks; selecting activities that learners perform so as to solve the tasks in the presence of teachers | SD | 11.1 | 4.82 | 0.093 |
| | D | 8.6 | | |
| | NN | 3.0 | | |
| | A | 13.7 | | |
| | SA | 63.7 | | |
| | Total | 100.0 | | |
| Teachers identifying learning tasks from the local environment | SD | 50.9 | 1.36 | .0311 |
| | D | 21.0 | | |
| | NN | 16.5 | | |
| | A | 9.1 | | |
| | SA | 2.6 | | |
| | Total | 100.0 | | |
| Teachers using hands-on activities to help students develop skills | SD | 19.3 | 1.99 | .591 |
| | D | 61.7 | | |
| | NN | 9.5 | | |
| | A | 6.5 | | |
| | SA | 3.0 | | |
| | Total | 100.0 | | |
| Students sent out to surrounding community to personally participate in work relevant to their learning needs | SD | 25.4 | 1.85 | .611 |
| | D | 53.1 | | |
| | NN | 10.9 | | |
| | A | 8.3 | | |
| | SA | 2.3 | | |
| | Total | 100.0 | | |
| Teachers guiding the learners' performance of the activities | SD | 23.8 | 4.74 | .825 |
| | D | 9.4 | | |
| | NN | 3.6 | | |
| | A | 27.8 | | |
| | SA | 56.8 | | |
| | Total | 100.0 | | |
| Students allowed to freely ask or contribute ideas on how learning activities should be performed | SD | 82.4 | 1.40 | .065 |
| | D | 6.8 | | |
| | NN | 4.8 | | |
| | A | 5.2 | | |
| | SA | 0.8 | | |
| | Total | 100.0 | | |
| Educators coming up with activities that encourage growth of students' creative participation in a proactively democratic manner | SD | 71.3 | 1.33 | .752 |
| | D | 16.5 | | |
| | NN | 5.9 | | |
| | A | 3.4 | | |
| | SA | 2.9 | | |
| | Total | 100.0 | | |
| The learning experiences organized in a way that examples, aids and activities that enhance the learning process are vivid, concrete and familiar to students | SD | 65.6 | 1.28 | .531 |
| | D | 12.9 | | |
| | NN | 8.3 | | |
| | A | 10.9 | | |
| | SA | 2.3 | | |
| | Total | 100.0 | | |

| Informal Education activity-based practices | Descriptions (Responses) | % of respondents per description (N = 390) | Mean | Standard Deviation |
|---|--------------------------|--|------|--------------------|
| The duration of learning sessions depending on the learning needs | SD | 70.4 | | |
| | D | 28.4 | | |
| | NN | 13.7 | 1.13 | .812 |
| | A | 9.4 | | |
| | SA | 3.6 | | |
| | Total | 100.0 | | |

Findings in Table 2, reveal that respondents who merely and strongly disagreed showed that the activity-based informal training was not used in Uganda’s university education to prepare students. They therefore revealed a zero level of applying this training when preparing university students. Those who neither agreed nor disagreed pointed to uncertainty about this level. Respondents who agreed indicated that the training was applied but at a low level. Respondents who strongly agreed implied that the training was used at a high level.

Findings in Table 2 further indicate that on average most of the respondents generally disagreed to the use of most training activities (most of the means are close to ‘1’). The findings thus, point to a zero level of using most of the informal training activities in Uganda’s university education. The standard deviations were very small, suggesting that individual respondents in all the selected categories did not differ much from the average description. The only exceptions were two activities. One of these activities involved lecturers’ identification of tasks and selection of activities that students had to perform so as to solve the tasks (mean = 4.82). The other task involved lecturers guiding students’ performance of the activities (mean = 4.74). The magnitudes of the mean values indicate that respondents strongly agreed to these activities, which suggests a high level of their use. The fact that the mean values were not exactly equal to ‘5’ implies however, that some of the respondents thought otherwise. Therefore, ANOVA analysis was conducted to establish how the selected categories of respondents differed in the perception of using the activities when training students. Findings are presented in Table 3.

Table-3. Respondents’ Description of the Level of using Activity-based Informal Training in University Education in Uganda

| Statistics | Respondents’ Mean Description of the level of use | | | | df | F | p |
|---------------|---|-------------------------------|--------------------|-----------------|----|----------|-----|
| | University Lecturers (n = 95) | University students (n = 215) | Employers (n = 80) | Total (N = 390) | | | |
| Grand Average | 3.90 | 1.06 | 1.38 | 1.13 | 2 | 12.664** | .00 |

**Significant at the 0.01 level of significance

Note: Disagree (1), Somewhat Agree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5).

Findings in Table 3, reveal that the mean response values corresponding to the different categories of respondents were close to ‘1’, except that corresponding to university lecturers (mean = 3.90), which was close to ‘2’. These findings imply that university lecturers merely agreed, thereby showing a low level of using the informal training activities in Uganda’s university education. However, students and employers alluded to a zero level of using the activities. This is why the F-value (F = 12.664, Sig. = .00 < .01) indicates a significant difference in the average perception of the use of the activities. There was thus need to establish which category of respondents was realistic. This involved testing *H₀* below.

H₀: University education in Uganda does not utilize the informal activity-based training to prepare students to be productive after graduation

H₀ was tested using the Chi Square because the way it was stated suggested independence of variables. The activity-based training dimensions used in the analysis were generated from items in Table 2 using factor analysis. Findings obtained from the testing appear in Table 4.

Table-4. Testing the use of informal activity-based training in Uganda’s University Education

| Activity-based training dimensions | χ^2_{obs} | χ^2_{cv} | df | p |
|------------------------------------|----------------|---------------|----|-----|
| Activity selection | 16.319 | 14.067 | 2 | .05 |
| Students’ proactive participation | 12.397 | 14.067 | 2 | .05 |
| Use of familiar local aids | 13.055 | 14.067 | 2 | .05 |
| Overall χ^2 | 14.334 | 14.067 | 2 | .05 |

Abbreviations: χ^2_{obs} –Observed Chi Square, χ^2_{cv} Critical Chi Square, P-Level of significance

Findings in Table 4 indicate that at the p = .05 level of significance, the overall observed Chi Square value was greater than the critical Chi Square value ($\chi^2_{obs} = 14.334 > \chi^2_{cv} = 14.067$). Therefore, the findings were statistically significant. *H₀* was hence rejected in favor of its alternative. This suggested that university education in Uganda uses the informal training activities to prepare students to be productive after graduation. However, a comparison of the observed and critical Chi square values reveals that their magnitudes were close to each other. This implies that the use of the training activities was weakly significant. Therefore, lecturers who reported a low level of using the training activities were generally more realistic. In specific terms however, a comparison of the observed Chi Square values corresponding to the individual activity-based training dimensions in Table 4 reveals that lecturers’ view was only realistic in respect of activity selection ($\chi^2_{obs} = 16.319 > \chi^2_{cv} = 14.067$). The Chi Square values corresponding to students’ proactive participation and use of familiar local aids were insignificant, suggesting that these activity-based training dimensions were indeed hardly used in Uganda’s formal education to prepare students to be productive after graduation. The fact that activity selection was applied by lecturers called for the need to establish the specific

training activities that were being selected to prepare students. Lecturers and students were hence asked to mention the activities that the dons selected to help students develop practical knowledge, skills and abilities. Results obtained from the analysis of the responses are shown [Figure 1](#).

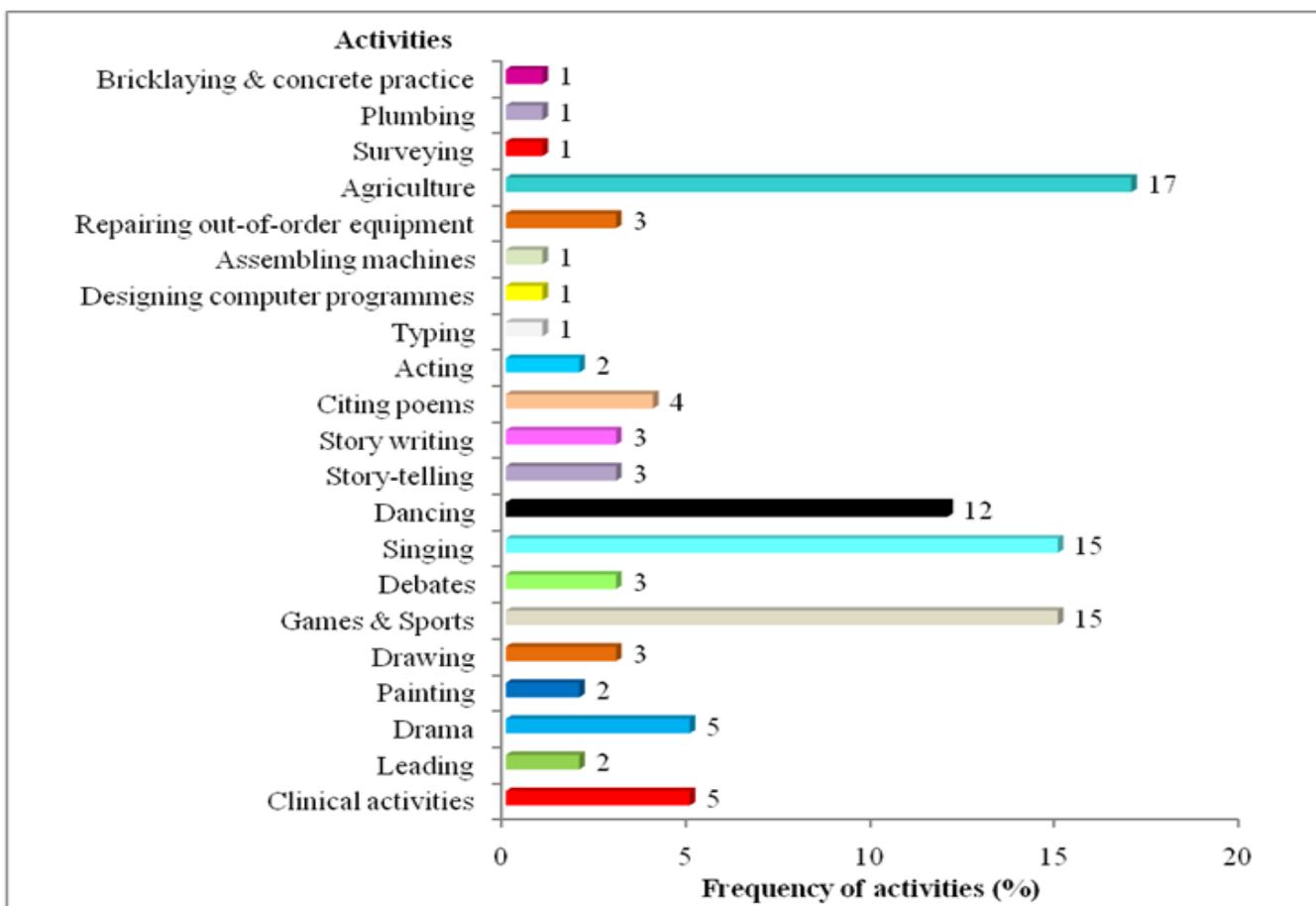


Figure-1. Activities used in management of formal education in Central Uganda, as reported by Formal and Informal Trainers and Trainees

[Figure 1](#) summarizes the informal training activities used in to prepare students who graduate from Uganda's university education. The magnitudes of percentages indicate that most of the activities were used by 1% to 4% of the trainers. Even the most used activities, including agriculture (17%), singing (15%), games and sports (15%), and dancing (12%) were also used by relatively small proportions. These findings thus, substantiate the low level of using the informal activity-based training reported by the educators ([Table 2](#)).

5. Discussion

The objective of this study was to analyze the level at which activity-based informal training was used in Uganda's university education when preparing students to be productive after graduation. Findings in [Table 4](#) led to the rejection of the hypothesis tested to meet this objective. The rejection suggested that this training was utilized. However, the response pattern in [Table 2](#) and [Table 3](#) and the magnitudes of the Chi Square values in [Table 4](#) showed that the level of using it varied according to particular training activities. The level of using the activities in which lecturers took a leading role was high ([Table 3](#)). These activities involved lecturers identifying tasks, selecting activities that learners had to perform so as to solve the tasks (moreover in the presence of lecturers); and guiding learners' performance of the activities. The findings thus supported the observations made by [Gorski and Covert \(2004\)](#) that most of the activity-based practices applied in formal education are those used by instructors.

However, as [Gorski and Covert \(2004\)](#) argued, proper preparation of students to become productive does not have to be dominated by lecturers. Learners have to be given an opportunity to engage in the identification, selection and conduct of learning activities. In fact, [Gorski \(2004\)](#) observed that providing such a chance prepares learners to become more productive because it enables them to learn through hands-on experience and involvement. Unfortunately, most of the activities that would have provided this opportunity were those whose level of use was zero ([Table 2](#)).

In particular, [Table 2](#) indicates that respondents disagreed that students were allowed to freely ask or contribute ideas on how learning activities should be performed. They also disagreed that educators came up with activities that encouraged the growth of students' creative participation in a proactively democratic manner, just as they disapproved of lecturers' use of hands-on activities to help students develop practical skills. These findings were further corroborated by those presented in [Table 4](#), which revealed a zero level of students' proactive participation in the selected activities and a zero level of utilizing familiar local aids while carrying out the activities. This implies that all students' self-directed training activities were hardly used in Uganda's university education. The results therefore support the observations made by [Mambili \(2004\)](#) and [Smith \(2008\)](#). While [Mambili \(2004\)](#) observed that most of the formal education systems (including university systems) in Africa do not make use of the activity-based training, [Smith \(2008\)](#) generalized the observation by noting that it is very easy for most people to dismiss the notion that schools and colleges can offer activity-based informal training simply because many school systems ignore it.

In fact, findings in [Figure 1](#) show that even the lecturers who applied this training were very few and concentrated on very few activities which included mainly games and sports, singing, dancing, and agricultural activities. These activities suggest that Uganda's university education is not totally devoid of informal activity-based

training. They therefore suggest that there are a few students who become productive mainly in agriculture, music, dancing and sports after graduation. It is therefore not surprising that Uganda's social scene is today witnessing a growing number of skilled musicians, dancers and sports persons. It is also not uncommon to find a few people engaged in modern agriculture.

Other activities shown in Figure 1 include: plumbing, surveying, bricklaying and concrete practice, repairing out-of-order machines/automobiles, assembling machines, designing computer programmes, typing, reciting poems, story writing, storytelling, acting, debating, drawing, painting, and leading (or leadership). A close look at these activities reveals strong similarity with those identified by Boal (1992), Fahrni (2006), Loima (2006), Göran-Folkestad (2006) and Smith (2008). As Boal (1992) argued, learners' involvement in such activities makes them develop practical skills and abilities that help them conduct similar activities in form of productive employment after graduation. However, the frequency distribution indicates that very learners benefited educationally from these activities.

6. Conclusion

The negligible level at which the informal activity-based training is applied in university education in Uganda, especially in the respect of using students' self-directed and proactive participation and use of practical examples, explains why most of the graduates are not productive and therefore the persistent conflict between internal and external efficiency of university education in the country. There is thus need to improve on the level at which this training is applied, especially in respect of the emphasis put on the use of students self-directed activity-based training.

7. Recommendations

- a) The management of universities in Uganda should encourage curricula enrichment of their current courses of study by ensuring that adequate informal training activities (environment-based learning activities) are part and parcel of what students should do in order to develop practical knowledge, skills, and abilities they need so as to be productive after graduation.
- b) University academic staff members should encourage students to practically carry out the informal training activities integrated in their respective program syllabi as a means of self-directed and proactive learning.
- c) The National Council for Higher Education should consider setting the use of the activity-based training approach as a standard that all universities in Uganda should observe as a measure of the quality of education they provide to enrolled students.

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