ISSN: 1816-6822
Volume 10 Number 1
February 2018

Makerere Journal of

Higher Education

The International Journal of Theory, Policy and Practice

East African School of Higher Education Studies and Development
College of Education & External Studies
Makerere University

Makerere Journal of Higher Education

Aims and Scope

Description: Biannually, the East African School of Higher Education Studies and Development, Makerere University College of Education, produces *Makerere Journal of Higher Education* (MAJOHE) (ISSN: 1816-6822). The goal of the Journal is to provide a visible outlet for definitive articles that discuss the theory, practice and policies relating to the role, development, management and improvement of higher education from an international viewpoint. Therefore, the editor invites contributions that link relevant theory and research evidence to the policy and practice of higher education. Though a highly diverse range of contributions will be considered, the Journal gives special preference to conceptual and empirical writing that is relevant to the understanding, promotion and constructive criticism of the reform agenda in African higher education institutions and national systems and integrates pertinent international developments, debates and challenges. This is because the Journal's management board acknowledges that the questions, issues, theories and policies pertaining to the development of contemporary higher education institutions and systems require in-depth study and comparison at an international level. Preference is also given to contributions that discuss new initiatives at regional and continental levels (including the work of national and multilateral higher education organisations and associations). The Journal's editorial policy prefers submissions that synthesise the significance of different higher education policy alternatives and geographical experiences in explaining the phenomenon at hand. On top of rigorous examination of the 'local dimension' of the issues that they expound, therefore, contributions mirror conversance with relevant international perspectives and experiences, thereby situating the debate in a broad discourse that facilitates holistic understanding of the issues at hand. Edited from Makerere University, Uganda, the Journal draws on the expertise of a diverse editorial board, as well as a wide range of reviewers in and beyond Africa. The Journal is committed to the publication of both experienced and early career researchers so its editorial policy puts overriding attention on helping contributors to reach the level of quality that is deemed fit for publication through ensuring relevant, fair and penetrating reviews as well as timely relay of feedback to contributors.

Frequency and subscription: *MAJOHE* is published biannually in February and August. Annual Institutional Subscription Rates 2018: USD 200 for East Africa; USD 250 for the rest of Africa; USD 300 for all other countries. Annual Personal Subscription Rates 2018: USD 50 for East Africa; USD 60 for the rest of Africa; USD 70 for all other countries. The prices include postage. Subscribers should note that these rates may be revised without prior notice.

Indexing and OnlineFirst Publication. MAJOHE is indexed in African Journals Online (AJOL) at http://www.ajol.info/index.php/majohe/index. The Journal is also indexed in the Uganda Digital

Scholarly Library (UDSL) (http://dspace.mak.ac.ug/), Research Management Coordination System (RMACS) (http://rmacs.mak.ac.ug/) and African Higher Education Research Online (AHERO) (ahero.uwc.ac.za). Upon acceptance, contributions will be published online (in AJOL, UDSL, RMACS and AHERO) ahead of the print version of the Journal. This will reduce the publication lifecycle and ensure that readers access the latest findings on higher education.

Editorial office, orders, advertising and enquiries: contact the East African School of Higher Education Studies and Development (P. O. Box 7062 Kampala, Uganda; Tel.: +256782464691; e-mail: judessempebwa@cees.mak.ac.ug). Readers should note that, although any advertising material included in the Journal is expected to conform to ethical advertisement standards, inclusion of adverts in *MAJOHE* does not constitute endorsement of the materials being advertised by the Journal, the East African School of Higher Education Studies and Development and Makerere University.

Notes for Contributors

Policies: Submission of a manuscript to MAJOHE implies that the work being described, in whole or substantial part, is not concurrently being considered for publication elsewhere; those contributing the manuscripts accept the editor's prerogative to effect changes to the manuscripts as may be deemed fit for purposes of quality assurance; and in case of two or more authors, all the co-authors have endorsed the submission of the manuscript. Contributors must not use sexist language (e.g. the notion that man is a generic term that includes women). United Kingdom English spellings and conventions of usage are preferred. The information and views expressed in MAJOHE are those of the authors and do not necessarily reflect those of the Journal, its staff, the East African School of Higher Education Studies and Development, the College of Education and External Studies, Makerere University or their partners. Articles are published on the assumption that they are original and have not been published elsewhere. In the unlikely event that plagiarised materials are published, therefore, those submitting them, rather than the Journal, are to be held to account. All the articles published in MAJOHE are covered by copyright and may not be reproduced without the prior permission of the copyright owner. All the manuscripts submitted are subjected to careful screening by the Editor and, if found to be generally suitable for publication, subjected to blind review by at least two peers. Manuscripts that are found to be generally unsuitable for publication in MAJOHE will not be submitted for peer review. However, their contributors will be requested to make the required revisions and resubmit.

Stylistic requirements: Contributors to MAJOHE should adhere to the following requirements: Length: 4000 to 6000 words. Format: Times New Roman; size 12 and 1.5 spacing. Structure: Even though articles may have other subsections as may be thought necessary by the author(s), the following should be conspicuous: Introduction; Methodology; Findings; Discussion; Conclusions; and Recommendations. Tables, diagrams, figures and pictures should be in their appropriate places in the body of the article. Abstract: Articles must be accompanied with an abstract of not more than 150 words. Keywords: After the abstract, the author(s) should outline the keywords in the article, on whose basis it can be classified. Referencing: All citations must be referenced and contributors should adhere to the sixth edition of the APA format. DOIs should be included in the references where they are available. Contributors of accepted manuscripts will receive detailed guidelines for preparing accepted papers for publication. Contributors may note that, although reviews may be accepted, priority will be given to primary papers that are original and discuss themes or cases that are relevant at national and international levels.

Submission and enquiries: Manuscripts should be e-mailed to the editor at majohe@cees.mak.ac.ug as word attachments. Enquiries, including questions on the *appropriateness* of manuscripts intended for submission, should also be sent to the same address. However, feedback on published articles should be addressed directly to the corresponding authors.

Makerere Journal of Higher Education

Volume 10 Number 1 February 2018

Makerere Journal of Higher Education is indexed in African Journals Online (AJOL) at: http://www.ajol.info/index.php/majohe/index

East African School of
Higher Education Studies & Development

Makerere Journal of **Higher Education**
ISSN: 1816-6822; 10 (1) (2018) 1-2

http://ajol.info/majohe

Editorial

This issue of Makerere Journal of Higher Education (MAJOHE) presents five papers touching on four themes: university-community partnerships (UCPs), research in higher education, open and distance learning (ODL), and technical vocational education and training (TVET).

Under UCP, Edopu et al. report the findings of a study that delved into the implementation and impact of the UCP approach to the delivery of the Bachelor of Industrial and Fine Arts program at Makerere University's Margaret Trowel School of Industrial and Fine Arts. They report that delivering the BIFA program following the UCP approach has helped the school to close critical gaps in studio support for its students, thereby enhancing the quality and relevance of teaching and learning. However, it has not resulted into service learning, contrary to the widely held view that UCPs result into symbiotic gains for higher education institutions and their communities. Therefore, the authors endorse—as part of the panacea to the resource constraints inherent to the massification of higher education in Africa—the UCP approach albeit with recommendations for more attention to service learning.

Under research, Adeosun reports the findings of a study that investigated efforts to expand teacher-trainees' capacity to identify educational issues and generate research ideas from them using participatory research approaches. The study demonstrates that close links with schools spurred teacher trainees' ability to construct research ideas, changed their perception of research, and improved their research skills.

Under ODL, Mutambo et al. report on the effectiveness of *satellite* study centres in supporting the ODL program at Makerere University. Starting with review of related literature, these authors probe the extent to which the centres' service delivery is satisfactory. Their findings show that although the centres have an important role to play in supporting the ODL programme, they are constrained by an indistinct status and mandate; gaps in the University's policies and understanding of ODL; inadequate funding; communication gaps between the centres and their coordinating unit at the University's main campus; inadequacy of study, ICT and human resources; and unconducive location and opening hours of the centres.

The last two papers draw on the findings of two primary studies to discuss innovative ways of promoting the development of TVET. In the first of the two papers, Ayonmike argues that industries and governments have important contributions to make towards the development of TVET while, in the second, Oviawe demonstrates a case for public-private partnerships in the development of this field of higher education. It is noted that these are in concurrence with Edopu et al., notably in their recommendation that higher education institutions and systems increase their amenability to the input of their *external* stakeholders.

It is noted too that, carefully considered, each of the five papers addresses aspects of innovations that are being implemented to address challenges in higher education today. We are glad that MAJOHE, now in its tenth volume, continues to give such papers expression. It is our hope that readers will find the papers relevant to the refinement of the innovations for the improved efficiency and effectiveness of higher education institutions and systems—the very goal of MAJOHE and indeed the East African School of Higher Education Studies and Development.

As usual, publication of this issue of the journal benefited from the input of our anonymous reviewers and advisors and we thank them for their selfless contribution.

Editor

East African School of
Higher Education Studies & Development

Makerere Journal of **Higher Education**
ISSN: 1816-6822; 10 (1) (2018) 3 – 21
DOI: http://dx.doi.org/10.4314/majohe.v10i1.1

http://ajol.info/majohe

Enhancing the Quality and Relevance of Teaching and Learning through University Community Partnerships: the Case of Art at Makerere University

Ritah N. Edopu [1,*], J. B. Mpoza [2], Edith Namutebi [3]

[1] College of Engineering, Design, Art and Technology, Makerere University [*Corresponding author: rnedopu@gmail.com], [2] University of Swaziland, [3] Kampala University

Abstract. A key gap in writing on the University Community Partnership (UCP) approach to higher education delivery relates to the fact that, in general, the fruitfulness of the approach is taken for granted. Furthermore, the usefulness of UCPs is tacitly expected to be two-way with universities *helping* their communities to address some of their challenges and the experience of partnership helping the universities to enhance their *relevance*. However, this paper reports the findings of a study that presents a different picture. Investigating the implementation and impact of the UCP approach to the delivery of the Bachelor of Industrial and Fine Arts program at Makerere University's Margaret Trowel School of Industrial and Fine Arts (MTSIFA), the study found that contrary to the widely held view that the approach to higher education delivery results into universities *helping* their communities to deal with some of their challenges, at the MTSIFA, the approach has not resulted into service learning. However, it has helped the school to close critical gaps in studio support for its students, thereby enhancing the quality and relevance of teaching and learning. Therefore, using this case, the study argues that UCPs present a panacea to some of the resources constraints inherent to massification that many HEIs in Africa are grappling with.

Keywords: UCP; Art education; Curriculum Innovation.

1 Introduction

In many parts of the world, university-community partnerships (UCPs) are gaining momentum as strategies for enhancing positive change (CCPH, 2007; Rubin, 2007). Although they could take many forms, UCPs are characterized by active involvement with issues, problems and constituencies outside the university in ways that foster the intellectual life of the university. They are beneficial in a way that they take the university to the community and the

community to the university. UCPs result into improvements in the relevance of universities' teaching, research and community engagement programs (Buys & Bursnall, 2007) as well as in the rating of the universities' quality. According to Benson, Harkavy & Puckett (2000), UCP is a particularly useful approach for improving scholarship and communities and for forging democratic, mutually beneficial, and mutually respectful university-community relationships.

As more UCPs have developed, a small but rapidly growing body of literature about the partnerships has emerged (Rubin, 2007). Nevertheless, review of this literature shows that majority of the authors on the subject focus on the promise rather than outcomes of the UCP approach to higher education delivery. A key gap in writing on the subject relates to the fact that in general, the fruitfulness of the approach is taken for granted despite the fact that putting UCPs into practice can present significant challenges, leading to disparities between expectations and experiences (cf. El Ansari, Phillips & Zwi, 2002; Vidal et al., 2002). Furthermore, the usefulness of UCPs is tacitly expected to be twofold: universities *helping* their communities to address some of their challenges and the experience of partnership helping the universities to enhance the relevance of their teaching and research programs to their communities' needs.

This paper reports the findings of a recent study that presents a different picture. Investigating the implementation and impact of the UCP approach to the delivery of the Bachelor of Industrial and Fine Arts (BIFA) program at Makerere University's Margaret Trowel School of Industrial and Fine Arts (MTSIFA), the study found that contrary to the widely held view that the UCP approach to higher education delivery results into universities *helping* their communities to deal with some of their challenges, at the MTSIFA, the approach has not resulted into significant benefits for the community. However, it has helped the school to close critical gaps in studio support for its students, thereby enhancing the quality of teaching and learning. Therefore, using this case, the study argues that UCPs present a panacea to some of the resources constraints inherent to massification that many HEIs on the continent are grappling with.

2 Makerere University and the UCP approach at MTSIFA

Makerere University, Uganda's flagship higher education institution (Lejeune, 1999), was established in 1922 as a technical college, by the British colonial administration in East Africa. The main aims of establishing the institution were to: 1) provide leavers of secondary education with higher education—so that they do not seek it outside Africa (where they could copy political independence activism), and 2) produce manpower for positions in the colonial administration (Ssekamwa, 1997; Tiberondwa, 1998). Sicherman (2006) aptly divides the

development of the University from 1922 to 2000 into five periods: 1) Formative years (1922 – 1949); Glory years (1950 – 1971); Crisis years (1971 – 1986); and Reform years (1987 – 1999).

The formative years were characterized by the conception and development of Makerere College as a regional institution of higher education serving the east and central African region. During the period, as well as in the 1950s, the college developed in line with the strategy of the British colonial administration in the region, which revolved around the idea of producing a class of gentry that would support the colonial administration without challenging its mandate (Tiberondwa, 1998). Guidance in the University's development was provided by various education commissions (e.g. the Phelps Stokes Commission [1925], Binns Commission [1951] and de Bunsen Education Committee [1953]). The college was structurally and culturally modelled along Oxbridge and, indeed, became an affiliate of the University of London in the early 1940s because the goal was to produce a class of "Europeanized Africans" that would not only aspire to European ways of life but also promote the colonialist agenda in the region (Ssekamwa, 1999). The universities that played a fundamental role in shaping the growth and development of Makerere did not at the time appreciate UCP as a vital component that would be required to shape instructional culture.

Like similar institutions (e.g. Ibadan [1948]), therefore, Makerere had little consideration for its African location (cf. Todaro, 1998; Mamdani, 2007; Mazrui, 1994). All of its students were sponsored by the government and courses of study were offered in a few areas, primarily targeted at meeting the human resource needs in the government's service. The college tended to be elitist—analogously removed from its immediate community as an ivory tower—and produced a class of 'Europeanised Africans', who shunned the traditional means of livelihood, since they perceived themselves as being superior to their less educated (Ssekamwa, 1997; Tiberondwa, 1998). In view of the superiority tendencies, the educated blacks who at the time were the administrators of the university did not feel inclined to adopting any strategies that would make them work closer to the African communities because they aspired to be superior. Notwithstanding, Makerere University developed into an institution of notable repute and was famed as a centre of international excellence that was analogously referred to as the 'Harvard of Africa' during its glory years (see, for example, Altbach, 2005; Nakanyike & Nansozi, 2003; Sicherman, 2006; Eisemon and Salmi, 1993).

However, the period 1971-1986 was a time of great retrogression. At Makerere, resources to support teaching and learning were acutely constrained and academic staff fled to other countries. Collaboration with other institutions of learning was cut off and international bodies such as the Commonwealth and UNESCO excommunicated Uganda. Since these bodies contributed significant funds to facilitate teaching and research these essential university activities deteriorated. The University was grossly underfunded—due to the country's

economic downturn and subsequent adoption of IMF/World Bank structural adjustment programs that *discouraged* government spending on higher education (Mamdani, 2007). According to Mayanja (1996), and other scholars like Kassam (1999); Mamdani (2007); Sicherman (2007) and Nakanyike & Nansozi (2000), this affected the University's potential for quality assurance.

At the MTSIFA, this turbulent period created scarcity of imported art materials and artists were forced to improvise using locally available materials. Interestingly, this engagement with local resources allowed for closer contact between MTSIFA and her community. The need for the students to relate with the community in order to learn from and share experiences during the turbulent times was clearer and evidence of this is seen through the paintings and other art pieces made at the school during that time.

During the late 1980s, the university came up with the private sponsorship scheme from 1987-1996 through which it hoped to give more opportunities to students to enrol in the university as well as provide avenues through which money would be generated to sustain the university (Mayanja, 1996). This improved the University's funding situation, thereby enabling refurbishment of some physical structures and upward revision of staffs' emoluments. It also narrowed the university education demand-supply gap in the country from 22% eligible applicants in 1986 to 46% in 2005 while accelerating curriculum innovation, as departments devised study programs for the *new* (fee-paying) students (Altbach, 2005; Byaruhanga, 2002; Mayanja, 1996). Since the mid-1990s, therefore, the expansion of student intake at the University has been credited for contributing to the reformation of the University (see, for example, Court, 1999; Kassam, 1999).

However, the expansion in student enrolment resulted in several constraints on the University's capacity to deliver quality higher education because expansion in support resources did not keep pace with expansion in the number of students admitted. Indeed, the years succeeding the reform years (2000 to 2006) were characterised by several dilemmas (see, for example, Mamdani, 2007). Besides, dysfunctional curricula practices resulted into production of ill-prepared graduates that lacked the competences required to deal with the challenges of the contemporary employment world.

Indeed, scholars like Mayanja (2002) report soaring unemployment rates among the university's graduates. Ironically, there were also reports that upcoming industries and cottages in the country could not find the skills they required. This concomitance of unemployed graduates and unfilled vacancies in the economy pointed to incongruence between the skills that the university provided and contemporary labour market needs. This incongruence formed part of the basis for the adoption of the UCP approach to the delivery of the university's programs in its strategic plan for the period 2008-2018. At the end

of the strategic planning period, this study delved into the impact that the UCP approach has had on the growth and development of art education at the school.

3 Methodology

Data was collected between 2015 and 2016 from BIFA students, lecturers on the BIFA program and representatives of the Art organisations in the community that hosted the BIFA students. This was done using questionnaire, interviews and photographic interpretation. The data was analysed using descriptive statistics and content analysis.

4 Findings and Discussion

The impact of implementation of UCP in the delivery of the BIFA program was looked at in terms of how adoption of the approach has influenced students' learning and lecturers' teaching, research and community service. It was also looked at in terms of the benefits that have accrued to MTSIFA as an institution as well as those that have accrued to the community.

4.1 Impact of UCP Approach on Students' Learning

The impact of the UCP approach on students' learning was looked at in terms of the domains of student competence that the BIFA program undertakes to build. According to the BIFA program handbook (2012), these domains are: 1) ability to create, perform and participate in the arts; 2) knowledge and utilization of art materials and resources; 3) ability to respond to and analyse works of art; and 4) ability to appreciate the cultural dimensions and contribution of the arts. The students that participated in the study were asked to specify the extent to which they would agree that delivery of the BIFA program using the UCP approach, notably their attachment to relevant organisations in the community, has improved these features of their learning. In response, majority of the students either "Agreed" or "Strongly Agreed" that adoption of the UCP approach has improved all the four elements of their learning.

The students that participated in the study were asked to specify the extent to which they would agree that delivery of the BIFA program using the UCP approach, notably their attachment to relevant organisations in the community, has improved these features of their learning and the findings are summarized in Table 1.

Table 1: Distribution of Students by Level of Agreement that UCP Improved their Competence (%, n=87)

Variable	AS	A	D	DS	Total
Ability to create, perform and participate in the arts	30	63	7	0	100
Knowledge and utilization of art materials and resources	38	54	3	5	100
Ability to respond to and analyse works of art	57	43	0	0	100
Ability to appreciate the cultural dimensions and contribution of the arts	32	39	29	0	100

Key: AS=Agree Strongly; A=Agree; D=Disagree; DS=Disagree Strongly

The results in Table 1 show that majority of the students either "Agreed" or "Strongly Agreed" that adoption of the UCP approach has improved all the four elements of their learning.

At three community organisations visited, all students completed two months long projects that were closely linked to organisation goals and explicitly focused on skills needed for effective product development such as problem analysis and collaborative problem solving. For example, at the first organisation, students were expected to carry out a concept testing of some of their new ideas. Students were expected to work in groups to establish whether the product would be understood or needed by the consumers. Students were taught how to develop action plans aimed at product awareness and improvement among the customers. Students worked together to implement these action plans and therefore got exposure to potential consumers and employers.

At the second organisation, the students took to development of corporate identity for consumer organisations. They were trained about the development of organisational persona through branding. One team of students at this organisation sought to improve the corporate identity of an organisation through signage. After conducting research, the students developed a proposal for promotional activities that would shape the transition period towards unveiling of the new organisation brand. The students were also exposed to ultramodern machinery and inputs (cf. Plate 1).

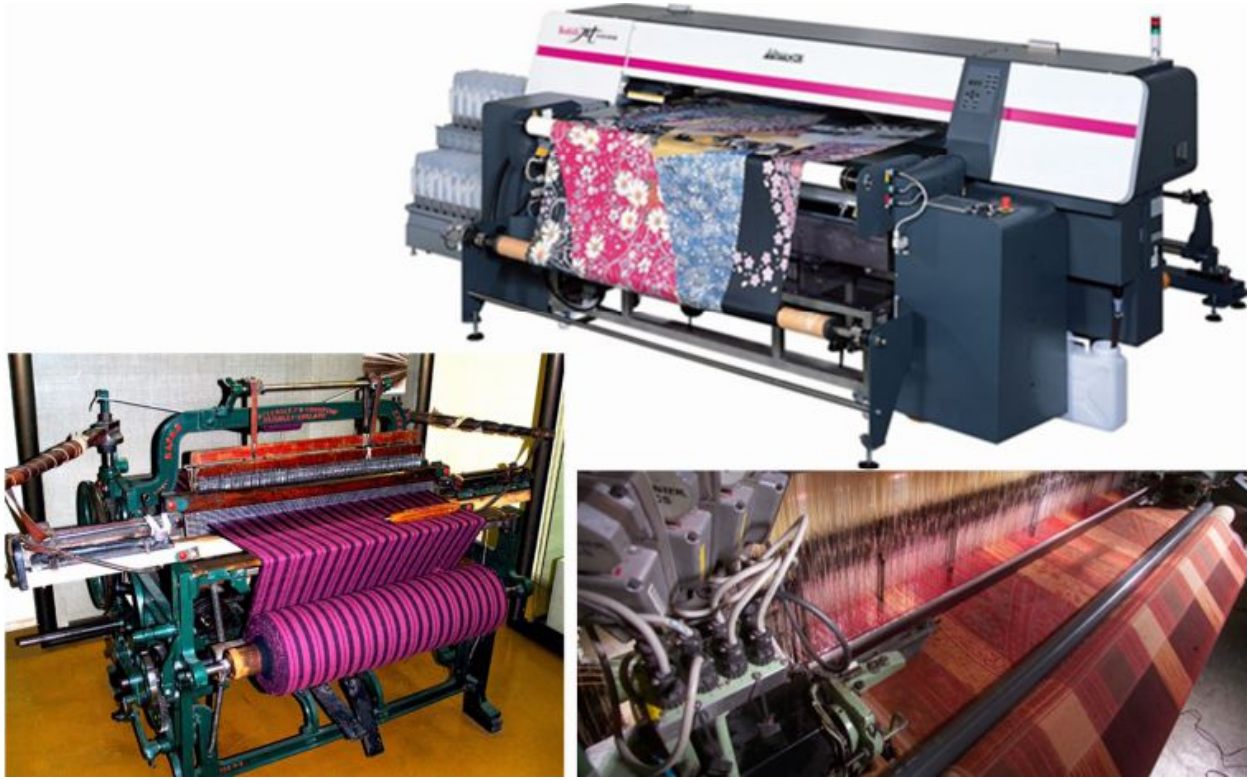

Plate 1: Ultramodern textile machinery intern BIFA students were exposed to at a textiles company

Plate 2: Textile machinery BIFA students use at the MTSIFA.

It is particularly noteworthy that the machinery shown in Plate 2 are a sharp contrast from the machinery and materials available at the MTSIFA. A key conclusion deducible from the foregoing findings is that the UCP approach

towards the delivery of the BIFA program has enabled the MTSIFA to close critical gaps in the latter's facilitation, to the benefit of the students' learning and exposure. As a consequence of consistent underfunding over the last four decades, facilitation of the MTSIFA is grossly inadequate, so the school run a risk of turning out graduates albeit who are not grounded in contemporary and emerging technologies of production of art. However, the findings of this study show that adoption of the UCP approach has provided a handy way out of some of the bottlenecks in the facilitation of the school.

At the textile industry students were taught the treatment of raw materials, i.e. the preparation or production of various textiles fibers, and the manufacture of yarns (e.g. through spinning). Students were additionally taught how to improve fabrics visually, physically and aesthetically--and to include properties which consumers demanded such as bleaching, printing, dyeing, impregnating, coating, and plasticizing.

However, in a comparative sense, the percentage of students expressing "Disagreement" with the statement that the UCP approach has improved their ability to appreciate the cultural dimensions and contribution of the arts was relatively higher (Table 1). All the students affirmed that delivery of the BIFA program following the approach did not constrain them in any way. This suggests that, from the students' point of view, the approach did not affect the delivery of the program in any way but rather that it positively influenced their perception about the production process of visual arts. This was corroborated by the data elicited from the lecturers and key informants interviewed.

Additionally the data in the students' questionnaires showed that 88% of the students felt that they agreed or strongly agreed that they had real responsibilities assigned to them at the different field attachment placement and 77% agreed or strongly agreed that they were allowed to make important decisions during the production process. Some of the photographic evidence collected corroborates this view. For example, the pictures in Plate 3 show that graphic design students working with an advertising company had the experience of working on street billboards that they otherwise would not have obtained from the MTSIFA since the school is not into street advertising much as the students need that experience to augment their study of graphic design.


DISCOVER WHAT PRICELESS
EXPERIENCES ARE MADE OF
CONTINENTAL

Plate 3: BIFA students erecting a street billboard in Kampala under the auspices of an advertising company

Most of the students also felt that they agreed or strongly agreed that they had freedom to develop and use their own artistic ideas at the various organisations (64%), agreed or strongly agreed that they were allowed to perform tasks by themselves rather than observe the organisation processes (66%), and felt that they made a contribution to the production process within those organisation (55%). Up to 79% agreed or strongly agreed that they had challenges accomplishing the tasks that they were assigned. While about 02% felt that they had the opportunity to discuss their field work experiences with their lecturers after returning to the Art School, 82% of the students felt that their work was not appreciated by the supervisors within the organisation. The latter indicators showed the degree to which students felt undervalued by both their field supervisors and lecturers. Although this data show laxity on part of MTSIFA lecturers, it interestingly reveals that about two thirds of the students benefited from their participation in UCP activities (field attachment) at MTSIFA. Indeed, comparative analysis of the students' performance before and after adoption of the UCP approach shows improvements in performance after adoption of the approach (Table 2).

Table 2: Students' Performance before and after Adoption of the UCP Approach

SN	Specialization	Mean Score		
		2007	2013	Difference
1	History of Art	7	8	1
2	Graphics	12	14	2
3	Ceramics	6	7	1
4	Painting	26	30	4
5	Photography	12	14	2
6	Fashion design	14	16	2
7	Sculpture	3	3	0
8	Illustration	7	8	1

4.2 Impact of UCP Approach on Teaching and Research

Questionnaires were administered to lecturers to ascertain the impact of UCP approach on teaching and research. They were asked to establish whether: the delivery of the BIFA program using the UCP approach has improved the delivery of the program; the delivery of the BIFA program using the UCP approach has constrained the delivery of the program; the delivery of the BIFA program using the UCP approach has improved their teaching effectiveness?

With exception of one, all the lecturers indicated that delivery of the BIFA program using the UCP approach has improved the program. Table 3 shows the ways in which delivery of the program using the approach has enhanced the program.

Table 3: Lecturers' views on the Impact of UCP on the Delivery of the BIFA Program

In your view, how has the UCP approach impacted on the BIFA program?
Students are [now] able to explore various techniques and styles on the [art] market
Students have gained confidence in working with customers
Students have got the opportunity to use modern equipment in the community organisations
MTSIFA products have been able to receive critique
Opportunity to expose their work to potential clients
Students gain real life experience
Students get opportunity for value addition
Students get exposed to current market trends
Students work much faster, producing more work
Students get a touch of practitioners
Students learn the level of precision required in the field

The findings in Table 3 show that the lecturers felt that the UCP approach has impacted on the BIFA program in two main ways. First, they suggest that the approach has exposed the BIFA students to the world of work—through giving the students an experience with practicing artists and exposing them to contemporary market trends and needs (Plate 4).

Plate 4: Contemporary garment trends fabric and textile intern students were exposed to at a garment company

Second, the findings show that the UCP approach is exposing the BIFA program to critique from the community, which could improve the program's external efficiency. During the interview held with him, the Principal of the CEDAT explained that the UCP approach markets MTSIFA, adding that, arising out of adoption of the approach, alumni of the school achieve placement in prestigious art and design related companies and that it has enabled MTSIFA lecturers to build solid professional research networks.

4.3 Impact of UCP Approach on Community Organisations

The respondents from art-related organisations were asked to describe how their partnership with MTSIFA (and how hosting of BIFA students in particular) has impacted their work. The goal of this question was to try to understand the impact of their involvement in the delivery of the BIFA program on their professional skills (i.e. service learning), capacity to address their own needs; and influence on the school's teaching and research programs. Their main responses to the question are cited below;

> Working with [MTSIFA] students is interesting in a number of ways. For one, they are ambitious and energetic—always eager to come up with something new. They are savvy about emerging technologies and fashions. Quite ironically, they tend to be very hardworking and excited [about their work]. (Interview with respondent from an art organisation in the community).

> The students add something to our work as a company…so I would say that partnership with the university has helped us…when you have large orders and students are around, they really help you [to deliver on the big orders]—Interview with respondent from an art organisation in the community.

> I would say the benefits of UCP are two-way. You have students with plenty of theoretical knowledge…then you also have experienced artisans that may not have been to formal Art Schools. I realize that they complement each other's strengths. (Interview with respondent from an art organisation in the community).

> The students use their time here [in the art company] to get exposed to emerging technologies and machines. Some of these [emerging technologies and machines] may be things they have seen and used in the university while others may be new to them. There are things you don't find at Makerere but which the students need to be exposed to. (Interview with respondent from an art organisation in the community).

The foregoing citations from representatives of art-related organisations in the community and plates show two things that are relevant to the study of the impact of the UCP approach on the community. First, they show that both the students and art organisations benefit from the students' internship experience. As the students gain exposure on one hand, the organisations hosting them benefit from the students' skills and labour. However, the second insight discernible from the citations and plates is that the impact of the students' engagement with the art-related organisations is not in the areas of service learning and enhancement of the organisations' capacity to address their needs and to influence the BIFA program and MTSIFA. The responses do not make any indication that engaging with the students has enabled the organisations to influence the BIFA program and MTSIFA in any explicit way. Accordingly, the findings of the study suggest that, at MTSIFA, the conceptual relationship between implementation of UCP and community involvement in higher education programs has not been realized.

4.4 Conclusion

The UCP approach to the delivery of the BIFA program at Makerere University has exposed the students to the world of work—through giving them an experience with practicing artists and exposing them to contemporary market trends and needs. Second, the findings show that the UCP approach is exposing the BIFA program to critique from the community, which could improve the program's external efficiency. More importantly, however, the approach has enabled students to access facilities and training experiences that the MTSIFA is unable to offer due to its resource constraints. However, the UCP approach has not facilitated service learning. Clearly, the art organizations that hosted the BIFA students did not learn from the students and their professors. Beyond the MTSIFA and Makerere University, this study has implications for similar higher education institutions on the continent. It demonstrates that UCPs present a way through which the institutions could augment their increasingly constrained facilities. The significance of this recommendation derives from the fact that funding for higher education institutions across the continent is reducing whilst enrolments are expanding and some actors in the administration of these institutions are reluctant to embrace partnership with the community.

References

Altbach, P. G. (2006). Contradictions of academic development: exploiting the professoriate and weakening the university. In P. G. Altbach (Ed.), *International Higher Education: Reflections on Policy and Practice* (pp. 143-146). Boston: Centre for International Higher Education.

Benson, L., Harkavy, I., Puckett, J. (2000). An implementation revolution as a strategy for fulfilling the democratic promise of university-community partnerships: Penn-West Philadelphia as an experiment in progress. *Nonprofit and Voluntary Sector Quarterly*. 29 (1), 24-45.

BIFA Program handbook (2012). Unpublished: Margret Trowel School of Industrial Fine Arts.

Buys, N., Bursnall, S. (2007). Establishing university-community partnerships: processes and benefits. *Journal of Higher Education Policy and Management*. 29 (1), 73-86.

Byaruhanga, M. (2002). *The paradox of curriculum innovation and implementation in a liberalised higher education system in Uganda: a challenge to Makerere University*, paper presented at the 10th general assembly of the Council for the Development of Social Research in Africa. Kampala: CODESRIA.

CCPH (2007). *Achieving the promise of authentic community-higher education partnerships: Community case stories*. Seattle, WA: Wingspread Conference.

Eisemon, T. O., Salmi, J. (1993). African universities and the state: prospects for reform in Senegal and Uganda. *Higher Education,* 25(2), 151-168.

El Ansari, W. Phillips, C. J., Zwi, A. B. (2002). Narrowing the gap between academic professional wisdom and community lay knowledge: Perceptions from partnerships. *Public Health. 116*, 151-159.

Kassam, A. (1999) University education in Uganda: quality despite adversity. *The UNESCO Courier*, No. 173, January- February 1999.

Lejeune, M. (1999) Higher education in Uganda. *International higher education*, Number 14, Winter (1999) Boston College for International Higher Education.

Mamdani, M. (2007). *Scholars in the market place: The Dilemmas of Neo-Liberal Reform at Makerere University, 1989-2005.* Kampala: Fountain Publishers

Margret Trowell School of Industrial and Fine Art, Strategic Plan 2008/09–2018/19. Kampala: Makerere University.

Mayanja, M. K. (1996). *The social background of Makerere University students and the potential for cost sharing*. Accra: Association of African Universities.

Mazrui, A. A. (1994). The impact of global changes on academic freedom in Africa: A preliminary assessment In: M. Mamdani and M. Diouf (Eds.) *Academic freedom in Africa.* Dakar: CODESRIA.

Nakanyike. B. Musisi, & Nansozi. K. Mwanga. (2003). *Makerere University in Transition 1993-2000*. Kampala: Fountain Publishers.

Rubin, V. (2007). *Evaluating university-community partnerships: an examination of the evolution of questions and approaches*. Paper presented at the Community-Higher Education Partnership Forum, Portland State University.

Sicherman, C. (2006). *Becoming an African University: Makerere 1922-2000*. Kampala: Fountain Publishers.

Ssekamwa, J. C. (1999). *Lectures in History of Education.* Kampala: Makerere University School of Education.

Ssekamwa, J. C. (1997). *The History and Development of Education in Uganda*. Kampala: Fountain Publishers.

Tiberondwa, A. K. (1998). *Missionary teachers as agents of colonialism: a study of their activities in Uganda 1877-1927*. Kampala: Fountain Publishers.

Todaro, M. P., 1998. *Economics for a developing world: an introduction to principles, problems and policies for development*. Third ed. 6th impression. USA: Longman.

Vidal, A., Nye, N., Walker, C., Manjarrez, C., & Romanik, C. (2002). Lessons from the Community Outreach Partnership Center Program. Washington: The Urban Institute.

East African School of
Higher Education Studies & Development

Makerere Journal of **Higher Education**
ISSN: 1816-6822; 10 (1) (2018) 23 – 44
DOI: http://dx.doi.org/10.4314/majohe.v10i1.2

http://ajol.info/majohe

Enhancing Teacher Trainees' Capacity for Knowledge Creation through Undergraduate Research Projects

Adeola Oyenike Adeosun [1]

[1] Department of Arts & Social Science Education, Faculty of Education, University of Lagos

Abstract. As a tool for discovering and creating knowledge, research is key to institutional and professional development. Hence, the teaching-research nexus has been driving academic activities in higher education, increasing pressure on academics to increase research productivity and develop students' research capacity. This has informed the emphasis of undergraduate research projects, especially in colleges/ faculties of Education. However, there have been serious concerns for the quality and impact of these student research endeavors. It is against this background that this study focuses on efforts to expand teacher-trainees' capacity to identify educational issues and generate research ideas from them using participatory research approaches. It reports that close links with schools spurred students' ability to construct research ideas and that they expanded students' experience of research; changed their perception of research; and improved their research skills. Recommendations arising out of these findings are discussed.

Keywords: Curriculum innovation; Research; Teacher training.

1 Introduction

Contemporary innovation in teaching requires the use of relevant tools and approaches that motivate students to engage in enquiry based learning. This is particularly emphasized in teacher education programmes where teacher trainees are engaged in teaching practice which in its focus and process lend itself to undergraduate research. Trainees are acquainted with the idea of research being an activity to contribute to their progression into teaching, as they are required to carry out a research project towards the final year of graduation from school. To sufficiently do this, they need knowledge of discipline-specific techniques and tools to locate research problems, gather and analyze data, prepare answers that are tested for accuracy, provide explanations and predictions that are useful, and communicate their reports (Schwarz and White 2005). While the experience is intended to prepare them for future academic and professional progression, such

period is often marked with frenzy, with students running around looking for researchable and topical issues through many avenues. They often come up with over-flogged, duplicated and over-researched topics on issues that have little or no impact to teaching and learning processes or to school problems in general. In most cases, they attempt to do research without a clear understanding of research process, despite having offered and passed some courses in the area. They soon get lost in the process of research and, as a consequence, the outcome of their research is always poor.

This makes research investigation, writing and supervision frustrating to both the students and their supervisors. Teacher educators often report daunting and frustrating experiences in supervising students during this process. Literatures also focus on students' experiences during this process as Maduekwe and Esiobu (2011) noted students experienced difficulties in understanding the processes involved in conducting and reporting research. The conclusion is that despite all theoretical orientations towards research process, most teachers-trainees are neither adequately prepared nor experienced to undertake research in their disciplines. In consequence, while practicing as teachers in school, they demonstrate neither competence nor skill to undertake research. In addition, once the researches are completed, no reference is made to their relevance except for those who later show up for postgraduate programmes. Even in such cases, there is no link between what they have previously done at the degree level. This rather looks at research as a mere academic exercise, something undertaken in 'partial fulfillment for the award of degree', or done rather out of obligation.

Rather, research should be an activity of interest, an opportunity to create new knowledge or add to an existing body of knowledge and an activity meant to jumpstart them into an effective professional practice and development. It is a haphazard activity, but a systematic enquiry into existing knowledge for the purpose of having more insight and involves identification, description, explanation, evaluation of several variables that should lead to development of new knowledge and eventually, problem solving (Chukwu, et. al, 2016). As a form of inquiry based learning, through which learners acquire and analyze information to enable them make claims that are valid and tested (Levy, Thomas, Drago and Rex, 2013), there is the need to properly guide and mentor undergraduates through the process in order to serve its purpose of knowledge creation. Odia and Omofonmwan (2013) emphasized that progressive change (individual, institutional, societal) is possible by people's ability to create ideas that are guided by defined procedure.

Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information (Davenport & Prusak, 1998, p.5). The most significant types of knowledge described in the knowledge creation literature are tacit knowledge and explicit knowledge (Nonaka & Takeuchi,

1995; Nonaka, 1991). The two forms of knowledge are seen as complementary-interacting and engaging with each other. Nonaka and Takeuchi's (1995) model of knowledge creation is based on the assumption that knowledge is created and expanded through social interaction between tacit knowledge and explicit knowledge. Both are essential to knowledge creation as "they interact and change into each other in the creative activities of human beings" (Nonaka, Konno & Toyama, 2001, p.14).

Literature clearly supports the assertion that the changing nature of society is challenging schools and has significant implications for the work of teachers (Fullan, 1991, 1999; Hargreaves & Fullan, 1998; Levin & Riffel, 1997; Hargreaves, 1994; 1997). Darling-Hammond (1998) indicates the enormity of the task faced by teachers who are expected to learn to teach in much more sophisticated ways to connect with students who approach learning from diverse vantage points. The changing environment is thus making the role of the teacher more complex and demanding; redefining what it means to be a successful teacher. Referring to teaching as a paradoxical profession, Hargreaves (2003) noted that the emphasis on knowledge society has entrusted three responsibilities on teachers: as catalysts of knowledge creation in developing human resources, counterpoints for the threats and effects of knowledge as well as be the casualties of the unmet and escalating expectations of knowledge. He emphasized that the three seemingly contradictory roles is dictating the nature of teaching, teacher education processes as well as teacher professionalism. He further emphasized that teachers who are catalysts of the knowledge society must develop their schools to become learning organizations where capacities to learn and structures that support learning and respond constructively to change are widespread. This implies double responsibilities for teacher education institutions within universities- in terms of the mandate for, first, developing capabilities for research and innovation, and second, educating teachers for knowledge creation. Such schools and processes must be marked by creativity, flexibility, problem-solving, ingenuity, collective intelligence, professional trust, risk-taking and continuous improvement.

The argument in favour of knowledge creation is that given the general view that educational research involves too little practical support to teachers and policy makers, one alternative is to make practitioners the major source of knowledge creation. Undergraduate research has the potential to stimulate and facilitate inquiry-based learning, recognition of and commitment to evidence based intervention as well as the practice of reflective learning, all of which are regarded as best practices in teacher education. Healey and Jenkins (2009) proposed four ways of engaging undergraduates with research as knowledge creation or inquiry learning:

- Research-led; which requires learning about current research in the discipline.
- Research-oriented; involving development of research skills and techniques.
- Research-based; with focus on understanding research and inquiry, and
- Research-tutored; which accommodates students to engage in research discussion.

They noted that though from each mode, students increasingly move from passive audience to active participants, teacher education curriculum should emphasize all of modes, as they are particularly interlinked.

Of particular interest are the benefits of research to teacher trainees. In a study on the impact of undergraduate research on different disciplines, Buckley (2008) reported that education students indicated more strongly than any other discipline that their research experience helped to develop their intellectual skills, their career and collaborative abilities, research skills, understanding of how knowledge is created, write more clearly and effectively, and work more effectively with others. A teacher education institution needs to be a knowledge creating school to remain functional and relevant in the knowledge and information society. This is because research-based approaches to teaching are required in order to be an effective teacher (Bower, 2010). Hargreaves further (1999) explores the concept of 'knowledge-creating schools' by examining the four key elements of knowledge creation:

- auditing professional knowledge
- managing the process of creating new knowledge
- validating the professional knowledge created
- disseminating the created professional knowledge

This study agrees with Hargreaves' (1999) characteristics of knowledge-creating schools to include among others, high volume of internal debate and professional networking, regular opportunities for reflection, enquiry and dialogue, and that this can stem from school involvement in initial teacher training. One core area of achieving this is through reflective practices and school relevance research. Bower (2010) further emphasized why undergraduate research is critical to teacher education; these include research:

a) Serving as avenue for promoting students' awareness of contemporary issues in the field of education.
b) Giving opportunity to link theory to practice in terms of applying research findings and literature to teaching and learning contexts.

c) Giving students the opportunity to take ownership of principles and concepts of the teaching profession, thus they are able to internalize their learning by experiencing.
d) Serving to synergize and apply relevant principles and learning frameworks from a range of areas- pedagogical perspectives, theories of learning, assessment practices, cultural contexts, etc.).
e) Equipping trainees with a range of strategies and approaches to address research issues, adapting such to different learning and research contexts.
f) Supporting the trainees to develop mindset for inquiry by utilizing research thinking and processes.
g) Reinforcing the development of research-related educational concepts such as validity, reliability, fairness, ethics that inform trainees 'curriculum principles and practice.

Another concern is the focus of knowledge to be given to and subsequently constructed by teacher trainees. There is often arguments around two strands of knowledge- pedagogy knowledge and content or subject-specific knowledge. There is also emphasis on pedagogical-content knowledge which involves the specific and specialized knowledge about teaching and learning processes of a particular discipline, which is reported to be the strongest indicator of students' achievement as well as that of teacher professional competence (Darling-Hammond, 2000, Moreno, 2005). Citing the OECD (2000)'s report *Knowledge Management in the Learning Society*, Marcelo (2005) further categorized such knowledge into four:

- Know-what - knowledge about facts, which is subject related, the what to teach or learn in teacher education.
- Know-why - knowledge of principles and laws of motion in nature, in the human mind, and in society, ability to explain, justify or reason through why things are the way they are. This type of knowledge adds depth to the 'know-what'.
- Know-how – skills and abilities for doing something, can be technical, manipulative, creative, etc. skills needed to earn a living. For instance, in teacher education, emphasis here is how to teach.
- Know-who - information about who knows what and who knows what to do; including the social ability to co-operate and communicate with different kinds of people and experts, including students, colleagues, etc.

According to him, and citing Grossman (1990). Morine-Dershimer and Todd (2003), these components of teacher knowledge are synthesized into a model capturing exactly what teachers do, and the points of emphasis of teacher education programme. The model is given in Figure 1.

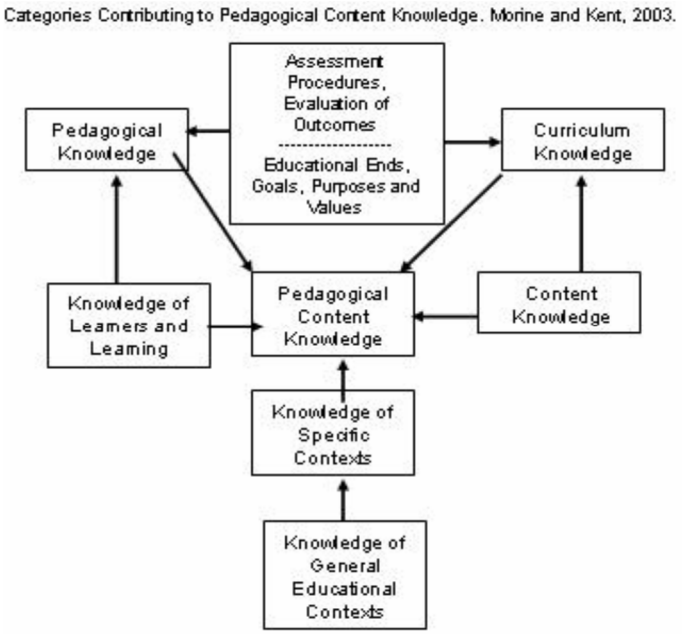

Figure 1: Dimensions of Teacher Knowledge, Adopted from Marcelo, 2005

In exposing undergraduates to knowledge construction and creation processes, they can be encouraged to locate their research interests from any or a combination of these areas. However, this study argues that in locating viable and effective researchable areas, the best sources of generating research problems for knowledge creation is through close and continuous relationship with the field practitioners -schools, teachers and students, while educators support teacher trainees to take ownership of the whole process by developing their capacity to access and assess phenomena, conduct and report independent researches that would be relevant to the teaching and learning situations in their fields of study, and thereby enable them create, transmit and transform knowledge.

1.1 Objectives

The study aims at realigning undergraduate research to its core purpose-knowledge creation, through hands on strategies and experiences of students, by working closely with schools and teachers, observing phenomena around their fields of study (English as Second Language and Literature-in-English) and taking them through processes where they can confidently take ownership of their research content, experiences and processes. Specifically, it plans to:

1. Explore the ESL/ Literature-in-English instructional or related issues that students-teachers would come across or observe in schools.
2. Guide the students to determine from their perspectives which of the issues are researchable problems and worth investigating.
3. Guide the students to construct or develop research proposals from their experiences.
4. Investigate the proposed research problems and designs that will emanate from the observed issues.
5. Find out students' peculiar experiences during the process of observation to proposal writing.
6. Determine from the students' perspectives, the efficacy of this approach.
7. Propose specific ways to inculcate the process into students' overall research experience, writing and supervision.

2 Methodology

The research design is a participatory action oriented research in which the researcher and the subjects are involved in problem identification and work together to carve out ways/solutions to the identified problem(s). The research emanated during the second semester teaching of a course- FED 316B titled *Application of Research Methods*. The course is a follow-up to FED 316A (Principles of Research) often taken during the first semester. The researcher was involved with the teaching of the course between March-June, 2014. The course focuses on engaging students in practical steps involved in research process. With this objective, it is expected that by the time students are ready to undertake research at the beginning of their final year, and post-teaching practice, they would have had a clear idea of not only what research entails, but also practical ideas to work on as their own contribution to knowledge. This is not always the case. Leveraging on her experience over the years with the students under her supervision where students use a substantial period of time searching for topic and getting frustrated in the course of research process, we decided to experiment with the 300 level students of Education/English taking the course. The total number of subjects in the class was twenty-four. The study lasted 14 weeks, and in four phases. In the first phase (2 weeks), the class met twice a week, giving four hours of meeting per week. During the first two weeks, focus was on revision of research concepts. The researcher explored students' background knowledge about research, using critical questions and hypothetical scenarios. Areas of difficulties were jointly discussed and resolved through peer- and guided-teaching.

The next phase was tagged school visit, where subjects were mandated to visit secondary schools, observe teachers while teaching, and interact with/interview the teachers and students on any area of interest or those that need clarifications from the classroom observations. This lasted for four weeks, and each student was to visit a minimum of two schools at least two times; making one visit per week. At the end of each visit, students were to write reports on their experiences. The next four weeks, which was the third phase, was used to share and critique reports from school observation/interaction. The approach to this was whole class conferencing where each student read out his/her report, shares his/her insights about the report and react his/her or her colleagues questions. Students were also asked to bring out specific researchable problems that emanate from the school visit. This was done with the help of the lecturer and their peers.

The final phase was proposal writing and sharing. Students were taken through the rudiments of writing research proposals, were asked to write a two paragraph literature review on the jointly identified problems in order to have focus, and were later given time develop a six page proposal on their constructed topics. The proposals were submitted for review by four teacher educators (supervisors), randomly selected by the researcher. The twenty-four proposals were distributed equally among them. They were asked to comment on each for relevance, focus, viability and possible impact. At the end of the study, students were encouraged to use the packaged proposal to continue their research projects with their supervisors, and were followed up throughout their research process.

3 Findings and Discussion

3.1 Issues observed and reported by the trainees

Though there was no particular report template given to the students to record the school visit, each of the students however submitted two pages of such. The issues are many and varied, and sometimes duplicated, but below are the synthesized ones. There are also direct quotes (in italics) from the students' reports.

- Teachers' lateness to class, affecting time spent on actual learning.
- Lack of teachers' mastery of content as well as competence in teaching some aspects of English, especially Oral English. – '*the class would have been a success if the teacher did not have spelling flaws...'*
- Lack of instructional materials in most of the classrooms, and where available, often badly illustrated and irrelevant, and not used at the right time. *'After the teacher's explanation, he brought out a cardboard that contained an illegible informal letter…'*

- Students' nonchalant attitude towards the teacher and the subject matter.
- Poor communication skills among students, and in some cases, teachers.
- Lack of textbooks in the classroom *'despite the fact that the state government provided the textbooks, most students left their copies at home…'*
- Teachers' physical and psychological abuse of students.
- Overpopulated classrooms affecting classroom management and organization – '*the students lost concentration at a point due to non-conducive learning condition, the rowdiness of the whole school', … 'though the teacher was audible, she could not sustain the students' interest…'*

  'from time to time, the class drifted from being quiet to annoyingly noisy… students engage in side talks, giggling, etc. in the course of the lesson'
- Lack of adequate teachers of English, in extreme cases, one English and Literature teacher per the whole school were reported.
- Prevalence of teacher-centered and transmission mode of instruction.
- Lack of linkage between students' previous knowledge and the topic or content at hand. E.g. *'the teacher asked questions on the last topic which was prepositional phrase, then introduced the current lesson which was informal letter writing…'*
- Favoritism in terms of teachers relying on favourite students to either read or answer questions.
- Teachers relying on printed textbooks questions in comprehension classes. No teacher self-generated questions.
- Teachers' lack of understanding of the concept of integration in teaching English Studies at the Junior Secondary School level.
- Use of vernacular to buttress some aspects of English – incidence of code switching and language mannerism – e.g. *abi, oya, sebi*.
- Lack of reading culture in schools. No or empty library. '*One teacher reported, students fail because they don't read.'*
- Delayed evaluation of learning, often done at the end of class teaching.
- Students' inability to recall what has been learnt immediately after the class *'I met five of the students after the class and they could not tell me what they have just learnt'…*
- Lack of teachers' skills in using ICT and other instructional media, even in a well- equipped school.

  'I was taken to the language laboratory which was well equipped with projector, laptop, audio cassette player, and video CDs… A lesson on /S/ sound was on tape, while a students were copying notes… the teachers sat at the back of the class calling the students to listen, or copy…'

Listed above are some of the students' observed and reported challenges to and problems of teaching and learning of English and Literature-in-English, recorded

during their two-week observation of schools and classes as well as the interaction with teachers and students. The study believes that with the myriad of problems reported, the teacher-trainees already have vast ideas of areas to focus their research and creativity on.

3.2 Researchable Issues & Proposed Research Problems

Out of the twenty-four research proposals submitted, ten were selected as truly translating the schools experience reports into researchable problems. The templates for the ten are summarized in the table:

Table 1: Summary of keys areas of students' research proposal

Student	Key Issues Reported	Proposed Title	Problem Statement	Key Research Questions
A	Students lost interest in the class at a point due to non-conducive learning environment, and the rowdiness of the whole school, … though the teacher was audible, she could not sustain the students' interest…'	Effects of non-conducive environment on teaching and learning English at the SSS level	The impact of the environmental issues on classroom learning is of global concern. The school system in Nigeria has underrated the significance of conducive learning environment. There is therefore the need to rethink the relationship between this variable and learning achievement in schools.	(1) How do learning environmental factors affect students' achievement in English? (2) How do students and teachers of English perceive their learning environment?
B	I noticed that the students were passive … none asked or answered question…	Investigation of the active learning methods in the English Language Classrooms in Lagos State	The study attempts to unveil factors that promote active learning in the ESL classrooms.	(1) Do teachers' qualification, skill, attitude and incentives affect active learning? (2) Do instructional materials, class size, and language of instruction affect active learning?
C	Students' failure in English was attributed to lack of reading culture.	How teachers promote extensive reading in schools.	Over the years, there have been contending issues over students' low reading interests which affect their performance. How do	(1) How can students reading interest be developed.

			teachers then encourage their students to read?	(2) How do ESL teachers improve students' interest in reading?
D	The teacher observed had mastery of subject matter, used appropriate reinforcement, and made use of discussion, demonstration and questioning. I later discovered she had M.ED.	A study of English teachers' perception of competence in teaching ESL.	There is no doubt that when we have competent teachers, problem of mass failure in English will be a thing of the past, but do English teachers themselves know what competence is?	(1) What are the criteria for judging teachers' competence? (2) How do teachers measure their competence? (3) What are the challenges faced by English teachers in exhibiting their competence in the classroom?
E	The teacher did not notice that some students were sleeping; she stood in the front of the class and asked the students questions only at the end the class. I asked her why she used the method, and she answered 'you could see I was able to finish in 40 minutes'.	An investigation into the usage of learner-centered methods in teaching English	Low performance in English is often attributed to wrong teaching methods. The study sets to explore how learner centered methods are being used to teach English language at the Senior Secondary School level.	(1)What are the prevalent methods used by English teachers? (2) Are the methods of teaching interactive? (3)Are the methods teaching effective?

F	Teachers in class A and C could not coordinate their classrooms properly while the teacher in class B had funny pronunciation.	Perceived learning consequences of teacher mannerisms in the English language classroom	Teacher mannerism has different effects on students learning and attitude, either negative or positive. The study focuses on learning consequences that arise out of teachers' mannerism.	(1)What is the incidence of mannerism among ESL teachers? (2)What teacher mannerism influence students' participation? (3)What mannerisms distract them from learning? (4) How do students handle or react to teacher mannerisms?
G	The population of the students in class was 115, thus classroom management was very poor	Patterns of classroom interaction in an overpopulated classroom	Teachers face a lot of challenges in an overpopulated classroom. Apart from ineffective method of teaching, the classroom interaction can be seriously affected. How do teachers and students cope with this trend?	(1)What is the teachers' attitude towards overpopulated classroom? (2) Are overpopulated classroom? (3) Does the seating arrangement affect the classroom interaction in overpopulated class?

H	The class would have been a success if the teacher did not have spelling flaws…'	Factors affecting students' interest in oral English	Generally, L2 students of English become disinterested in learning oral English than in learning other aspects of English. Teachers of English need to be aware of this considering the multilingual nature of Nigeria. The study examines how teacher factors can affect students' interest in and performance in Oral English.	(1)What are the factors affecting students' interest in oral English? (2) Which of the factors are teacher related?
I	The cardboard used to illustrate the lesson was not clear, in the other class, instructional material was not used at all.	The use of instructional materials in the teaching of some aspects of English.	Instructional materials are known to affect students' learning. The study focuses on some problems that may arise from teacher's use, lack of use and inappropriate use of instructional materials in teaching English Language.	(1)Will appropriate use of instructional materials influence students' participation in the class? (2)What are the sources of the instructional materials used by teachers? (3) What factors influence the use or lack of use of instructional materials in schools?
J	Despite the fact that the state government provided the textbooks,	Patterns of classroom interaction in ESL	Teachers often complain that their teaching is not effective because students don't have	(1) What is the pattern of classroom interaction

most students left their copies at home…'	text-available and non-text available classrooms.	textbooks. This also affects students' performance in English as students are often referred to their texts to read. How do teachers cope with the use or lack or texts in class?	in a class where most of the students have access to textbooks? (2) What is the pattern of interaction in a class where students have no texts? (3) Will there be any difference in the two classrooms?

From the summary presented above, the students are able to directly connect with the observed/reported instructional issues with their roles as researchers in addressing the issues. The proposed research topics and questions are intended to address a number of issues such as learning environment, learner involvement, teacher competence and other teacher factors, reading interest and performance, instructional techniques and resources from different perspectives, all of which are vital and currently trending in educational and language learning researches. The implication is that since these topics emanated from direct experience and report from school challenges and issues, the relevance and validity of research focus, process and outcomes are not in doubt. In essence, knowledge that are locally sourced can be more effective in addressing local challenges.

3.3 Proposed Research Designs

A review of the proposals showed an overreliance on the use of questionnaire, interview and occasional classroom observation. For instance, of the ten proposals selected, six relied solely on Likert attitudinal scale questionnaire which usually yield though focused, but narrow responses, three added some structured interview schedule, while only one included classroom observation. In essence, all the research proposals intended to use questionnaire, suggesting students' orientation towards conventional descriptive survey design. Students reported that the design enables them source firsthand information relating to their research focus, and that they can work with manageable sample. Though questionnaire-based survey is more common for their level, however, emphasis on knowledge creation requires they become more versatile with research designs and instruments that can yield robust data and responses for sharpening focus, manipulation and prediction of outcomes.

3.4 Peculiar Experiences and Impact

In determining students' experiences and process impact, three open-ended questions given to the twenty-four participants to respond to in writing.

- What is your perception of research prior to the course?
- What is your perception of research after?
- What specific skills and competences have your acquired through the approach?

Key responses are summarized in Table 2:

Table 2: Summary of students' experiences and impact measurement

Prior Perception of Research…	Perception of Research Now	Skills and Competences Acquired	n
...was stressful and difficult	Research can be interesting and rewarding	Ability to identify problem areas and project possible solution	3
...is full of difficulties	Though it is still tedious, but it boarders my horizon and exposes me to a lot of educational issues affecting the society	How to assess issues objectively. Discover relatively new research issues	4
...is too scientific and often cumbersome…	Research is a journey. …discoveries of issues that are researchable	I have learnt to observe my environment and to think about issues happening around me.	1
…is something boring and difficult	Interesting but still tasking to the brain	Hard work, independence and interaction.	2
...is difficult to understand	My understanding improved	Critical thinking skill and skill of literature search	1
...task that should be avoided.	I don't research as a burden again, but a training.	Critical and logical thinking skill	1
… difficult and afraid I may not be able to cope	Interesting though still difficult	Less dependence on my peers, at least in writing my proposal	1
…boring and can be tasking	Enjoyable process	Understanding of basic research concepts, engaging in literature review.	5
….is mere duplication of other peoples' work	Discovering and re-discovering persistent problems through varied perspectives…	Clear understanding of research process, ability to identify and state problem exactly.	1
Herculean task, dreadful…	Research is now simplified…	Clear statement of research problem, conducting literature search	1
… just an ability to write extensively from consulted books	Identification of educational problems form the basis of research.	Perceiving abnormality in what others will take for granted.	1

… is finding and bringing solutions to issues	Involves rediscovering your environment, and asking questions	Ability to observe critically, understanding of basic research methods	1
Systematic study of problems in a particular field of knowledge	…not only systematic, comprehensive and interwoven	Turning learning problems into research issues	1
… a mechanical way of mandating students to write a book	…an important step, core responsibility of every student… though challenging and tasking.	Observation skills, identification of problems, writing research proposal	1

The experiences and impact measurement yield a lot of interesting information ranging from change in attitude to research (negative perception to positive), enhanced knowledge of research procedure, and better understanding of research purpose and impact. Very important are also the generic or soft skills developed alongside- enhanced observational skills, thinking skills, envisioning, skills for interactions, independence and confidence one's ability, hardworking, information literacy, enhanced study and library skills, all of which are required not only to undertake academic research, but also for school, work and life success. Researches have reported cognitive learning gains and affective outcomes accrued from actively involving students in research projects. It has been noted that research experience allows undergraduate students to better understand published works, learn to balance collaborative and individual work, determine an area of interest, and jumpstart their careers as researchers. Specifically, Bauer and Bennet (2003), isolates ability to develop intellectual curiosity, acquire information independently, analyze literature critically as direct gains from this process. Furthermore, Petrella and Jung (2008) noted that incorporating a research component along with a sound academic foundation enables students to develop independent critical thinking skills along with oral and written communication skills. All these skills were manifested in this study because students had the opportunity to create their learning and knowledge.

4 Conclusion and Recommendation

Since knowledge is dynamic as well as iterative, and generated through action and interaction between people, exposing undergraduates, especially teacher trainees to the rudiments of knowledge creation can greatly enhance their observational and analytical skills. Idea generation, i.e. knowing what to write about has been established to be the greatest impediment to undergraduate research, and in fact every writing task. Opportunities should then be given to students to observe phenomena, brainstorm on their experiences past and present, explore ideas and discover relationships between them, consult existing knowledge and interact with peers. All of these will not only give them ideas to research on, but will also help to sharpen their focus. The experience in this study should be incorporated into courses training students on curriculum in subject areas. This must be done to emphasize the link between the training institutions and the schools which serve as their field of practice. If learning is indeed a catalyst for personal growth, it must be more than acquiring basic skills and accumulating information. It must help students develop reasoning and valuing abilities. Teacher educators must begin to build a repertoire of instructional practices to help students acquire and apply knowledge, develop insights, and be

able to think logically, resourcefully and imaginatively. One fundamental means of achieving this goal is through the research process students expose them to, and the kind of support we give them throughout the process. As Hargreaves (2003) emphasized, we can promote an educational system with highly skilled teachers, capable of generating ingenuity and creativity in students, provided they experience creativity and flexibility and are themselves developed as knowledge society professionals.

References

Bauer, K. W., & Bennett, J. S. (2003). Alumni perceptions used to assess undergraduate research experience. *The Journal of Higher Education, 74*(2), 210-230.

Bower, Matt (2010). Research-based pre-service teacher education: Centering teachers in the process of knowledge creation. Conference paper read at Sydney Symposium on Teacher Education. Available on www.researchgate.net. Accessed March 3, 2018.

Buckley, J. A. (2008). The disciplinary effects of undergraduate research experiences with faculty on selected student self-reported gains. Paper presented at the Annual Meeting of the Association for the Student of Higher Education, 6-8 November, Jacksonville, FL.

Chukwu, N., Ebue, M., Obikeguna, C., Anonu, N., Agbawodikeizu, P., & Agwu, P. (2016). Problems of social research in Nigeria. *Research in Humanities and Social Sciences. 6(2)*.

Darling-Hammond, L (1998). Teachers and teaching: Testing policy hypotheses from a national commission report. *Educational Researcher, 27(1): 5-15*.

Darling- Hammond, L. (2000).Teacher quality and student achievement: A review of state policy evidence. Educational Policy Analysis Archives. Available at http://epaa.asu.edu/epaa/v8n1. Accessed October 10, 2016.

Davenport, T. H., Prusak, L. (1998).*Working Knowledge: How Organizations Manage What They Know*. Boston: Harvard Business School Press.

Fullan, M. (1999). *Change Forces; the Sequel*. London: Falmer Press.

Fullan. M (1991). *The New Meaning of Educational Change*. New York: Teachers' College Press.

Grossman, P. (1990). *The Making of a Teacher: Teacher Knowledge and Teacher Education*. Chicago: Teacher College Press.

Hargreaves, A. & Fullan, M. (1998). *What's Worth Fighting for Out There*? New York: Teachers' College Press;

Hargreaves, A. (1997). Cultures of teaching and educational change. *International Handbook of Teachers and Teaching*. Pp. 1297-1319. Springer.

Hargreaves, A. (2003). *Teaching in the Knowledge Society: Education in the Age of Insecurity*. New York: Teacher College Press.

Hargreaves, D. (1994). The new professionalism: the synthesis of professional and institutional development, *Teaching and Teacher Education, 104(4), pp. 423-438*.

Healey, M., & Jenkins, A. (2009). Developing undergraduate research and inquiry. York, England: Higher Education Academy. Available at http://www.heacademy.ac.uk/assets/York/documents/resources/publications/ developingun dergraduate_Final.pdf. Accessed June 8, 2016.

Levin, B. &Riffel, J. (1997). *Schools and the Changing World*. London: Falmer Press

Levy, B. L., Thomas, E. E., Drago, K., & Rex, L. A. (2013). Examining studies of inquiry-based learning in three fields of education sparking generative conversation. *Journal of Teacher Education, 64, 387-408.*

Maduekwe, A. & Esiobu, G. (2011). Pre-service teachers' understanding of research culture in Nigeria multicultural context. *Journal of Pedagogical Thoughts, 1, 71-93.*

Marcelo C. (2005). Teachers learning for a learning society – Literature Review. In Moreno, J. M. (2005) (Ed.) *Learning to Teach in the Knowledge Society*, pp.4-34.HDNED, World Bank.

Moreno, J. M. (2005) (Ed.).*Learning to Teach in the Knowledge Society*. HDNED, World Bank.

Morine-Dershimer, G., & Todd, K. (2003). The complex nature and sources of teachers' pedagogical knowledge. In J. Gess-Newsome (Ed.) *Examining Pedagogical Content Knowledge. The Construct and its Implication for Science Education*, pp. 21-50. New York: Kluwer Academic Publisher.

Nonaka, I. (1991). The knowledge-creating company. *Harvard Business Review*, November-December, 96-104.

Nonaka, I., Konno, N., & Toyama, R. (2001). Emergence of BA: A conceptual framework for the continuous and self-transcending process of knowledge creation. In I. Nonaka & T. Nishigushi (Eds.) *Knowledge Emergence: Social, Technical and Evolutionary Dimensions of Knowledge Creation*. Oxford: Oxford University Press. pp. 3-29.

Nonaka, I., and Hirotaka, T. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford: Oxford University Press.

Odia, O. L. & Omofonmwan, S. I. (2013).Research and development initiatives in Nigeria: Challenges and prospects. *Mediterranean Journal of Social Sciences, 4(2). pp. 257-265.*

OECD. (2000). *Knowledge Management in the Learning Society*. Paris: Center for Educational Research and Innovation.

Petrella, J. K. & Jung, A. (2008). Undergraduate research: Importance, benefits, and challenges. *International Journal of Exercise Science*: 1(3). Available at: http://digitalcommons.wku.edu/ijes/vol1/iss3/1. Accessed March 3, 2018.

Schwarz, C. & White, B. (2005). Meta modelling knowledge: Developing students' understanding of scientific modelling." *Cognition and Instruction* 23(2): 165-205.

East African School of
Higher Education Studies & Development

Makerere Journal of **Higher Education**
ISSN: 1816-6822; 10 (1) (2018) 45 – 59
DOI: http://dx.doi.org/10.4314/majohe.v10i1.3

http://ajol.info/majohe

Effectiveness of Study Centres in Supporting Open and Distance Learning at Makerere University

Nabushawo Harriet Mutambo [1, *], Jessica Norah Aguti [1], Mark Winterbottom [2]

[1] Makerere University [*Corresponding author: hnabushawo@gmail.com], [2] University of Cambridge

Abstract. In open and distance learning (ODL), the teacher and student are separated in time and space for most of the time. To ensure continuity of teaching and learning, learner support mechanisms are required. Rumble (1992) contends that for effective support these mechanisms should be decentralized and accessible to students. It is with this understanding that this study examined the effectiveness of Makerere University's study centres in supporting teaching and learning in its ODL programmes. Following a survey design, data was elicited from 422 respondents who included students and staff of the University. This was done using questionnaires, interviews, focus group discussions and documentary analysis. The findings were that the centres are relevant to offering remote learner support, especially given the low level of technological advancement in Uganda. However, due to a number of factors, the centres are not offering satisfactory support to the students. These include the centres' indistinct status and mandate; gaps in the University's policies and understanding of ODL; inadequate funding of the centres; communication gaps between the centres and their coordinating unit at the University's main campus; inadequacy of study, ICT and human resources at the centres; and unconducive location and opening hours of the centres. Recommendations for the better performance of the centres are discussed.

Keywords: ODL; Study centres; Student support services.

1 Introduction

The increasing demand for higher education has forced institutions to be more innovative in their course offerings, so as to accommodate all qualifying students including those who are interested in professional development and adult education. Open and Distance Learning (ODL) has been adopted as a means of meeting this demand (UNESCO, 2002).

According to Perraton (1993), ODL is a process where teachers and learners are separated in space and/ or time for a significant portion of their education.

However, to ensure continuity of teaching and learning, learner support mechanisms are usually put in place. Direct student-support is one key component that enables students to cope with the challenges of isolation, and hence to progress and stay motivated.

Student-support services in ODL are rooted in social constructivist theories advanced by Vygotsky (1978) which emphasises collaborative learning. This is where knowledge is socially constructed through peer tutoring. This involves students working in pairs or small groups to discuss concepts or find solutions to academic problems. Such educational experiences that are active, social, contextual, engaging, and student-owned lead to deeper learning and development of higher-level thinking (Simpson, 2013). Indeed, Moore (1993)'s theory of transactional distance posits that the space between the learner and the structure of teaching must be mediated by dialogue (Tait, 2003). With growing innovation in ICTs, dialogue between the tutor and the learners and among the learners can be enhanced using different platforms like chat rooms, discussion forums, podcasts, video clips, blogs, and wikis (Pact, 2014).

There are a range of student services given to individuals and groups of students to support teaching and learning (Tait, 2000). These services are both academic and administrative and involve face to face or virtually interaction. With advancement in technology, student support is being provided on different platforms like emails, discussion forums, social media and on-line chats (Simpson, 2013).

Support services are very important in any ODL programme. They should be designed at the initial planning phase of the ODL programme and should be "fit for purpose" (Mills, 2003). Indeed, the way these services are provided differs across institutions, depending on the context and teaching philosophy of the institutions (Bbuye, 2012).

The Open University (OU) in the UK champions high quality ODL by putting in place strong institutions and structures to support students. The management of student support services at OU was based on a decentralized model, which was relatively effective (Rumble, 1992). This was because the study centres increased students' access to educational services, such as tutorial assistance, library resources, and interaction with tutors and fellow students. This structure has been replicated across the world. However, in some countries, support services in ODL institutions have not been well managed and this consequently affects the teaching and learning process (Aguti, 2004; Bbuye, 2012).

1.1 Role of Study Centres in ODL

Study centres are an extension arm of a university to the community. They operate in different forms. In some ODL institutions, they operate as residential schools; in others they serve only as centres for tutorials or for material

distribution (Ipaye, 2008). The tutors in these centres support students and motivate them to keep on the programme, providing timely feedback to their queries, both academic and administrative.

To ensure that these activities and facilities are running, there is need for institutional commitment. Ipaye (2008) contends that to sustain a study centre, funding must be regular and adequate, contact between the study centre and main campus must be cordial, and staff at the study centre should be friendly and familiar with learners' problems.

However, in many ODL institutions, these centres do not have a clear position within the institutional structure. This lack of clarity can result in a reduced budget and a transition only to provision of ad hoc support, which itself can foster increased rates of course withdrawal. Nanyongo (2002) for example cites low success in terms of completion and throughput rates in UNISA due to inadequate learner support, which was exacerbated by a lack of coordinated regional learning centres. Mills (2003) similarly reports a high drop-out rate of 50% in a large and relatively successful institution of OU; he attributes this to new policies that saw a systematic and steady reduction of resourcing for regional support services. Due to this status, Simpson (2013) reports that the graduation and retention rates at OU have fallen by up to 22%.

In institutions still running second generation ODL, the study centres are still relevant to offer personalized and localized support, particularly in contexts where ICT infrastructure is poor. Contemporary Web 2.0 technology, such as podcasts, forums, video clips and wikis may provide better opportunity for learning as materials and tutors can be accessed online. Similarly, mobile phone technology is popular, but the quality of phones students possess are limited in terms of internet capacity, storage and transmission (Pact, 2014). The level of technological integration in teaching and learning processes is still too low to offer effective and efficient remote support. Therefore, the most appropriate support may be provided through study centres.

1.2 ODL Support Services and Study Centres at Makerere University

To meet the increasing demand for higher education in Uganda, Makerere University introduced a flexible mode of study that could take in large numbers of students, especially those who are disadvantaged due to social, economic and geographical factors. Such "distance education" is flexible in that it allows one to study while working and taking care of other obligations. The university introduced the Bachelor of Education (B. Ed.) External Degree Programme in 1991. Like any other distance education programme, student support is key to ensuring the continuity of learning while away from the main campus (Bbuye, 2012). At Makerere University, student support services comprise occasional on-campus face-to-face sessions, study group meetings, upcountry study centres,

access to library services and opportunities for students to interact with tutors (Aguti, 2004). The study centres aim to provide ODL students with tutorial, library, reading and discussion space plus administration (including assignment submission and registration). However, according to Wrightson and Otto (2005) the centres are poorly resourced. Therefore, this study was conducted to provide an evaluation of the effectiveness of the centres in supporting the University's ODL programmes. The study attempted to respond to the following specific research questions:

1. How have Makerere University upcountry study centres supported ODL students?
2. What are the barriers to effectiveness of ODL study centres?

2 Methods

The study employed qualitative and quantitative approaches to data gathering and analysis. Data were collected from four of the nine upcountry study centres. These were purposely selected from the four regions of Uganda (i.e. Central, East, North and West). Cluster sampling was used to select 300 students out of the 3500 students on the University's B.Ed. programme. The clusters of B.Ed. students included 90 year one students and 210 year three students. The students were asked to share their experiences regarding the support they had received since joining the programme. Other key informants were also purposively selected to participate in the study: four study centre coordinators, four librarians, five lecturers on the B. Ed. programme, three ICT administrators, and six members of staff from the Department of Distance Education. Information from students was gathered using a structured questionnaire, interviews and focus group discussions (FGDs). FGDs were held in each of the study centres and these included 7-10 students and key informants. An observation checklist was used to study the facilities available to students at each of the centres. Relevant documentary evidence was examined to triangulate the information obtained from the questionnaires and FGDs. The data was analysed using descriptive statistics and content analysis.

3 Findings and Discussion

3.1 Support towards ODL Students at Study Centres

The study began by asking the students to rate the support services on the B.Ed. programme. In response, most of them maintained that the support systems were poor (Table 1).

Table 1: Students' Ratings of the Services and Facilities available in the Study Centres

To what extent would you agree that the following are available in your study centre?	Strongly agree	Agree	Disagree	Strongly disagree	Total
ICTs	20 (6.7%)	13 (4.3%)	139 (46.3%)	128 (42.7%)	300 (100%)
Reading space and discussions	37 (12.3%)	95 (31.7%)	67(22.3%)	101 (33.7%)	300 (100%)
Library services	115 (38.3%)	138 (46.0%)	36 (12.0%)	11 (3.7%)	300 (100%)
Staffing	20 (6.7%)	37 (12.3%)	128 (42.7%)	115 (38.3%)	300 (100%)

The students cited the following reasons for rating the quality of support at the centres as poor: poor student–tutor interaction, ill-prepared tutors, and absence of student study groups. One B.Ed. student said;

> "There is no support you get from the department while at home, if you have an academic related query, you have to travel back to main campus because there are no tutors at the nearest centres".

Student support services ought to be provided to distance learners both at the main campus and at the study centres. However, all of these services are being offered centrally with only a few being provided at the study centres. Hence, although there is a framework for learner support in place, it has not been operationalized to offer continuity of learning while away from the main campus.

The responses from Table 1 indicate that students are getting minimal services from the study centres. About 88% of the students reported centres not having ICTs, 67% said there is no space for reading and discussions, while 81% claimed there was no staff to attend to them. That said, students rated library and computer resources at study centres considerably more useful than the other facilities there. As already noted, study centres are meant to offer remote support to ODL students. However, if these services are not available to them, then the quality of the education they are receiving is likely to be affected.

The students were further asked to give reasons why many of them do not utilize the study centres. The findings are summarised in Table 2.

Table 2: Factors Hindering Students from Utilizing Study Centres

To what extent do the following factors hinder your utilisation of your study centre?	To a large Extent	To a small Extent	Not at all
Ignorance about the services at the centre	230 = 77%	69 = 23%	1 = 0.3%
Inadequacy of study materials at the centre	256 = 85%	40 = 13%	4 = 1.3%
Unavailability of tutors at the centre	242 = 81%	48 = 16%	-
The office is always closed	160 = 53%	130 = 43%	10 = 3.3%
Lack of required information	127 = 42%	160 = 53%	13 = 4.3%
Staff at the centre cannot make decisions	260 = 87%	40 = 13%	-
The centres are very far away	145 = 48%	130 = 43%	25 = 8.3%
Lack of internet	240 = 80%	50 = 17%	10 = 3.3%

Although study centres do exist, they do not provide adequate support to the students. That is why those interviewed contended that they do not utilize the centres. Interviews with programme administrators and centre coordinators, plus the observations made confirmed the students' claims. They contended that due to multiple factors, operations at the centres have been hampered. They cited inadequate funding, unclear policies and poor staffing. One coordinator said that:

> "Previously the university administration recognized our contribution and would allocate some funds to support us but now, we do not get any support from the main campus. We reported the disconnection of internet and telephone lines but nothing has been done." Coordinator, Mbale Centre.

3.2 Barriers to the Effectiveness of the ODL study centres

Results from the interviews, FGDs and observation established the following factors affecting the effectiveness of the study centres in supporting distance learners.

3.2.1 Indistinct Status and Mandate

The status and mandate were found to be barriers to the effectiveness of the centres. The study centres were opened by the university with a clear mandate to offer outreach services (CCE, 1990). This means that study centres have a position in the university structure with authority to carry out outreach services, even though it was evident here that their services and contributions are not recognized by the central university. The poor resources are unlikely to facilitate quality services to students. For example, centres like Mbale and Lira in particular lack resourcing for student support. Students claim study materials are inadequate (85%), that there are no tutoring services to attend to academic related challenges (81%) and that there are no ICT facilities (80%) (See table 2).

With time, the university has grown and decided to use some of the centres as branch campuses, hence elevating the status from that of a centre to a university wide campus. Centres like Jinja and Fort Portal have started to run regular undergraduate programmes in addition to serving as extra mural centres for short courses and supporting distance learners. This new status comes with improved facilities and resources in terms of offices, lecture rooms, library, ICT laboratories and personnel.

> "---set up on February 2010 with a skeleton staff of three teaching staff and one support staff. Today we have 295 students, 15 full time and three part time teaching staff supported by eight support staff. We derive our legal status from Makerere University College Statute and External Campuses Policy". Jinja Campus website.

The old centres (Mbale and Lira) do not have substantive coordinators but have interim organisers who have taken over these roles from their original roles as a typist and security guards. Hence, where a study centre is given a sense of purpose through a clear mandate it is more likely to be effective. This was seen in Jinja and Fort Portal where the university has improved on the teaching and learning facilities like ICTs, library services and personnel. Such improved services are likely to improve the quality of education that students receive.

3.2.2 Policy Gaps and Limited Understanding of ODL

To run ODL in the university, there must be guiding principles related to teaching and learning activities in the ODL mode. Absence of these principles leads to confusion and inefficiency in service delivery to the students. Results from interviews and FGDs with administrators, centre coordinators and librarians suggested that University administrators may simply be ignorant of the philosophy of teaching and learning in ODL. One programme administrator said;

> "When central university transfers funds to faculties, the outstanding bills they consider are those for teaching and supervision of research not for students support and development of study materials for ODL students. He said in the last four years, there has been neither a workshop for developing study materials nor any support to students upcountry".

Muyinda (2013) demonstrates this limited knowledge of university administration about ODL operations in the following scenario. In a letter responding to an application by the coordinator for Bachelor of Science (External) for a scholarship in MSc. Zoology, the Human Resources Development Committee (HRD) of Makerere University stated:

> "The HRD committee wonders how Zoology will be applied in the department of Open and Distance Learning so it unanimously decided that the scholarship should not be granted. So we advise you to try other sources of funding".

This is a committee made up of top managers of the university who are well aware that the department is running a BSc. External whose coordinator must be knowledgeable both in the content as well as the philosophy of ODL. Failure to appreciate who should work in ODL department demonstrates limited understanding of how ODL ought to be provided. This ignorance affects decision making (Mintzberg, 2004). According to Robinson (1997), the cost structure and funding needs of ODL are often not well understood by senior decision makers. The head of department of ODL said:

> "Our biggest problem is the failure of the university administrators to appreciate the operations of this mode of study and the unique characteristics

> of its students. When making policies, they do not differentiate between Internal and External programmes"

Limited understanding and minimal appreciation of ODL in dual mode universities is a big factor impacting upon provision of support services, which are often inappropriate and yields stifling of ODL activities. There is therefore need for a deliberate effort to educate / sensitize university administrators about ODL operations, so as to improve the support systems to students as well as the quality of education being provided. A policy to guide the operations of ODL within and outside the university will help in enhancing support services which are central in this mode of study.

3.2.3 Inadequate Funding and Facilitation of the Centres

Funding is a big barrier to the effectiveness of study centres. From the students' responses, interviews and observations carried out, the study centres are ill-equipped to support ODL students. During the study, the coordinators for the traditional centres (Mbale and Lira) reported that they have not engaged in much activity to support ODL students because they do not have the capacity to effectively support teaching and learning activities.

> "Since funding for tutorials stopped coming from the main campus, we have no other source of income to facilitate the tutorials" Coordinator, Mbale Study Centre.

The study established from the students that there is no qualified staff to competently address academic queries (81%), the ICT infrastructure is poor (80%), there are poor library services in the traditional centres (Mbale and Lira) and some centres do not have even space for reading and discussions (56%).

Kember and Dekkers (1988) described an ideal study centre as one with institutional co-operation, that is physically identifiable and has proper staffing, joint funding and community involvement as essential ingredients. From observations and interviews with coordinators and programme administrators, the study found many of these facilities in a dilapidated state. For example, Mbale centre had only two computers while Lira had three but which were not connected to the internet.

According to Muyinda, (2013), increased funding leads to proactive student support services, which in turn lead to increased student retention levels. Yet there is lack of up-front preparatory development investment in ODL and although "critical mass" enrolment numbers do exist for a number of programmes, the lack of investment in infrastructure especially upcountry has compromised the quality of delivery. There may be need for the university administrators to allocate funds towards revamping of these centres if they are

going to be used for supporting distance learners. It may also be appropriate to strengthen and broaden the finance and resources base of ODL by accessing donor funding for capacity building and infrastructural development.

3.2.4 Communication between the Centres and Department of ODL

Communication is key in any working relationship and it is the only way information can be effectively spread to all stakeholders in an organization for realization of organizational goals. In ODL, a communication breakdown leads to a transactional distance which provides opportunity for misunderstandings by all stakeholders. This study established that poor communication was a barrier to the effectiveness of study centres in ODL because some of the stakeholders did not have the information about the services in the centres. While some of the students knew about the existence of the centres (77%), some were not aware of any services available there (23%). The same students claimed not to have been referred to the centre by the programme administrators. The study established that students were holding tutorials and discussion groups in other venues because they were not aware of available working space at the centres. They spent money hiring venues out of ignorance due to poor communication. Students interviewed in Jinja, Mbale and Fort Portal were all having discussions groups outside the study centres due to limited awareness of the available facilities therein.

> "We have been meeting in a school where one of us teaches because we did not know we are allowed to use the facilities at the campus" Students from Fort Portal.

The coordinators also claimed that there had been no follow up by the department of ODL regarding the centres' activities. This breakdown in communication between partner institutions affects service delivery to students. Muyinda (2013) reports that after reduction in funding for ODL activities in 2007, there have been no activities happening at the centres. This was confirmed by the Coordinator Mbale Centre who said that,

> "Students come to the centre in search of particular services like typing and internet. However, since computers broke down and internet was disconnected nothing has been done even if this was reported."

According to observations and interviews with the centre coordinator, Mbale centre has only two working computers, which are not connected to the internet. A centre with such a status of facilities cannot attract students, nor offer effective academic support to the students. According to Delvane (2005), students' support services in ODL should always combine central and regional services in an integrated manner. Due to inadequate information at the centres one student said

that, "The person in charge of the centre has to first telephone the main campus to get information at the cost of the student."

3.2.5 Inadequate Study Materials and Library Services

The students interviewed decried the quality and quantity of study materials at the study centres (Table 3).

Table 3: Resources Accessible at the Study Centres

Are the following materials accessible at your study centre?		Year 1		Year 3	
		Count	%	Count	%
Print material	Yes	85	94.40	160	76.20
	No	5	5.60	50	23.80
Audio materials	Yes	5	5.60	53	25.20
	No	85	94.40	157	74.80
Video material	Yes	5	5.60	5	2.40
	No	85	94.40	205	97.60
Audio visual material	Yes	5	5.60	24	11.40
	No	85	94.40	186	88.60

The students who visited the study centres claimed not to have found the materials helpful and relevant for in-depth research for their assignments. They instead opt to go to the public library which in addition to the study materials deposited there, had a variety of other references.

> "When I visited the centre, the study materials I found there were out dated and could not assist me to carry out effective research to do my course works or prepare for examinations." ODL student.

The coordinators and administrators also confirmed the poor status of the materials in the centres. Very few books had been placed at the study centres and they were seldom used.

> "Some students came to borrow the study materials but did not find them useful. They said they were outdated and never came back again".

The programme administrators further reported that the provision of study materials has been stifled by inadequate funding to develop the materials as well as to buy or adapt from other institutions. One of the administrators said;

> "Since the funding for ODL activities deteriorated, the department has not held any workshops for study materials development neither have any text books been purchased as supplementary references"

Study materials in ODL are very central because they are the main teaching tool and act almost as a surrogate teacher. They are meant to be specially prepared by the tutors for teaching and learning purposes. Their inadequacy or absence will affect the effectiveness of these centres since it is one of the main services

students seek at the centre (85%). Makerere University should therefore allocate funds towards acquisition of current and up to date study materials to facilitate continuity of teaching and learning processes.

3.2.6 Poor ICT Infrastructure

In this digital age, the teacher is no longer the only dispenser of knowledge and as such, computers and internet have highly complimented other modes of study. Tschanga and Santa (2000) as quoted by Aguti (2004) believe that the in ODL, use of ICTs help improve learning by getting the "--- right types of content and learning to the individuals---".This is because ICTs with internet connection facilitate in-depth study which enhances learning and promotes knowledge generation. A lot of learning materials can be accessed by students on line to enrich their studies. However, this is not the case with ODL at Makerere University as seen from the findings. From the responses of students in table 4 below, we note that the level of technological use is still low.

Table 4: Status of ICT access by students

Type of ICT	Can access		Cannot access	
	Count	%	Count	%
Radio	300	100%	0	-
Print	300	100%	0	-
Mobile phone	280	93%	20	2.30%
Television	150	50%	150	50%
Computer facilities with internet	100	33%	200	67%

The media which are popular and accessible to all students are the radio (100%), print materials (100%), mobile phone (93%) and computer and internet (33%). The radio has been widely used in ODL because of its ability to reach inaccessible areas (Aguti, 2004). Nevertheless, it is limited by signal in some areas as well as having fixed hours of transmission; this may not be convenient to the students. The mobile phone (93%) has Increasing potential, although it also has limitations in terms of the quality of phones students possess which may be affected by internet capacity, storage and transmission (Pact, 2014). Access to a computer and the Internet is limited to 33% of students (see table 4). At the time of the study, all the centres had their internet services disconnected, apart from Fort Portal upcountry campus. The traditional extra mural centres like Mbale and Lira did not have computer facilities and internet for students' utilization. This limitation means students cannot enrich their studies using on line resources and this may limit their scope of knowledge as well. The television facilities are also popular among open and online studies however, they are still a challenge in the Ugandan context due to poor infrastructure development in Makerere, as well as in the communities where the students are scattered. Efforts

should therefore be made by the university to have these centres networked and equipped basic ICT infrastructure with internet to support teaching and learning processes considering that the internet enable students to access a variety of on line study materials like their counterparts on the main campus.

3.2.7 Inadequate Staffing

From the records of the programme administrators and centre coordinators, it was found that the study centres have a skeleton staff comprising of the coordinator, secretary/clerk and security officer. This was in the traditional extra mural centres (Mbale and Lira) while for Fort Portal and Jinja their provision has been increased (see Table 5).

Table 5: Staffing of Study Centres

Title	Mbale and Lira	Jinja and Fort Portal
Resident Tutor	NO	NO
Tutors / lecturers	NO	YES (14)
Centre Organizers / Coordinators	YES (1)	
Librarian	NO	YES (1)
ICT administrators	NO	YES (1)
Secretary / Records Clerk	YES (1)	YES (2)
Security guard	YES (1)	YES (1)

Source: Makerere University Website

A study centre without a resident tutor to attend to students' academic needs is not helpful, as such a scenario is a barrier to effective academic student support. Lack of qualified personnel like tutors to support students while away from the main campus slows down the students' learning processes, since feedback to students' difficulties and queries is not timely. From table 5 we also establish that centres with an elevated status of a campus, have a larger staff to provide academic support. The university administrators should develop clear working policy between ODL and the new campuses so that the students can benefit from these services and resources.

3.2.8 Location of Study Centres

Location was also found to be a barrier to centre effectiveness. The study centres existed in urban areas and yet many students are situated in remote rural areas and find it expensive to visit the study centre. This long distance between students and the centres has the potential to make them ineffective. While visiting the Lira centre, we found there were no students within that district. The nearest group of students was coming from Apac over 45km away. Students (48%) reported not visiting the centre because of distance from their homes. According to Kember and Dekkers (1988), the academic support offered to students must

be related to the distribution of the students; a highly decentralized population over a wide area can make support difficult or costly. Hence, it is important for Makerere University to review the location of study centres, considering opening new centres close to student populations, in addition to the regional centres

3.2.9 Unconducive Working Hours

Lack of flexibility in working hours may reduce a study centre's effectiveness. Some of the students interviewed who had visited the study centres complained about the unfavourable working hours at the centre. From the study findings, 53% of the students claimed that the offices are always closed while 43% also said to a smaller extent they have been hindered from using the study centres because the offices are often closed. The closure of offices much of the time or earlier than the official time is a sign of an office that is either not busy or not well supervised (Bbuye, 2012). This may also point to the fact that the staff concerned have limited knowledge about the nature of their clients. One B.Ed. student had this to say;

> "We work from Monday to Friday and the only time I can come to the centre is after 5pm or over the weekend. These are officially non-working hours and the offices are always closed."

This, therefore, calls for training of the staff in the centres to understand the complexity of ODL students and the need for flexibility when serving them.

4 Conclusion and Implications

The existence of study centres for Makerere University shows the original commitment of the university to support ODL. However, over time and with many changes in our education systems and structures, the university seems to have lost the vision and this decentralized model of providing student-support is no longer a priority. This study however, noted that there are factors that have worked against the flourishing of these centres, and if addressed the centres can again offer meaningful support to students.

The barriers to effectiveness of study centres of Makerere University are more internal than external. The main barriers are lack of a clear policy to guide the activities of ODL and this has hindered smooth working relationships and communication among different stakeholders i.e. the students, programme administrators and centre staff. The other factor is inadequate funding, which has affected the upgrading of facilities and efficient service delivery. This has manifested itself in terms of ill equipped study centres with inadequate and out-dated study materials, no ICT infrastructure to support teaching and learning

activities, and no qualified academic staff, ICT administrators and librarians to attend to students' academic concerns. This status has hindered decentralization of students' support services and this has consequently affected the activities of study centres, rendering them non-functional. There is a need for a deliberate effort by the programme administrators to sensitize all stakeholders about the operations of ODL, especially the policy and decision makers in the university about the role of study centres. If the study centres are going to be upgraded and equipped with both human and material resources, then the policy makers need to appreciate their role so as to facilitate them. The staff in the study centres should be sensitized as well about the philosophy of ODL (flexibility) and the nature of students so that they can be available to serve them whenever they attend.

The relevance of study centres in developing countries, which are still running second generation distance education, cannot be understated. From this study, it is evident that those study centres that have been upgraded to campus status have been resourced, so they are in a better position to competently support ODL students. The rest of the study centres should also be revamped and equipped to support the ODL students. The innovations in students' support using ICTs can only reinforce existing support structures but cannot replace them. Institutions offering ODL under such contexts are tasked with exploring strategies of effectively sustaining study centres so as to fulfil their mandate.

Acknowledgement

The authors gratefully acknowledge support towards completion of this study that was provided by the Cambridge-Africa Programme under the auspices of the Cambridge–Africa Partnership for Research Excellence (CAPREx) and Makerere University.

References

Aguti, J. N. (2004). *A study of In-service Distance Education for Secondary School teachers in Uganda. Developing a Framework for Quality Teachers Education Programme.* Unpublished PhD Thesis, University of Pretoria.

Bbuye, J. (2012). *Developing a framework for the management of Distance Education learner support for private and public universities in Uganda*. PhD Thesis. Unpublished.

CCE (1990). A proposal to start the External Degree programme. CCE, Makerere University. Unpublished.

Ipaye, B. (2008). Strategies *for sustainable learner support services in developing nations:* Learner support services, National University of Nigeria. Retrieved from: http://pcf4.dec.uwi.edu/viewpaper.php?id=57print=1.

Kember, D. & Dekkers, J. (1988). The role of study centres for academic support in distance education. Distance Education, 8(2), 30-42.

Mills, R. (2002). The role of student centres in open and distance education: A glimpse of the future. In Mills R. and A. Tait (Eds.) *Supporting the learner in open and distance learning*, pp. 73-87. London: Pitman Publishing.

Moore, M. G. (1993*). Theory of Transactional distance*. In D. Keegan (Ed.), Theoretical principles of distance education. (pp. 22-38) London / New York: Routledge.

Muyinda, P. B. (2013). *Open and Distance learning in Dual Mode Universities: A treasure unexploited.* In International Perspectives of Distance Learning in Higher Education. Published by In Tech on line.

Nanyongo, E. P. (2002). *Changing entrenched learner support systems. In. Tait & Mills (eds.), Rethinking learner support in distance education*: Change and continuity in an international context. London: Routledge.

Perraton, H. (1993). *Distance Education for Teacher Training*. London: Routledge.

Robinson, B. (1997). *Distance Education for primary teacher training in developing countries.* In J. Lynch C. Modgil &S. Modgil (Eds.) Education and Development: Tradition and Innovations in delivering primary education. London: Cassell Edu Press.

Rumble, G. (1992). *Management of Distance Learning System.* Paris: UNESCO and IIEP.

Saint, W. (1999). *Tertiary Distance Education and Technology in Sub- Saharan Africa.* Washington, DC: Working Group on Higher Education, Association for the development of Education in Africa (ADEA) / World Bank.

Simpson, O. (2013). Student's retention in Distance Education: Are we failing the students? *The Journal of Open, Distance and E-Learning*, 28 (2), 105-119.

Tait, A., R. Mills (2000). *Rethinking Learner Support in Distance Education* London: Routledge Falmer. pp. 185-197.

Tait, A. (2003). *Reflections on students Support in Open and Distance Learning. Journal for international Review of research in Open and Distance Learning*. 1, 287 – 299.

UNESCO (2002*). Teacher Education Guidelines*: Using Open and Distance Learning. Technology, Curriculum, Cost and Evaluation.

Wrightson, T. and Otto, A. (2005). *Makerere University Distance Learning Programmes Evaluation Report. Kampala:* Makerere University.

East African School of
Higher Education Studies & Development

Makerere Journal of **Higher Education**
ISSN: 1816-6822; 10 (1) (2018) 61 – 72
DOI: http://dx.doi.org/10.4314/majohe.v10i1.4

http://ajol.info/majohe

Role of Industry and International Organisations in Improving Technical Vocational Education and Training in Nigeria

Ayonmike, Chinyere Shirley [1]

[1] Department of Technical and Business Education, Delta State University [E-mail: chinyereshirley@ymail.com]

Abstract. This paper reports the findings of a study that delved into the roles of industries and international organisations in improving Technical Vocational Education and Training (TVET) in Nigeria. A survey design was used. The 152 principals of the government technical colleges in the country comprised the population of the study. Seventy-six (representing 50 percent) of these principals were selected to participate in the study. These were selected using stratified random sampling. Data was collected using a 10-item questionnaire. The data was analysed using means and student-t test at the level of significance p = .05. The study revealed that industries and international organizations have great roles to play in improving TVET in the country. Hence, it is recommended that government makes policies that will promote collaboration between TVET institutions and these organisations.

Keywords: TVET; Education-Industry partnerships; Reform.

1 Introduction

TVET is a viable instrument for human capital development, economic progress, and sustainable livelihood. It is skill oriented and involves the acquisition of vocational and occupational skills in various trades and occupations like medicine, engineering, music, fine and applied arts, business, hospitality, oil and gas, ICT, and transport. TVET is about work and training for work. It is an instrument for sustainable industrial development (Abdulmutallib & Musa, 2014). Technical vocational education and training (TVET) is a notable instrument for producing skilled manpower for various sectors of the nation's economy, thereby creating jobs for her citizens and contributing to wealth generation (Ayonmike, 2016). TVET sometimes also known as Vocational

Education and Training (VET) or Career and Technical Education (CTE) can be regarded as a means of preparing for occupational fields and effective participation in the world of work. It also implies lifelong learning and preparation for responsible citizenship (Ayonmike, 2016).

According to Idialu (2007) in Abdulmutallib and Musa (2014), TVET is a form of education, training or retraining which is directed towards developing the learner to become productive in paid or self-employment. Japan International Cooperation Agency (JICA, 2001) described TVET as a comprehensive term to cover institution-based formal and non-formal education and training programmes in the technical and vocational institutes.

According to Odugbesan (1995), even before the advent of the British in Nigeria, many communities and cultures had developed their own system of informal, formal and vocational education systems. Vocational education was done through the system of apprenticeship, whereby young boys and men were attached to master craftsmen trades and skills such as carpentry, masonry, blacksmithing, foundry, carving, textile design, and dyeing to mention a few. Such apprentices could spend from three to seven years depending on the trades they were specialising in, the Masters' skill, competence and exposure and the apprentice's individual ability and performance. At the end of such training, the *graduate* apprentice was assisted by the family to acquire necessary tools and local equipment to start his own trade.

Technical vocational education is recognized as that aspect of education which leads to the acquisition of practical and applied skills as well as basic scientific knowledge that will enable an individual to secure employment in a particular occupation for sustainable livelihood. These skills cannot be acquired in a vacuum but rather in a well-established and functional workshop with the right tools, equipment and machines for effective implementation of TVET programme (Ayonmike, 2016). TVET can only create jobs and generate wealth if giving the required attention by government and stakeholders in the direction of implementation of TVET curriculum at all levels through the provision of the required human and material resources for effective implementation of TVET programmes (Ayonmike, 2016).

However, formal technical education programmes are acquired at primary to university level of education. Odugbesan (1995) opined that TVET outside the universities is offered at a) Local Apprenticeship with Master craftsmen level, b) Prevocational school, c) Vocational Schools (Artisans - Various trades Craftsmen - National Technical Certificate (NTC), d) Technical Colleges - Master craftsmen, Advanced Technical Certificate (ANTC), e) Polytechnics and Monotechnics High Technician/Technology Technicians - National Diploma (ND) and Higher National Diploma (HND), f) Colleges of Education (Technical) Technical Teachers -National Certificate in Education NCE (Tech).

After the national independence in 1960, the products of the nation's formal educational institutions, though considerably increased in number, did not acquire the skilled knowledge and varied technological expertise to meet the specific needs of the industrial sector. It therefore became clear that a link between the industries and the educational institutions must be created in order to meet the needs. One of the ways of bridging this gap was the establishment of the Students Industrial Works Experience Scheme (SIWES) by the Federal Government. In the face of criticism from industries that university and polytechnic graduates lacked the practical skills to undertake serious industrial work, SIWES was established (Odugbesan, 1995). In the light of the above, partnerships with industry if found to be fundamental to securing relevance of training, industry must play an active role and TVET and skills development need to be aligned with workforce needs (Shanti, 2013).

The industries have contributed in improving the competencies of graduates from polytechnics and university through attachment of students under the Students Industrial Works Experience Scheme (SIWES). As well, the industries contributed to education through the Industrial Training Fund (ITF), according to Odugbesan (1995), the Industry Training Fund (ITF) was one of the parastatals established by the Federal Government of Nigeria to create a link between educational institutions and industries. This was done during the second National Development Plan Period (1970-1974). Its enabling Decree, No 47 of 8th October, 1971, defined its objectives as the promotion and encouragement of the acquisition of skills in industry and commerce with a view to generating a pool of indigenous trained persons sufficient to meet the needs of the economy. To be able to generate this needed pool of skilled and efficient indigenous persons, the governing council of the industrial Training Fund is empowered by the decree to: provide facilities for training of persons employed in industry or commerce, approve such courses and facilities provided by other persons; consistently and regularly vet areas of industry or commerce that require special manpower development actions and to recommend the kind of training needed, the standards to be attained, and to ensure that such standards are met; assist persons in finding facilities for training for employment in industry and commerce; and to conduct or assist other persons to conduct research into any matter relating to training in industry.

Industries contributions in other areas include: donation of equipment, machinery and computer components (new and/or used ones) to the institutions for their laboratories and workshops, where funds are limited. As well, special endowments, scholarships and awards are often instituted by private companies and industry to promote their special interest in an institution (Odugbesan, 1995). Similarly, Popoola (1995) posited that the employers' role in establishing co-operation includes the following: need to articulate what skills and specialisation are required; communicate what numbers can be comfortably accommodated;

provide challenges and real work experience in the planned programme for students on industrial attachment; provide supports services for Vocational Educational Institutions through maintenance service for training equipment, and make their own plants and equipment available to educational institutions; and make available to the institutions specialist instruction through in-house experts and professionals.

According to Lugujjo and Manyindo (1995), co-operation between educational institutions and enterprises in technical and vocational education is manifested in the form of industrial training for students, study tours, organising seminars and workshops and recently, through execution of joint projects between the small scale sector and the institutions. The researchers further opined that a country's technical and vocational training system and its subsequent linkage to enterprises is a decisive factor determining the competitive strength and level of development of its economy, production and maintenance. Skilled workers enhance the quality and efficiency of product development, usage, production and maintenance. The establishment of linkages between technical and vocational training institutions and enterprises provides a solid basis for: curriculum adjustment and reform, student placement for practical experience, staff exchange (staff development), identification of employment opportunities, execution of joint projects, identification and selection of part-time instructors, upgrading of training officers and policy makers' knowledge about the sector, and overall assessment of the success of education and training in meeting the requirements of employers/enterprises.

In terms of building national technical capacity, the accrued benefits to the students in this co-operation is the early exposure to the world of work which enables them to link theory to practical experiences in enterprises. In some cases, students also embark on practical projects to solve problems within the enterprises. In order to achieve all this, the following are proposed: Regular short term courses/seminars should be organised to orient lecturers and trainers, both in enterprises and training institutions, about the mechanisms for co-operation and linkages; strong viable liaison offices/committees should be created in each of the training institutions; and · a National coordinating body should be established, preferably within the framework of National Commission for UNESCO. Similarly, Amaechi (2013) in Ogbunaya & Ekereobong (2015), suggested the following as strategies for repositioning TVET in Nigeria: improvement of instructional and infrastructural resources in TVET institutions, regular capacity building and training workshops for teachers of TVET; increased funding for TVET institutions for procurement of equipment and more facilities for better learning; better synergy between TVET institutions and industry through exchange programmes; genuine political will by government and education policy makers; improving the conditions of service and regular motivation for TVET teachers and instructors; lastly, regular sensitization to

improve the public's poor perception of TVET as desirable course option instead of tagging it as inferior course option.

According to Abdulmutallib and Musa (2014), the current global recession is affecting every aspect of human endeavor. This is because a depressed economy like ours in Nigeria is affecting the skills acquisition especially in terms of the vocational and technical education and training for its sustainable industrial development. Nigeria is facing very serious economic problems which are affecting its well-planned policies on TVET because of some factors such as corruption and non-implementation of its well-planned policies on Technical Vocational Education and Training (TVET), there are also more specific problems in technical teaching in Nigeria, but more of these problems have become more pronounced as a result of the poor economy that can never sustain our industrial development in Nigeria. Hence there is need for industries and international organizations to help improve TVET in Nigeria. In this work therefore, international organizations include entities like United Nations, African Union, European Union, and TVET Association, while industries include local and multinational corporations operating in Nigeria. As well, mechanism refers to international organization and industries.

1.1 Statement of the Problem

The current economic situation of Nigeria coupled with the continuous fall in crude oil production and prices has affected virtually all the sectors of the country. This economic situation of recession has posed tremendous challenges in the implementation of TVET at all levels due to the fact that TVET is cost intensive as a result of the nature of material and human resources needed for effective implementation TVET programmes. However, there is a paradigm shift from solely relying on government for the funding of TVET in developed nations. As well, other mechanisms such as grants from donor organizations exist in developed countries such as United State of America (USA), the United Kingdom, France, Japan, and Germany among others. The question now is that can alternative sources of funding be used to complement government funding of TVET in Nigeria? This study was conducted to try and respond to this question.

1.2 Purpose of the Study

The purpose of the study was to examine the role of stakeholders in improving TVET in Nigeria. Specifically, the study seeks to find out the role of:

1. Industries in improving TVET in Nigeria.
2. International organisations in improving TVET in Nigeria.

1.3 Research Questions

The following research questions guided the study:

1. What are the roles of industries in improving TVET in Nigeria?
2. What are the roles of international organisations in improving TVET in Nigeria?

1.4 Hypotheses

The following hypotheses were tested at .05 level of significance:

1. There is no significant difference in the mean response of technical college principals from Northern and Southern Nigeria on the roles of industries in improving TVET in Nigeria.
2. There is no significant difference in the mean response of technical college principals from Northern and Southern Nigeria on the roles of international organisations in improving TVET in Nigeria.

1.5 Significance of the Study

This study will be significant to administrators of TVET institutions, TVET lecturers, Students, National Board for Technical Education (NBTE), National Commission for Colleges of Education (NCCE), National Universities Commission (NUC), Industries, International Organisations, Federal Ministry of Education, and State Ministry of Education. The findings of the study will inform the various TVET Stakeholders on how industries and international organization can improve TVET at all levels. Furthermore, the findings of this study will remain a reference point for future researchers in the field of TVET. Lastly, the findings will serve as practical guide in improving TVET through stakeholders such as industries and international organisation.

2 Methodology

Survey research design was used in this study. The population of the study was all the 152 technical college principals in Nigeria (National Board for Technical Education, nd.). Stratified random sampling technique was used to select 76 principals representing 50% of technical college principals from Northern and Southern Nigeria, this implies that 34 and 42 technical college principals were selected respectively from Northern and Southern Nigeria making up a total sample of 76 technical college principals. The instrument for data collection was Role of Stakeholders in Improving TVET Questionnaire (RSITVETQ) , it is a self-developed 10 item 4-point scale questionnaire of Strongly Agree(4),

Agree(3), Disagree (2) and Strongly Disagree (1), the questionnaire was validated by three lecturers from Delta State University, Abraka. The reliability of the RSITVETQ was tested by administering 20 copies to TVET lecturers from tertiary institutions in Delta State and Cronbach Alpha technique was used to ascertain the reliability of the instrument which yielded a reliability coefficient of 0.72. Data were collected through the aid of 15 research assistants who were students of the Department of Technical and Business Education, Delta State University, Abraka. Mean was used to analyse the research questions, while t-test was used to test the hypotheses at .05 level of significance. Any mean response of 2.50 will be regarded as Agree, and below 2.50 will be regarded as Disagree. As well, when t-calculated is less than t-critical, the hypothesis will be accepted, and when t-calculated is greater than t-critical, the hypothesis will be rejected.

3 Findings and Discussion

The findings of the study are presented according to the research questions and hypotheses that guided the study.

3.1 Roles of Industries in Improving TVET in Nigeria

The findings on the roles of industries in improving TVET in Nigeria are shown in Tables 1 and 2.

Table 1: Mean Scores of Technical College Principals on the roles of Industries in improving TVET

What are the roles of industries in:	Northern Technical College Principals (N=34)		Southern Technical College Principals (N=42)	
	Mean	Remark	Mean	Remark
Provision of infrastructural facilities in TVET institutions.	2.78	Agree	3.12	Agree
Provision of feedback to TVET institutions on the competencies of TVET graduates.	3.00	Agree	3.08	Agree
Sponsoring of training and retraining programmes for TVET teachers/instructors.	3.12	Agree	3.31	Agree
Provision of instructional materials to TVET institutions.	2.56	Agree	2.78	Agree
Awarding research grants & scholarships to TVET students & instructors.	3.23	Agree	3.43	Agree
Grand Mean	2.94		3.14	

Table 1 revealed that industries will help to improve TVET through: Provision of infrastructural facilities in TVET institutions; Provision of feedback to TVET institutions on the competencies of TVET graduates; Sponsoring of training and retraining programmes for TVET teachers/instructors; Provision of instructional materials in TVET institutions and; Awarding grants for research and scholarship to TVET students, teachers and instructors.

These findings are in line with other research findings. Buttressing the findings, Amaechi (2013) in Ogbunaya & Ekereobong (2015), suggested the following as strategies for repositioning TVET in Nigeria: improvement of instructional and infrastructural resources in TVET institutions, regular capacity building and training workshops for teachers of TVET; increased funding for TVET institutions for procurement of equipment and more facilities for better learning; better synergy between TVET institutions and industry through exchange programmes; genuine political will by government and education policy makers; improving the conditions of service and regular motivation for TVET teachers and instructors; lastly, regular sensitization to improve the public's poor perception of TVET as desirable course option instead of tagging it as inferior course option.

Similarly, in Lugujjo and Manyindo (1995), co-operation between educational institutions and enterprises in technical and vocational education is manifested in the form of industrial training for students, study tours, organising seminars and workshops and recently, through execution of joint projects between the small scale sector and the institutions. The researchers further opined that a country's technical and vocational training system and its subsequent linkage to enterprises is a decisive factor determining the competitive strength and level of development of its economy, production and maintenance. Skilled workers enhance the quality and efficiency of product development, usage, production and maintenance.

The establishment of linkages between technical and vocational training institutions and enterprises provides a solid basis for: curriculum adjustment and reform, student placement for practical experience, staff exchange (staff development), identification of employment opportunities, execution of joint projects, identification and selection of part-time instructors, upgrading of training officers and policy makers' knowledge about the sector, and overall assessment of the success of education and training in meeting the requirements of employers/enterprises. As well, Odugbesan (1995) posited that industries contributions in other areas include: donate equipment, machinery and computer components (new and/or used ones) to the institutions for their laboratories and workshops, where funds are limited. As well, special endowments, scholarships and awards are often instituted by private companies and industry to promote their special interest in an institution.

Hypothesis 1: There is no significant difference in the mean response of technical college principals from Northern and Southern Nigeria on the roles of industries in improving TVET in Nigeria.

Table 2: Difference in the Principals' mean scores on the roles of industries in improving TVET

Group	N	Mean	SD	t-cal	Decision
Northern Technical College Principals	5	2.94	0.27	1.260	Accept
Southern Technical College Principals	5	3.14	0.25		

Df 8, t-crit= 1.860, SD = Standard Deviation

Since t-calculated (1.260) is less than t-critical (1.860), hypothesis 1 which stated that there is no significant difference in the mean response of technical college principals from Northern and Southern Nigeria on the roles of industries in improving TVET in Nigeria was accepted.

3.2 Roles of international Organisations in Improving TVET in Nigeria

The findings on the roles of international organisations in improving TVET in Nigeria are shown in Tables 3 and 4.

Table 3: Mean Scores of Technical College Principals on the roles of International organisations in improving TVET

What are the roles of international organisations in:	Northern Technical College Principals (N=34)		Southern Technical College Principals (N=42)	
	Mean	Remark	Mean	Remark
Sharing of global TVET best practices with TVET institutions in Nigeria	2.65	Agree	3.21	Agree
Organisation of exchange programmes for TVET students and instructors	3.24	Agree	3.08	Agree
Linking TVET institutions across the globe to TVET institutions in Nigeria	3.01	Agree	2.95	Agree
Organisation of training workshops, seminars and conferences for TVET students and instructors in Nigeria.	2.92	Agree	2.87	Agree
Awarding grants to TVET institutions for upgrading of facilities.	3.17	Agree	3.23	Agree
Grand Mean	3.00		3.07	

Table 2 revealed that international organization can improve TVET in Nigeria through: Sharing of global TVET best practices with TVET institutions in Nigeria; Organisation of exchange programme for TVET students, teachers, and instructors; Linking TVET institutions across the globe to TVET institutions in Nigeria; Organisation of training workshops, seminar and conferences for TVET

students, teachers, and instructors from TVET institutions in Nigeria and; Awarding of grant to TVET institutions for upgrading of facilities by international organisation. This findings are in line with previous research findings. In the face of criticism from industries that university and polytechnic graduates lacked the practical skills to undertake serious industrial work, SIWES was established (Odugbesan, 1995). Partnerships with industry is found to be fundamental to securing relevance of training, industry must play an active role and TVET and skills development need to be aligned with workforce needs (Shanti, 2013).

Hypothesis 2: There is no significant difference in the mean response of technical college principals from Northern and Southern Nigeria on the roles of international organisations in improving TVET in Nigeria.

Table 4: Difference in the Principals' mean scores on the roles of international organisations in improving TVET

Group	N	Mean	SD	t-cal	Decision
Northern Technical College Principals	5	3.00	0.23	0.558	Accept
Southern Technical College Principals	5	3.07	0.16		

Df 8, t-crit=1.860, SD = Standard Deviation

Since t-calculated (0.558) is less than t-critical (1.860), hypothesis 1 which stated that there is no significant difference in the mean response of technical college principals from Northern and Southern Nigeria on the roles of industries in improving TVET in Nigeria was accepted.

4 Conclusion and Recommendations

Based on the findings of this study, it was concluded that to improve TVET in Nigeria, stakeholders such as industries and international organizations have great role to play through: Sharing of global TVET best practices with TVET institutions in Nigeria; Organisation of exchange programme for TVET students, teachers, and instructors; Linking TVET institutions across the globe to TVET institutions in Nigeria; Organisation of training workshops, seminar and conferences for TVET students, teachers, and instructors from TVET institutions in Nigeria and; Awarding of grant to TVET institutions for upgrading of facilities by international organisations. Furthermore, industries will help to improve TVET through: Provision of infrastructural facilities in TVET institutions; Provision of feedback to TVET institutions on the competencies of TVET graduates; Sponsoring of training and retraining programmes for TVET teachers/instructors; Provision of instructional materials in TVET institutions and; Awarding grants for research and scholarship to TVET students, teachers

and instructors. The security of the industries is dependent on the manpower development from allied area of study and from the educational institutions, in Nigeria, industrial and technological advancement is crippling, and therefore requires adequate strategies to rescue the situation. Therefore, TVET policy framework and TVET-industry partnership are the instruments necessary to salvage the manpower development of the industry via TVET education programmes, so that there will be continual replacement of competent manpower in the industries. Hence, the following recommendations were made:

1. Government should make policy that will promote collaboration between TVET institutions and stakeholders such as industries and international organizations to improve TVET.
2. Government and TVET boards should include managers of industries and heads of international organizations when planning TVET programme to create lasting relationships.
3. Stakeholders such as industries and international organizations should be given the opportunity to conduct independent assessment of TVET programmes for improvement purpose.
4. TVET administrators should build working relationships with stakeholders such as industries and international organizations to improve TVET programmes.
5. Government and stakeholders such as industries and international organizations should work collectively to improve training methods in TVET institutions.

References

Abdulmutallib, U. B. & Musa, A. A. (2014). Strategies for improving technical vocational education and training for the enhancement of public private partnership for sustainable industrial development of Nigeria. *ATBU, Journal of Science, Technical & Education; Vol. 2(2), 105-111.*

Ayonmike, C. S. (2016). Technical vocational education and training in Nigeria for job creation and wealth generation: myths and realities. *ATBU, Journal of Science, Technology & Education, 4 (2), 1-8.*

JICA (2001). *The study of development of a master plan to strengthen technical education in Ghana*. Main Report, No, 106 November pp151.

Lugujjo, E. & Manyindo, B. M. (1995). Uganda: Co-operation links. In UNESCO-UNEVOC (1995). Establishing partnership in technical and vocational education. Co-operation between Educational Institutions and Enterprises in Technical and Vocational Education: A Seminar for Key Personnel from Africa and Asia Berlin, Germany, 02-12 May.

National Board for Technical Education NBTE (nd). Approved technical colleges in Nigeria. Retrieved 13th February 2017 from http://nbte.gov.ng/techcolleges.html.

Odugbesan, F. A. (1995). Nigeria: The perspective of an educational institution. In UNESCO-UNEVOC (1995). Establishing partnership in technical and vocational education. Co-operation between Educational Institutions and Enterprises in Technical and Vocational Education: A Seminar for Key Personnel from Africa and Asia Berlin, Germany, 02-12 May.

Ogbunaya, T. C. & Ekereobong, S. U. (2015). Repositioning technical and vocational education and training (TVET) for youth's employment and national security in Nigeria. *Journal of Education and Practice, (32), 141-147.*

Popoola, B. A. O. (1995). Nigeria: The perspective of an employer. In UNESCO-UNEVOC (1995). Establishing partnership in technical and vocational education. Co-operation between Educational Institutions and Enterprises in Technical and Vocational Education: A Seminar for Key Personnel from Africa and Asia Berlin, Germany, 02-12 May.

Shanti, J. (2013). Skill development: Promising approaches in developed countries and emerging economies. Asian Development Bank (ADB) Briefs, No. 19.

East African School of
Higher Education Studies & Development

Makerere Journal of **Higher Education**
ISSN: 1816-6822; 10 (1) (2018) 73 – 91
DOI: http://dx.doi.org/10.4314/majohe.v10i1.5

http://ajol.info/majohe

Revamping Technical Vocational Education and Training through Public-Private Partnerships for Skill Development

Jane Itohan Oviawe [1]

[1] Department of Vocational and Technical Education, Ambrose Alli University, Ekpoma [E-mail: janeoviawe@yahoo.com]

Abstract. Technical Vocational Education and Training (TVET) faces huge demands globally due to the high level of unemployment and the quest for technological development, industrialization and economic growth. For TVET to achieve its objectives of enabling leaners to catch up with the ever-changing living standard in a fast growing technological world and creating jobs for sustainable living, it must be strengthened through public-private partnerships (PPP) because government cannot singlehandedly shoulder this enormous task. It is with this understanding that this paper examined the need for PPP in TVET, strategic issues for TVET in Africa, reforms in TVET, PPP models for skill development and ways of revamping TVET through PPP. The paper suggests that PPPs should be encouraged. Sharing of tools and equipment between TVET institutions and industries—aimed at ensuring that learners are abreast with developments in the world of work—is also recommended.

Keywords: TVET; Public-private partnerships; Employment.

1 Introduction

Technical Vocational Education and Training (TVET) is globally recognized for its role in preparing people for dynamic engagement in occupations of functional value and effective source of skilled workforce. The United Nations Educational Scientific and Cultural Organization (UNESCO) and the International Labour Organization (ILO) recommendation of 2000 on TVET for the 21st century define TVET as: (i) an integral part of general education; (ii) a means of preparing for occupational fields and effective participation in the world of work; (iii) an aspect of lifelong learning and a preparation for responsible citizenship; (iv) an instrument for promoting environmentally sound sustainable development; (v) a method of facilitating poverty alleviation (Oviawe, Uwameiye & Uddin, 2017). Similarly, UNESCO (2009) defined TVET as all forms and aspects of education

that are technical and vocational in nature, provided either in educational institutions or under their authority, by public authorities, the private sector or through other forms of organized education, formal or non-formal, aiming to ensure that all members of the community have access to the pathways of lifelong learning. The above definitions of TVET implies that its goal is to fight ignorance and literacy, provide knowledge, develop skills and inculcate the attitudes that are required for entry and progressing in any occupation. To Kukoyi (2009), TVET is a planned programme of courses and learning experiences that begin with exploration of career options, support basic academic and life skills, and enable achievement of high academic standards, leadership and preparation for industry-defined work. This implies that TVET prepares learners for career that are based on manual or practical activities, traditionally non-academic and totally related to a specific trade, occupation or vocation. Unlike general education, learning in TVET is centred on 'applied' as opposed to 'academic', practical as opposed to theory, and skills as opposed to knowledge. Accordingly, TVET today face huge demands globally due to high level of unemployment. For TVET to achieve its envisaged objectives, it must be properly strengthened. Government alone cannot shoulder this enormous task hence the need for TVET and public/private collaboration. This paper therefore examined how public/private partnership or collaboration could be employed for strengthening workplace training in TVET.

1.1 Concepts of Public/Private Partnership and TVET

The private sector is the part of a country's economic system that is run by individuals and companies, rather than the government. Most private sector organizations are run with the intention of making profit. An easier way to think of the private sector is by thinking of organizations that are not owned or operated by the government. The public sector is owned and controlled by national, state and local governments. The differences between public and private sectors include the following: (i) the public sector is made up of agencies and institutions owned and operated by the government, while the private sector is made up of small businesses, corporations, as well as profit and non-profit organizations; (ii) the public sector is not profit driven, while this is the case with the private sector; (iii) the end beneficiary of the services offered by the public sector is the general public, while it is the general consuming public who take advantage of the goods and services offered for profit by the private sector businesses.

The alliance between TVET and public/private sector is referred to as partnership. A partnership is an agreement where parties or partners agree to cooperate to advance their mutual interests. This agreement could be between government, schools, employers, professional associations, employees and their representatives, the local community and combinations of organizations. TVET

institutions can partner with public/private sector to extend their frontiers in form of Public-Private Partnership (PPP).

The PPP Policy (2012) defined Public-Private Partnership as a long-term procurement contract between the public and private sectors in which the proficiency of each party is focused in the designing, financing, building and operating an infrastructure, project or providing services through the appropriate sharing of resources, risks and rewards. Maigida (2014) defined public private partnership as a joint mutual agreement entered into by the government and private bodies to provide services to people based on established terms. Similarly, Agence Francaise De Development (AFD) (2014) viewed public-private partnership as that consisting of bringing together public authorities and private stakeholders to devise, finance, build, manage or preserve a project of public interest. PPP is a generic term for the relationships formed between the private sector and public bodies often with the aim of introducing private sector resources and/or expertise in order to help provide and deliver public sector assets and services. Contextually, PPP in TVET refers to various agreements between the public and private sector partners by which the private sector partners delivers infrastructures and services that should have been provided by the public sector without comprising the profit objectives of the private partners, the primary aim of which is to provide opportunities for practical training of learners for skill development. According to Piyasiri, Suraweera & Edirinsootiya (2008), there are two types of Partnership. These are the formal partnership which obtains where each party's role and obligations are spelt out in a written agreement and informal partnership where the roles and obligations are agreed verbally. The essential characteristics of PPP according to PPP Policy (2012) are:

1. Involve an arrangement with a private sector entity by delegating one or more project functions to them (that is delegating to a private party the responsibility to design, build, or expand/develop, operate, maintain, rehabilitate, or finance an asset or service);
2. Require a private party to take significant risk in performance of functions delegated – that is, the private party's revenue is dependent on its performance (the availability of an asset, or the quantity and quality of outputs supplied);
3. Involve public infrastructure/asset or service provided for public benefit where the output has the element of facilities/services being provided by the government as a sovereign to its people; and
4. Operations or management of the asset or service is within specified period. The agreement with the private sector entity has the element of a time period after which the arrangement comes to a closure. Hence, the arrangement is not in perpetuity.

1.2 Need for Public/Private Partnership in TVET

The unfortunate neglect of TVET is an obstacle to national and global development. Governments globally have sought to address the issue of unemployment. The number of unemployed graduates and youths in the labour market is alarming but more alarming and disturbing is the quality of these graduates. Unemployment has bedevilled the lives of people causing untold hardship, suffering, dejection, frustration among others. The high rate of unemployment among youths has contributed to the high rate of poverty and social vices. The excerpts of statistics obtained from the National Manpower Board and Federal Bureau of Statistics that Nigeria has a youth population of 80 million representing 60% of her total population. 64 million of them are unemployed while 1.6 million are under-employed whereas about 112.5 million Nigerians live below the poverty line (National Bureau of Statistics, 2015).

TVET according to Australian National Training Authority (ANTA) (2003), is no longer seen as being solely in the realm of educational institutions but is increasingly involving workplaces, private individuals and a variety of other non-governmental and community organizations. ANTA stated that the increasingly competitive changes in the nature of the economy as well as occupational and workplace changes have had a significant impact on the nature of the workplace. This implies that the skill level of present ad prospective employees must be continuously developed. As such, workplace learning (both formal and informal) is taking on an increasingly important role in the education and training of the workforce. Hence, there is need for collaboration.

The need for PPP in TVET is also justified by the fact that TVET institutions and their programmes are ineffective and of low quality. There are a lot of challenges facing TVET in Africa the greatest of which is inadequate funding by the governments. In addition, infrastructures in most schools, including higher institutions are dilapidated. Moreover, there is an adverse learning condition characterized by paucity of teaching and instructional materials, absence of adequate infrastructures in most TVET institutions. Okeshola (2012) stated that the hygiene and sanitary conditions in most TVET institutions are also critical and this has been identified as a contributory factor to the poor retention and participation of girls in TVET.

Research evidences indicate the following as challenges facing TVET: most formal TVET institutions are currently operating in an environment that is characterized by low quality training and mismatch between training and labour market skill demand (Yusuf & Soyemi, 2012); the quality of TVET facilities like workshops, books, classrooms, learning environment, machines, computer rooms, TV/Audio visual, instructors and contents of curriculum are inadequate in most tertiary institutions (Akhuemonkhan & Raimi, 2013); inadequate classroom blocks, lack of conducive staff offices, inadequate electricity supply,

lack of water supply, inadequate workshop spaces, lack of TVET machines and tools, lack of TVET books, lack of consumable materials and inadequate instructional materials (Ayonmike, Okwelle & Okeke, 2013).

The obvious implication of these challenges is that the quality of training given to the learners is very low and they may end up not acquiring adequate skills required for getting and sustaining employment in the labour market or being self-reliant. In view of these issues, PPP has become necessary for the following reasons: the widening infrastructure gap, increased demand for TVET, inadequate government funding, inadequate facilities and falling standard of education. PPP is inevitable due to the growing economic and financial difficulties which have made it impossible for many governments to pay for the rather high cost of TVET (Okoye & Chijioke, 2013).

2 Strategic issues for PPP in TVET in Africa

In spite of the sterling position of TVET in the socio-economic transformation globally, it has suffered neglect for too long in Africa. UNESCO (2009) stated that as promising as the potentials of TVET are, it is however, estimated that only 10% of secondary school students worldwide are enrolled in school-based TVET programmes when considered from the standpoint of enrolment, manpower, facilities and funding. In order TVET to achieve the desired capacity building and sustainable development, the following challenges and issues must be addressed:

2.1 Enrolment

According to UNESCO Institute of Statistics (2006), African countries can be grouped into three categories when judged on the basis of percentage enrolment of TVET institutions against the total enrolment of conventional secondary school programmes in 2005. The first group of 10 countries according to the ranking scores included Rwanda (34%), Cameroon, Democratic Republic of Congo, Egypt, Libya, Congo, Mauritius, Benin, Algeria and Mali all with a percentage of vocational/technical schools enrolment to conventional secondary schools' enrolment up to 10% or more. The second group had a proportion of vocational/technical schools' enrolment to general secondary education enrolment between 5% and 9%. These groups of countries include Burkina-Faso, Burundi, Djibouti, Mozambique, and Tunisia, 8% each, Botswana, Morocco, South Africa, Cape-Verde, and Togo 5% each. The third group of countries had percentage enrolment in technical/vocational schools of the total students of secondary school programmes less than 5%. These countries included Mauritania (4%), Uganda (4%), Niger, Ethiopia, Ghana, Guinea-Bissau, Zambia, Chad,

Eritrea, Gambia, Kenya, Lesotho, Sao-tome, Senegal and Sudan, 1% each. It is disheartening to find that Nigeria did not feature in any of these three categories, implying that her enrolment was less than 1%. The long proportion of students enrolled in TVET programmes signals stagnation and overall poor public training capacity. TVET has failed to absorb many school leavers who would have had opportunities to make useful contributions to the development of the society.

2.2 Public Perception

Generally, technical and vocational education has been perceived as a career path for the less academically endowed. This has been fuelled partly by the low academic requirements for admission into TVET programmes and the limited prospects for further education and professional development (African Union, 2001). Similarly, TVET personnel tend to show low self-esteem in social relations due to devalued status accorded TVET. Universally, nations have identified this neglect and devalued esteem. To this end, Ruqayata Rufai, a Nigerian former Minister for Education frowning at the poor public perception asserted that one crucial challenge affecting TVET is low societal estimation of TVET. Bo (2012) commenting on the situation in China posited that for a long time, even today, TVET is regarded as a sub-class or lower rank education. This negative mind set can be changed through intensive public enlightenment that TVET is an effective programme to train skilled workers for the employment market and sustainable livelihood.

2.3 Attitude towards Implementing TVET Policies

TVET programmes need to play a pivotal role in developing a new generation of people who will face the challenges of achieving sustainable socio-economic development throughout the globe (UNESCO, 2001). The major issue facing TVET implementation is the lack or unsatisfactory policy framework, and therefore stated that good policy framework will help promote TVET and its curriculum design and delivery to meet the needs of the labour market. There is need to revise the school's curriculum to reflect multiple intelligent from the industrial sector. To ensure that the issue of policy framework in TVET is addressed, publicity and advocacy for new TVET policy can serve as a means for proper implementation of TVET programmes. Since policy framework is the driving force to the planning, implantation and attainment of any programme or organizational objectives, therefore a good TVET policy framework can help to monitor and control manpower development for the workplace.

2.4 Skilled Manpower

The delivery of quality TVET is dependent on the competence of the instructors. Most instructors possess the theoretical knowledge but lack the technical and

practical skills. Also instructors may not be abreast with new technologies in the workplace. This leads to the production of graduates who lack the saleable skills and competences required by employers of labour. These dampen the interest the interest of investors in TVET. But the situation could be better if the PPP is fully encouraged.

2.5 Relating TVET to Priority Areas of the Country

It is important to identify priorities of a nation before coming out with innovation areas that would contribute to the rapid development of the nation. TVET institutions should fashion its training in harmony with identified priorities of the country. A study by the African Union on the state of TVET in 18 African nations has shown the priority areas for vocational training in Africa in the following order: agriculture, public health, water resources, energy, environmental management, information and communication technology, construction and maintenance.

The general recommendation from the states include the development of appropriate competency-based curriculum in these areas, and compulsory implementation of TVET programmes for students in strategic fields such as entrepreneurship, computer literacy, agriculture and building construction. Training without consideration to priority areas will certainly result in flooding the workplace with unwanted skills thereby raising the level of unemployment and under-employment.

2.6 Linking TVET with Traditional Skills

Traditional skills have served tremendously in providing a source of livelihood. Some of these have been abandoned in quest for foreign skills. Where foreign skills can no long suffice due to lack of raw materials and where there is plenty of raw materials, TVET programmes can inject innovation into local skills for the production of traditional artefacts and related crafts to safeguard them from being extinct and to provide sustainable living.

2.7 Funding of TVET

Funding is an absolutely crucial input of any educational system. It provides the essential purchasing power with which education acquires its human and material resources. It is difficult to talk of the relevance and quality of education without considering the issue of funding and indeed, the funding process. TVET has suffered in the hands of general education administrators who in many nations have control over funds especially when such funds are centrally controlled, and where TVET is jointly managed with general education. In the situation where

the two are jointly managed the likely personnel in control, for obvious reasons, is the general educator who hardly understands that TVET is much more capital intensive and more financially demanding than general education. A way out is to separate the management of TVET from that of general education. In Nigeria, the establishment of the National Board for Technical Education (NBTE) and TVET boards at the State level has to an extent addressed the management issues. However, a lot still need to be done by ensuring that only professional TVET managers and policy makers with adequate expertise and insight be placed in control of TVET.

2.8 Training Facilities

Training for high quality skills requires appropriate equipment and tools, adequate supply of training materials and consistent practice by the learners. For result-oriented training, tools, equipment and other required facilities must be a replica of what is obtainable in the workplace where the trainees are expected to work upon graduation. There is little or no infrastructure and future positive policies out on ground by the government for TVET scholars and graduates. This is challenge as the private/public sectors do not have anything on discussion to consolidate on, hence most interested investors are discouraged.

2.9 Quality Assurance and Certification in TVET

TVET staff in many countries lack technical capacity to develop national qualifications courses, competency-based curriculum and training packages as well as quality assurance and accreditation standards in TVET (African Union, 2007). This situation gives rise to inconsistency in quality control and certification of TVET programmes. In Nigeria, the chief executives of National Directorate of Employment (NDE) and the NBTE jointly noted that the non-certification of programmes in government's vocational centres across the nation had been identified as a factor against high rate of people's enrolment in the centres (NBTE, 2013). The Federal Republic of Nigeria in 2013 approved a six-level National Vocational qualification framework that recognizes and certifies skills and vocations outside the school system and places same on the schemes of service (NBTE, 2013). It is worthy to note that a sound certification system is predicted on the quality of training. This means that the popularity and acceptability of a certificate is dependent on the extent to which its holders acquit themselves or show quality in their post-certification endeavours. To this end, NBTE (2013) posited that for each level of training, trainees should acquire necessary skills and show adequate knowledge of theoretical principles in their respective trades before certification.

City and Guilds Certificate of London Institute has been able to gain wide acceptability globally because of its sound quality assurance indices. Established in 1878, City and Guilds till date has developed qualifications across a variety of sectors that meet the needs of the 21st century's workplace and it works with over 10, 000 centres and training providers in 80 countries around the world, offering more than 500 qualifications across 28 countries (MCS Consulting Ltd, 2012).

2.10 Training for Skills, Job-Creation and Linking TVET Institutions to the Workplace

Developing relevant skills and matching training with job for sustainable living is fundamental to effective TVET. This objective can be achieved if TVET know the needs the workplace requires from TVET products or graduates. These needs may include: practical capacity (capacity for skill acquisition); theoretical and technical knowledge (capacity to show knowledge of operating principles and relate to practice); creativity and entrepreneurship, social capacity, and information and communication technology (ICT) skills (Madungwa, 2012). Other skills required by the workplace include communicative skills; critical thinking and problem Solving skills; team work; long learning and information management skills; entrepreneurship skills; ethics, moral and professional; and leadership skills.

TVET institutions cannot successfully play this role of providing high quality manpower with advanced skills if it operates in isolation of the operating industries that require skilled workers. TVET institutions must establish collaborative linkages with these industries that require their graduates. Such linkages on a well fashioned partnership terms will guarantee quality skill and smooth transition from school to work. In meeting, the skill needs of the teeming youths and addressing ever-increasing trend of unemployment and underemployment, government globally have been compelled to strengthen the link between institutions and workplace. This in most cases takes the form of closely involving the industry and, developing occupational standards and, work-based verification and continuous assessment of trainees.

The world needs a production-oriented TVET which must incorporate functional skill development and knowledge driven programmes with sufficient motivational and reward mechanism. For TVET to produce people with powerful skills and high quality innovative minds to build the world and make it a better place, some fundamental mechanisms such as TVET institution-workplace collaboration should be considered.

3 Reforms in TVET

The fast pace of development recorded in some nations such as Malaysia, Indonesia, Brazil, Canada, United States of America, Singapore, among others have revealed that development is driven by innovativeness, creativity and enterprise of the people. According to Maclean & Wilson (2009), today, almost all nations have modernized their education and training system in order to ensure adequate supply of highly skilled workers.

In the United States of America, the reform began with an open letter to the American people entitled *'A nation at risk: the imperative for educational reforms'*. Strategies were to arrest America's workforce crises. Canada used a two-pronged innovation strategy. The first focused on creating and using knowledge as national asset while the second called for investment in people as a country's most important resource. Australia owes its success to investment initiatives and to successive and repeated commitment to TVET demonstrated through various policies, planning and investment initiatives formulated in the key national development plans. The European Union focuses on linking TVET to productivity, employment and social cohesion.

Singapore progressively focuses its TVET principally on her three phases of economic development: *'Factor-Driven' economy* (1960s-1970s) which involved intensive labour; *'Investment-Driven' economy* (1980s-1990s) which was capital intensive; and *'Innovative-Driven' economy* (2000s) being powered by the needs of knowledge for intensive industrialization as well as continuous and heavy investment. The African Union recognizes TVET as a means of empowering individuals to take control of their lives and recommends integration of vocational training into the general education system.

Malaysia utilizes Private Partnership Participation (PPP) approach to revamp its TVET. Strategies employed involve the setting up of National Dual Training System (NDTS); Human Resources Development Fund (HRDF) and Vocationalisation of Tertiary Institution. There is a Training Reimbursement Scheme. The companies that participate in certain apprentice training programmes qualify for tax incentives and 1% part of the training cost from government. These incentives stimulate healthy competition and better performance among the training companies. Of vital importance, the students/apprentices are: (i) assured of employment; (ii) eligible for total reimbursement of training cost; and (iii) given insurance protection among others.

The PPP approach employed by Malaysia accelerates industrial training, and offers opportunities for industries and public/private TVET institution to contribute to relevant and more responsive skill development. Malaysia came about this approach through recommendations made by a task force set up to

suggest strategies for revamping TVET. The task force based their recommendations on models found in TVET institution in Germany, Hong Kong and other countries. Maigida (2014) advanced the following as reasons for the needs of PPP in TVET:

1. High cost of providing infrastructure for effective TVET programme.
2. Most countries of the world have not realized that the state alone cannot provide the needed access to high quality infrastructure and skill training.
3. Private sector involvement whether at provision of infrastructure or at the level of training delivery can greatly enhance what the state affords.

Similarly, Ndagi (2010) highlighted the following as the reasons government adopts the PPP model:

1. PPP enhances governments' capacity to develop integrated solutions to infrastructure provisions, decline decay.
2. It facilitates creative, innovative, cost reducing and faster approaches to project implementation.
3. It enhances public management, improved quality services and generation of additional revenues.
4. It facilitates access to skills, experience and technology while enhancing transfer and acquisition of technical knowledge know-how.
5. It allows for transfer of risks which are inherent to project partners on agreed sharing formula.

Unfortunately, some African nations such as Nigeria have not been able to enact similar feats owing to poor linkage between knowledge and skill development, and among the private public sector of the economy. This according to Adeniyi (2012) may have been due to lack of appropriate TVET skills and insufficient entrepreneurial culture in the educational system. On TVET development in schools, UNESCO (2000) posited with regret that less than 1% of secondary education in Nigeria is oriented towards technical and vocational skills. The economic and technological development of any nation does not solely depend on the education population but to a large extent on skilled workforce that can handle the rapidly changing demands of the labour market. To boost economic development, revamp TVET and reduce unemployment, there is need for urgent private/public partnership collaboration for effective TVET skills acquisition programmes.

4 Public-Private Partnership Models for Skill Development

In seeking ways of bringing TVET institutions globally closer to real-life work experiences in industries, some conceptual models PPP of vocational education have been developed. These models include:

4.1 The Dual Vocational Training System

The dual system exists in Germany, Switzerland and to a limited extent in Australia, Denmark, Norway, Luxemburg and the Netherlands. The German system of partnership (dual system) is one based on a law from 1969 that mandates a particular governance structure for TVET. At the heart of the German system is a delegation of responsibility for curriculum and assessment to a coalition of labour representatives, business and educators. The business plays a given complex role managing the system by monitoring the quality of training provided by firms in the dual system. Market Intelligence Germany (2014) stated that under this system of vocational training, trainees undergo 1-2 days training in the public training schools and 3-4 days training in companies. The dual system relies on the sharing of cost among companies and government. For instance, the schools are funded by government while companies pay remuneration to apprentices. The following components must be in place for proper application of the German model:

1. a legislative framework that requires firms to invest in training of newly hired workers;
2. a funding mechanism through a combination of federal, regional and business spending;
3. the capacity to carry out jobs analysis and curriculum development;
4. local institutions that represents the interest of business; and
5. trained professionals' instructions and administrators.

Euler (2013) listed the following as the essential elements of the German dual system:

1. it has broad objectives as vocational training is a means of achieving economic, social and individual goals;
2. the main objective of vocational training is to produce skilled workers with flexible qualifications who are mobile and capable of working in their chosen fields;
3. learning situations are alternated in accordance with the dual principle;
4. vocational training is a task to be carried out in partnership between the government and the business community
5. there is joint funding of vocational training by the government and private sector;
6. complementary programmes are run by schools or non-business entities;
7. quality standards are codified;
8. qualifications of teachers and training personnel is a very important factor; and
9. there is nationwide social acceptance of vocational training.

TVET in a regular school setting focuses on students' practical exercises and test-production. The DUAL concept is a useful innovation. Dybowski (2005) summarized the main features of the German dual system as: TVET is organized by private and public sectors; conducted in companies and part-time vocational schools and carried out as training in the workplace and classroom tuition on the basis of training contract and compulsory attendance at vocational schools. It is regulated by government and supervised by chambers and school supervision bodies. In Nigeria, the National Board for Technical Education (NBTE) supports this approach by recommending that each technical college should have a production unit to support the training needs and boost commercial production of goods and services. In this approach, TVET institution is split into two major directorates, namely: (i) Directorate of training: to offer regular academic activities and skill training in a practicing workshop; and (ii) Directorate of commercial production: to produce goods and services in commercial quantity in a designated production workshop.

4.2 The Japanese System

This model is totally different from the German model, but relevant in the USA and other nations with social networks. This model is based on a local relationship and depends on high school staff correctly analysing the skills of potential graduates and their fit with academic and vocational needs of employers. Here, Japan's manufacturing system come from high schools, which have a network of relationships with hiring managers that allows them to place their most accomplished students preferentially. This model encourages government use of incentives such as tax levies to promote training.

4.3 The Factory School Model in Singapore

According to Tucker (2012), the model of VET system in Singapore is the factory school model that focuses on encouraging firm level training through government policy known as 'Human Resource Development' or 'Workforce Development System'. This model enables Singapore to train its workforce to truly state-of-the-art standards, to engage industry as a close partner in training, to enable students to train in an environment that is designed for training, but which, at the same time, is similar enough to the real thing to present challenges for the students very much like those they will face in the workplace. It combines the advantages of a first-rate apprenticeship system with the advantages of first-rate school-based VET system.

The factory school model is based on and designed to foster close link between the VET system and the industry, there is an apprenticeship system,

faculty members in the school-based system are required to work periodically in a firm in the same field in which that person teaches, and students are also required to spend time working in firms. Similarly, employers are deeply involved in advisedly the various VET institutions and programmes as well as in setting occupational standards, in assessing candidates for diplomas, providing state-of-the-art equipment for instruction and in advising on broad programme direction (Tucker, 2012). Other countries that have this type of programme include: South Korea, and Malaysia. They evolved in East Asia largely as governments in the 1960s to 1980s tried to strengthen economic growth through spending on both initial and further vocational training. The core of these Human Resources Development strategies is taxation policies that allow the governments to collect revenue from firms and then allow government to use these resources to train within their own companies.

5 Benefits of Public/Private Partnership in TVET

According to African Development Fund (ADF) (2006), the benefits of PPPs include:

1. Speedy, efficient cost effective delivery of training programmes.
2. Poverty reduction through human resources development.
3. Improved access to quality TVET in formal and non-formal training institutions.
4. Enhancement of employment-oriented skills for youths and adults.
5. Reduction in the rate of school dropout and their potentials harnessed through skill training centres.
6. Innovation and diversity in the provision of public services.
7. Other benefits include:
8. Provide ample opportunities for students to have better industrial experience
9. Facilitate effective acquisition of practical skills as the industries will provide adequate facilities and competent instructors for the training
10. Foster development of positive professional attitudes by the students
11. Ensure that TVET curricula and teaching methodologies are up to date and relevant to the needs of the industries
12. Enable teachers and trainees to have access to the latest technology and practices
13. Intractable problem of poor funding, inadequate facilities, incompetent teachers would be greatly minimized.
14. Enable TVET institutions to know the level and types of skills currently required in the workplace. This will assist to minimize mismatch between skill supply and skill demand

15. Help in the setup and maintenance of National Qualification Frameworks.
16. Improve service delivery as both sectors will be allowed to do what they know best with improved cost effectiveness thus minimizing infrastructure decay
17. Private sector will be more involved in planning and implementation of TVET programmes
18. Improve the level of mutual information on the job market, making recruitment of school graduates more efficient.

6 Revamping TVET through PPP for Skill Development

TVET has been recognized by many countries globally for helping to develop a professionally skilled workforce vital to economic and technological development. Grunewald (2008) posited that the economic growth vital for a nation's development and combating poverty is impossible without private sector participation. Grunewald added that private enterprises play an essential role in creating jobs and income for society and individuals. Corroborating this view, Abubakar (2010) highlighted that repositioning and subsequently improvement of TVET targeted at development of technology and scientific innovations cannot be achieved by government alone but it has to be in collaboration or partnership with private enterprises that have the technical expertise, vocational competencies and financial capability.

In revamping TVET, the private sector intervention may include technology support in terms of training and retraining of staff and students, provision of capital and expertise through participation in curriculum development, networks, and access to modern production equipment, tools, machines and technical know-how. The Organization for Economic Cooperation and Development (OECD) (2013) opined that the private sector can organize workplace leaning through internships, apprenticeship, cooperative education and continuing education and training (CET) schemes. OECD added that in internship, students go to work in enterprises in their expected career with little or no compensation for a period ranging from a few weeks to several months. Internships provide real world experiences to those who need to explore or gain the relevant knowledge and skills required to enter into a particular career (Olaitan, Nwachukwu, Igbo, Onyemachi & Ekong, 1999). Grunewald (2008) listed the following as the key areas of collaboration between TVET institutions and the private sector:

1. Identifying training needs of technical staff;
2. Setting standards for the vocational and technical educators;
3. Developing training programmes/syllabi for TVET institutions;
4. Training and retraining of technical teachers and workshop attendants;

5. Developing teaching and learning materials;
6. Qualifying and supplying teachers and instructors;
7. Planning and implementing training measure;
8. Setting up and implementing testing and examination systems;
9. Evaluating the relevance, significance, effectiveness and efficiency as well as impact of training measures and related activities; and
10. Financing activities.

It is expected that the collaboration between TVET institutions (Government) and the private sector will result in efficient delivery of services (skill development) due to the private sector endowment in financial resources, technology, technical know-how and others, whereas the public sector has strong policies to guide the private sector; therefore, the combination will be overwhelming and tremendous.

7 Conclusion and Recommendations

TVET is essential because it creates job for sustainable living and provides training that individuals require to catch up with the dynamic and ever-changing living standard in a fast growing technological world. TVET is a training that any nation requires to foster its socio-economic development. The UNESCO and ILO intervention with relevant recommendations has in recent times compelled thorough-going reforms globally towards revamping TVET for sustainable skill development. What countries need mostly is how to successfully enforce implementation of their policy initiatives to make TVET effective through skill development towards reducing unemployment. This requires revamping TVET through PPP, making huge investment, showing repeated commitment to the cause of TVET and for TVET to gain proper public image. This paper examined TVET public private sector partnership in relation to conceptual issues. The need for public private partnership in TVET, strategic issues for TVET in Africa, reforms in TVET, PPP models for skill development, benefits of PPP in TVET and ways of revamping TVET through PPP for skill development.

Based on the literature reviewed in this paper, the following recommendations are suggested:

1. TVET private sector partnership should be encouraged, so as to ensure effective development training programme necessary for acquisition of new technologies by TVET recipients towards causing a home-grown industrial revolution like other developed nations. The sharing of tools and equipment between TVET institutions and industries will help the students keep abreast the changes taking place in the world of work.

2. There should be period staff and student exchange programme between TVET institutions and the workplace to equip students and staff with the practical skills while the workplace benefit from the theoretical knowledge of the staff and students of TVET
3. TVET private sector partnership should be encouraged in order to address the rising rate and poverty among youths in Africa.
4. There should be collaboration between TVET institutions and the workplace during curriculum development to address the needs of the industries.

References

Abubakar, M.S. (2010). Revitalizing TVET for technology entrepreneurship and industrial development: Measure, design and applicability. A paper presented at the national centre for technology. June 6th -8th.

Adeniyi, B. A. (2012). The role of entrepreneurship education in vocational and technical education. Adeniyi Agricultural Consult. The Punch Newspaper, Friday 12, 64-65.

African Development Fund (2006). African Union (2007). Strategies to revitalize technical and vocational education and training (TVET) in Africa: Final draft. Retrieved 22/8/2016 from http://www.africa.union.

Agence Francaise De Development (2014). Public-Private Partnership in vocational training: Taking stock of AFD's experience and strategic recommendations. Retrieved on 8/10/2017 from www.afd.org.

Akhuemonkhan, I. A. & Raimi, L. (2013). Impact of quality assurance on technical vocational education and training (TVET) in Nigeria. Retrieved on 7/10/2017 from www.iveta.org/Resources/Documents/about/.../Akhuemonkhan.pptx.

Australian National Training Authority 92003). What makes for good workplace learning? Retrieved on 7/10/2017 from http://www.ncver.edu.au.

Ayonmike, S.C. Okwelle, P.C. & Okeke, B.C. (2013). Towards quality technical and vocational education and training programmes in Nigeria: Challenges and improvement strategies. Retrieved on 7/10/2017 from www.iveta.org/Resources?Documents/about/.../Ayomike./pptx.

Bo, Jiang (2012). China's TVET: Reform. An opening-up speech at the WF CP 2012 World Congress Halifax, Canada.

Dybowski, G. (2005). The dual vocational education and training system in Germany. Retrieved on 4/10/2017 from www.bibb.de/en.

Euler, D. (2013). Germany's dual vocational training system: A model for other countries. Retrieved on 4/10/2017 from www.bertelsmann-stiflung.de.

European Centre for the Development of Vocational Training (2011). Learning while working: Success stories of workplace learning in nine countries. Retrieved on 4/10/2017 from www.cedefop.org.

Grunewald, E. (2008).PPP models in TVET and their impact on the role of Government. Journal of Association for the Development of Education in African.

Kukoyi, D. (2009). Design and implementation of Public-Private Partnerships in Education. Case study of Technical and Vocational Education.

Maclean, R. & Wilson, D. (2009). International handbook of education for the changing world of work. International Centre for Education: UNESCO-UNEVOC: University of Toronto. 81-96.

Madungwa, A. (2012). Achieving better teaching and learning in TVET. Paris: UNESCO.

Maigida, J.F. (2014). Building and sustaining partnership through public private partnership for effective technical vocational education and training programme in Nigeria. A paper presented at the 2014 annual international conference of International Vocational Education Association (IVETA) at Tennessee, USA. November 18-19. Retrieved on 2/6/2015 from www.iveta.org/.../Dr.J.F.Maigida.

Market Intelligence Germany (2014). Vocational Training "Made in Germany". Retrieved on 1/2/2015 from http://www.gtal.com.

MCS Consulting Ltd (2012). Mcsonsultingltd.com/index/html. Retrieved on 21/7/16 National Bureau of Statistics (2013). Poverty in Nigeria- World Bank Report. Retrieved on 15th/8/2016 from http://www.nigeriapoliticsonline.com/poverty.

National Board for Technical Education (2013). Vocational Enterprise Institutions (VELs) and Innovative Enterprise Institutions (IELs). Retrieved on 12/10/2014 from www.Note.gov.ng/iei&vei.html.

Ndagi, A. (2010). Understanding Public-Private Partnership in TVET development for technology and scientific innovation. A paper presented at the National workshop of National Centre for Technology Management in Minna, held between 16th and 18th June.

Okeshola, F. B. (2012).challenges facing realization of millennium development goals (MDGs) in educational reform in Nigeria. European Scientific Journal 8 (2), 201-205.

Okoye, K.R.E. & Chijioke, O.P. (2013). Private-Public partnership and technical vocational education (TVET) in a developing economy. Arabian Journal of Business and Management Review 2(10), 51-61.

Organization for Economic Cooperation and Development (2013). Enhancing skills through public-private partnerships in Kazakhstan's information technology sector. Retrieved on 4/10/2016 from www.oecd.org/.

Oviawe, J.I., Uwameiye, R. & Uddin, P.S.O. (2017). Bridging skill gap to meet Technical, Vocational Education and Training school-workplace collaboration in the 21st century. International Journal of vocational education and training research. 3 (1), 7-14.

Piyasiri, T.A., Suraweera, B.H. & Edirinsootiya, M.L.N.S. (2008). Research studies on tertiary education sector. National Education Sector, Sri Lanka.

The PPP Policy (2012). Shaping new partnership for national development and institutional framework for the implementation of a public-Private Partnership programme for the government of Jamaica. Retrieved on 17/10/2016 fromhttp://www.dbankjm.com/files/public-private-partnership

Tucker, M.S. (2012). The phoenix: Vocational education and training in Singapore. Retrieved on 12/8/2016 from www.ncee.org/cieb.

UNESCO (2001). Revised recommendation concerning technical and vocational education. Paris: UNESCO.

UNESCO (2009). Regional contribution to Statistical Information Systems Development for Technical and Vocational Education and Training. Retrieved on 14th May, 2015 from http://unesdoc.unesco.org/images/0021/002160/216065e.pdf.

Yusuf, M.A. & Soyemi, J. (2012). Achieving sustainable economic development in Nigeria through technical and vocational education and training: The missing link. International Journal of Academic Research in Business and Social Sciences 2(2), 71-77.

Makerere Journal of
Higher Education

ISSN: 1816-6822
Volume 10 Number 1
February 2018

Contents

East African School of
Higher Education Studies and Development
College of Education and External Studies
Makerere University
P. O. Box 7062
Kampala, Uganda

ISSN 1816-6822
9 771816 682322