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Suggestions for Improving Ugandan Higher Education to Produce Productive Graduates

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Abstract. Every country invests in formal education to develop and empower its citizens with the 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 suggests however, that most of the formal education graduates are not practical enough to turn their local environmental resources into gainful work and effective contribution to national development. 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 formal education made effective use of the activity-based informal training when preparing students.

Keywords: Relevance; Curriculum reform; Graduate unemployment.

1 Introduction

The genesis of formal education in Uganda is traced to the early Christian missionaries who arrived in the country in the last quarter of the 19th Century (Nabayego, 2011). This education was a photocopy of the British system of education (Kasenene, 2003). It was entrenched as a highly classroom-based system of education that slowly but surely 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 and prepared learners to become practical enough to do similar activities after graduation, thereby being productively employed.

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 solve to the identified problem, need, or task by conducting the activities necessary to address it. The need, problem or task could be physical, social, economic, political, recreational, or work-related (Loima, 2006; Göran-Folkestad, 2006). Carrying out the activities as a means of addressing it then prepares learners to perform similar activities should it occur later in life. The problem could even occur in form of a specialized job, implying doing it after training makes those involved productively engaged and employed (Fahrni, 2006).

Unfortunately, instead of using the above-described training and learning activities, the introduced formal education exposed students to classroom-based learning activities. Classroom activities disempowered Ugandan students in many ways notwithstanding the fact that they enabled them to learn array of jobs that included catechist, teaching, clerical, nursing and administrative jobs which Christian missionaries and the colonial government wanted native Ugandans to do after training (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 from the introduced formal education having acquired little or no knowledge and skills required to enable them to engage in productive activities based on their surrounding environments. Much of the acquired knowledge and skills enabled them to do activities pertaining to jobs which the colonial government and Christian missionaries wanted to be carried out in public administration, teaching, health work, and other colonial missions and church-based ministries (Kasenene, 2003).

Such kind of training continued until the Uganda Government realized that it 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 development process (Kamuhangire, 2011; Kawere, 2010; Ministry of Education and Sports, 2003; Museveni, 1995). Most of Uganda's formal education students could not easily create or find jobs after graduation (Government White Paper, 1992). Less than 30 percent of the graduates could find jobs. Graduate unemployment started rising as more and more colleges, institutes, tertiary institutions and universities produced more graduates. Consequently, the Uganda government instituted the Education Policy Review Commission (EPRC) to review Uganda's formal education policy and make recommendations for promoting practical education. EPRC (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 formal education 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 promote practical and environment-based lesson planning, teaching and student evaluation (Bitamazire, 2005).

However, graduate unemployment has 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 formal education in Uganda. The main objective of this paper is therefore to analyse the level at which this training is used in Uganda's formal education to prepare students to be productive after graduation. The paper also proposes a useful way forward based on the findings 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 (Ho) 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 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 also 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. Gorski and Covert (2004) observed that in many new institutions of education in Asia, Europe and the United States, most of which are boarding schools, educators have started applying activity-based training after discovering that formal education in these countries was insufficient. These scholars noted further that educators in these education systems supplement formal 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 schools and surrounding communities. To note of these observations is that they covered the use of activity-based informal training in formal education systems 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 formal education; 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 was not covered.

In another study, Gorski (2004) found out that in European schools, 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's (2004) observations is that despite being well illustrated in terms of how the adoption of the activity-based informal training can enhance formal 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. This paper is therefore needed to cover the case for Uganda.

Porat (1985) and Boal (1992) identified and described a number of examples of the activities that the activity-based training can contribute to formal education so as to develop the desired knowledge and skills. These include: painting, drawing, games, sports, making arts and crafts, and engaging in puzzles and quizzes. Other identified training activities include: 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 (Smith, 2006, 2008; Fahrni, 2006; Göran-Folkestad, 2006; Loima, 2006; Hazler, 1998; Bentley, 1998; Boud & Miller, 1997; Gibson & Clarke, 1995; Caffarella, 1994; Brown, 1993). Boal (1992) 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. It however, remains unclear whether these activities are used to enhance and make formal education in Uganda develop productive graduates; hence the need to find out empirically.

Indeed Porat's (1985) concern was on cases in Britain and Ireland. Bentley (1998) concentrated on learning beyond the classroom, which he called an education for a changing world. Boal (1992) focused on games for actors and non-actors in a learning experience yet Boud and Miller (1997) were analyzing how to live and work with experience. Brown (1993) focused on learning that takes places in group-work while Caffarella (1994) was interested in planning

programs for adult learners as well as a practical guide for educators, trainers and staff developers. Further, Fordham, Holland and Millikan (1995) were dealing with adult literacy yet Gibson and Clarke (1995) focused on developing a project-based group work manual for facilitators of young learners and youth workers. Hazler (1998) was interested in helping in the development of advanced strategies for enhancing school relationships.

Mambili (2004) made similar observations, adding that activity-based informal training continues to play an effective role in meeting the basic learning needs of Universal Primary Education (UPE) children who would otherwise have missed out on basic education. They are the alternative education training that are crucial for increasing access as well as bridging gaps in classroom-based learning process. 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 waste 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 formal 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. Mumbali (2004), however, did not address the case for Uganda. His concern was about analysing 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 and colleges 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, p.1) suggested to help achieve this: 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 suggested by Smith (2008) 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 programmes whose activities link schools with local communities and homes (this can be achieved by developing the activity programmes involving respectable people and parents coming to school to talk to the 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 programmes using school resources; and working with school staff to develop new social and educational opportunities.

Although this paper adopts the logic of Smith's (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 formal 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.

According to Bentley (1998), learners' involvement in informal activity-based training is made possible through instructional processes such as conversational guidance or constructive dialogue in a democratic manner. The instructor communicates the activity that he/she wants the learner to know as well as how he/she wants the learner to try it out (Hazler, 1998); allowing the learner to freely express what he or she thinks about the activity and how he/she thinks it can be carried out so as to be accomplished effectively and efficiently (Boud & Miller, 1997). In this way, the student learns in a more creative and proactive way, interpreting actively the relevance and applicability of the activities being learned, thereby developing knowledge and skills appropriate to doing similar activities in future and across different circumstances (Fordham, Holland & Millikan, 1995). Gibson and Clarke (1995) observed that the activity-based training helps learners to resolve existing conflicts between

themselves as individual and as a group so as to fit in the society properly and productively. They also help learners to find employment in adult society by using the developed knowledge and skills. Since this is not largely the case with graduates in Uganda, understanding the level at which such training is used in formal education becomes necessary.

In general, literature indicates that using activity-based informal training facilitates formal education to produce productive graduates. The literature is however, silent about the case in Uganda, thereby calling for the need to address it.

3 Methodology

This paper is developed from a study designed as a descriptive cross-sectional survey. This design was adopted because according to Sekaran (2000), it triangulates both quantitative and qualitative approaches, thereby permitting collection and analysis of both quantitative and qualitative first hand data. It therefore allowed administration of both interviews and questionnaires to a large number of respondents selected from different sections of the study population. It also permitted the use of descriptive and inferential techniques of data analysis (Amin, 2005).

This population consisted of all stakeholders who participate in formal and informal education as stakeholders. These included educators from primary to university level; students at all levels, teacher trainers, employers, and home-based trainers and trainees. The size of this population was 9,881,436 (Uganda Bureau of Statistics, 2009). The expected size of the sample was computed based on the population above. The formula for maximum standard error of estimates (Kothari, 2005) was used and it revealed that the minimum sample size was supposed to be 323 respondents. This implies that any sample size below this number was not statistically representative. However, any sample size greater than 323 was acceptable since it increased the statistical representativeness (Kothari, 2005). Consequently, the actual sample consisted of 993 respondents

Educators/trainers were selected because of the role they play in managing education as its planners and implementers. Formal educators included instructors in university, post-primary and primary levels of formal education; for it is through these levels that graduates are prepared and produced in formal education. The views of the educators at all levels were therefore considered representative of what was happening in this formal education as far as the use of activity-based informal training was concerned. University and post-primary students were selected because of their role as formal education learners from

primary school to university, where they finally become graduates. It should be noted that primary school pupils were deliberately left out because they had not reached a stage at which they could appreciate whether or not activity-based informal training activities had been used to make them productive.

Employers were selected because of the role they play as evaluators and further trainers of the graduates produced by the formal education system. They included officers in charge of human resource management in companies and businesses operating in both the formal and informal sectors. This was intended to collect data on how activity-based training had been applied to trainees under both formal and informal employers. Parents and out-of-school youths were selected because they were considered a good source of data on home-based informal training.

All respondents were selected using judgmental random sampling, which according to Seigle (2004) 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. It was implemented 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 is used when there is need to exercise judgment in selecting respondents at random. The following were the criteria:

- a) Occupation in which the respondent was engaged. This was considered for purposes of ensuring that selected respondents were people doing different trades and therefore training or being trained to develop different knowledge and skills.
- b) Period spent in the occupation and in Uganda was also considered in the selection. The longer this period was, the more reliable was the data provided by a respondent was taken to be.
- c) Name of the employing or training institution/enterprise was considered for each selected formal or informal trainer and for each formal or informal trainee, respectively. This was considered for purposes of ensuring that the study covered as many fields of competency development as possible.
- d) For formal trainees/students and formal educators, the offered course or subject combination and teaching subjects were considered, respectively. This was intended to ensure that the study covered as many types of knowledge and skills developed through formal education as possible.
- e) For the heads of households and out-of-school youths, gender, location, and level of formal education were considered during selection. This was intended to collect data from both home-based male and female trainers/trainees who had attained some level of formal education from both rural and urban settings. The idea was to select as many home-based

trainers/trainees who were in a position to provide data on both informal and formal education.

Data was collected by the researcher and five filed assistant with the aid of a self-introductory letter obtained from the Dean, School of Education in Makerere University. It was collected using not only a semi-structured questionnaire designed according to the main themes of the study and administered to the selected formal students and interview guides used to conduct informal interviews with the selected informal employers, trainees, heads of households and out-of-school youths. It was also collected using interview guides that guided interviews with informal employers, trainees, heads of households and out-of-school youths. In addition, interview schedules were designed and administered to formal educators and formal employers. 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 as summarized in Table 1.

Table 1: Validity Indices and Reliability coefficient of Research Instruments

Research Instrument	(CVI)	α
Interview Schedule for Formal Educators	0.875	_
Questionnaire for Students	0.809	0.875
Interview Schedule for Formal Employers/Trainers	0.870	
Interview Guide for Informal Employers/Trainers	0.857	
Interview Guide for Informal Trainees	0.857	
Interview Guide for Heads of Households	0.867	
Interview Guide for Out-of-School Youths	0.813	

Table 1 indicates that the Content Validity index (CVI) of each research instrument and the Cronbach Alpha coefficient (α) were greater than 0.5. 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 informal interview and open-ended questionnaire-responses. Content analysis was the specific technique applied to analyze this data. It involved transcribing and describing given responses using the thematic approach. The interpretative technique was particularly used to develop themes out of the open-ended responses given by the respondents. 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 themes developed as explained above. Factor analysis was used to generate and determine the reliable and independent indicators (Kothari, 2005) of respondents' perception of how the problem-solving training were being used to manage formal education. The Chi Square technique was used to test the hypothesis as it assumed independence of variables (Amin, 2005). ANOVA was used to establish at once how the different categories of informal and formal trainers and trainees reported the level of using the problem-solving informal education training in the management of formal education in Uganda (Amin, 2005; Kothari, 2005). This was necessary to determine whether the level of using the training differed at the different levels of formal education management or not.

4 Findings

The objective of this paper was to examine the level at which the informal activity-based training was used in formal education in Uganda. The objective was met by asking respondents to use a Likert scale of responses running from disagree to strongly agree and indicate whether various training activities were used in Uganda's formal education. Descriptive statistics obtained from the analysis of the responses given appear in Table 2.

Table 2: Description of use of informal activity-based training in formal education

Informal training activities	Mean	SD
Teachers identifying tasks; selecting activities that learners perform		
so as to solve the tasks in the presence of teachers	4.82	0.093
Teachers identifying learning tasks from the local environment	1.36	0.031
Teachers using hands-on activities to help students develop skills	1.19	0.591
Students sent out to surrounding community to personally participate		
in work relevant to their learning needs	1.15	0.611
Teachers guiding the learners' performance of the activities	4.74	0.825
Students allowed to freely ask or contribute ideas on how learning		
activities should be performed	1.40	0.065
Educators coming up with activities that encourage growth of		
students' creative participation in a proactively democratic manner	1.33	0.752
The learning experiences organized in a way that examples, aids and		
activities that enhance the learning process are vivid, concrete and		
familiar to students	1.28	0.531
The duration of learning sessions depending on the learning needs	1.13	0.812

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

From Table 2, respondents who disagreed showed that informal activity-based training was not used in Uganda's formal education to prepare students until they graduate. They therefore revealed a zero level of applying this training when preparing formal education students. Respondents who somewhat agreed indicated that the training was applied but at a low level. Those who neither agreed nor disagreed pointed to uncertainty about this level. Respondents who agreed implied that the training was used but at a moderate level while those who strongly agreed implied that the training was used at a high level.

On the basis of the above interpretation, the findings in Table 2 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' or '2'). The findings therefore, point to a zero level of using most of the informal training activities in formal education in Uganda. Moreover, the standard deviations were very small, suggesting that individual respondents in all the selected categories did not differ much from this average description of using these practices. The only exceptions were two activities and included teachers identifying tasks and selecting activities that learners had to perform so as to solve the tasks in the presence of teachers (mean = 4.82), and teachers guiding the learners' performance of the activities (mean = 4.74). The magnitudes of the corresponding mean values suggest a high level of using these activities. However, the fact that the mean values were not exactly equal to '5' implies that some of the respondents thought otherwise. Therefore, further analysis was conducted to establish how respondents at the different levels of formal education differed in their description of the use of the activities when training students. The analysis was conducted using ANOVA (Table 3).

Table 3: Grand Average Scores on use of Problem-solving Informal Training

Description of the level of use of Problem-solving Informal Education Training										
University	University	Secondary	Secondary	Primary	Formal	Informal	Informal	Total	F**	р
Educators	students	teachers	students	teachers	employers/	employers/	trainees	(N =		
(n = 95)	(n = 149)	(n = 98)	(n = 124)	(n =	Trainers (n	Trainers	(n =	881)		
				137)	= 80)	(n = 58)	140)			
1.9	1.06	1.64	1.08	1.19	1.38	1.32	1	1.13	12	.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).

From Table 3, the mean response values corresponding to the different categories of respondents were close to '1', except those corresponding to university educators (mean = 1.90) and post-primary educators (mean = 1.64) both of which were close to '2'. These findings imply of all the categories of respondents who participated in the study, only university and post-primary educators somewhat agreed, thereby showing a low level of using the informal training activities in Uganda's formal education. Other categories, including all

the students and trainees pointed to a zero level of using the activities. This is why the F-value (F = 12.664, Sig. = .000 < .01) indicates a significant difference in the average description of the use of the practices. There was therefore need to establish which category of respondents revealed a realistic level. This involved testing Ho below.

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

Ho 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: Use of informal activity-based training in formal education

Activity-based	training	$\chi^2_{\rm obs}$	$\chi^2_{\rm cv}$	df	p
dimensions					
Activity selection		16.319	14.067	7	.05
Students' proactive partie	cipation	12.397	14.067	7	.05
Use of familiar local aids	3	13.055	14.067	7	.05
Overall χ^2		14.334	14.067	7	.05

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

Table 4 indicates that at the .05 level of significance, the overall observed Chi Square value was less than the critical Chi Square value ($\chi^2_{\rm obs}$ = 14.334 > $\chi^2_{\rm cv}$ = 14.067). Therefore, the findings were statistically significant. *Ho* was hence rejected in favour of its alternative. This suggested that formal 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, educators who reported a low level of using of 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 the educators' view was only realistic in respect of activity selection ($\chi^2_{\rm obs} = 16.319 > \chi^2_{\rm cv} = 14.067$). 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 activity selection was applied by educators called for the need to establish the specific training activities that were being selected to help prepare students. This need was addressed by asking formal educators and students to mention the activities that teachers encouraged students to do so as to develop practical knowledge, skills and abilities. The results obtained showed that most of the activities were used by 1% to 4% of the trainers. Even the most used activities, including farming (17%), singing (15%), dancing (12%) and games and sports (12%), were also used by relatively small proportions of trainers. These findings thus, substantiate the low level of using the informal activity-based training reported by the educators (Table 2).

5 Discussion and Conclusion

The main objective of this paper was to analyse the level at which the informal activity-based training was used in Uganda's formal 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 Table 4 showed that the level of using it varied according to particular training activities. The level of using the activities in which teachers took a leading role was high (Table 3). These activities involved teachers identifying tasks, selecting activities that learners had to perform so as to solve the tasks (moreover in the presence of teachers); 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 teachers. 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) all levels of formal education (Table 3).

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 teachers' use of hands-on activities to help students develop practical skills. These findings were further corroborated by those presented in Table 4; for these findings revealed a zero level of students' proactive participation in the selected activities as well as 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 formal 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 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, the findings show that even the educators who applied this training in Uganda's formal education were very few and concentrated on very few activities which included mainly games and sports, singing, dancing, and farming activities. These activities are consistent with those pointed out by Porat (1985, 1989). These activities suggest that Uganda's formal education is not totally devoid of informal activity-based training. They therefore suggest that there are a few students who become productive in mainly in agriculture, music, dancing and sports after graduating through the country's formal education. 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 reported include: carpentry and joinery, plumbing, surveying, bricklaying and concrete practice, driving, repairing out-of-order machines/automobiles, assembling machines, designing computer programmes, typing, reciting poems, story writing, storytelling, playing musical instruments, debates and quizzes, handcrafts, 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.

The negligible level at which the informal activity-based training is applied in formal education in Central 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. There is therefore need to improve the level at which this training is applied while putting more emphasis on the use of students self-directed activity-based training. The National Curriculum Development Centre should enrich the formal education curriculum with informal training activities that students at all

levels of formal education should do in a free-range and hands-on learning manner, and in so doing, develop practical knowledge, skills and abilities they need to be productive after graduation. Educators at all levels of Uganda's formal education should encourage students to practically learn all the informal training activities adopted in their respective syllabi using more of self-directed and proactive learning based on learning aids identified from local environment.

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