An Evaluation of (ICT) Support Services Utilisation at Mutare Polytechnical College: Zimbabwe

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Abstract
Global trends indicate that Technical Vocational Education and Training (TVET) is increasingly being influenced by Information and Communication Technologies (ICTs). However, many learners in (TVET) colleges in Africa are subjected to traditional lecturer methods with minimal (ICT) support (Chiwerei;Azih&Okoli 2013); Gulvanani&Joshi 2014). This paper sought to evaluate utilization of (ICT) services by lecturers and students in the commerce division at Mutare Polytechnic College in Zimbabwe. A descriptive survey that used questionnaires and interviews was used to collect data from a stratified random sample of lecturers and students and from purposively sampled staff and heads of (ICT) and Commerce divisions. The study concludes that lectures at the college depend on traditional lecture methods and rarely support their teaching with (ICT) services available. While both students and tutors acknowledge low utilization of (ICTs) they appreciate benefits of supporting (TVET) with (ICTs).

Keywords: (ICTs); Learner support services; Polytechnic.

1. Introduction
1.1 Background to the Study
Mutare Polytechnic College in Zimbabwe is a state run technical training and vocational college offering commercial, engineering, agricultural, hospitality and wood technology courses and programmes. Increasing demand of Information and Communication Technology (ICTs) in teaching and learning in these programmes has culminated in upgrading of (ICT) learner support services in a bid to improve quality of teaching and learning. For example, all commerce academic staff members received special (ICT) training through a programme called College Information Technology Enhancement Programme (CITEP), while all students were offered enhanced courses in ‘Computers’ and ‘Computer Applications’ embedded as compulsory courses in their existing programmes. Under the enhanced programme, students and tutors were expected to access extended internet facilities at various points of delivery within the college. Network facilities to service both students and lecturers in the library, computer laboratories and lecturers’ base rooms were upgraded. In addition to internet Wi-Fi connection, the college digital library was expanded to subscribe to more international journals enabling staff and students to utilise more scholarly databases.

Despite all these efforts by the college to support (TVET) with (ICTs), there are pockets of challenges interfering in the smooth utilization of (ICT) facilities. For instance, within the commerce division there seem to be lack of capacity utilization of (ICT) tools meant to improve teaching and learning. Majority of students seem to use (ICT) facilities mainly for social interaction and reading electronic press rather than interacting with tutorial materials and doing research. Majority of students’ levels of usage seem to end at basic (ICT) utilization activities such as surfing the internet for teaching/learning material. Among lectures, the dominant teaching methods are still traditional chalk board and teacher talk. It may seem as if both lecturers and students are not motivated enough and ready to fully utilise available (ICT) support facilities. These circumstances may also be interpreted as if available (ICT) services are failing to meet lectures and students’ needs. While lecturers for example are expected to spearhead utilization by developing interactive and supportive (ICT) teaching platforms, issues of readiness could be at play coupled with constraints emanating from students’ low levels of (ICT) skills. It is against this background that this paper sought to evaluate (ICT) learner support services by lecturers and students in the commerce department.

1.2 Review of related literature
Global trends indicate that teaching of commercial disciplines in (TVET) colleges is increasingly being driven by (ICT) support. Gulvanani& Joshi (2014) claim that in developed countries, digital libraries, networked computers, multimedia communication and audio-visual media are some of the tools widely in use in technical colleges. Oke, Ezanwafu&Umoru (2012) also claim that (ICT) tools such as lecture presentation using PPT, bulletin boards, student feedback using (ICTs) and use of applications software are a common feature in (TVET) classrooms in developed countries. However, as pointed out by Oke, Ezanwafu&Umoru (2012), usage of (ICTs) in (TVET) colleges in Africa is still at its early life. While Talebiana; Mohammadia&Rezvanfara (2014) claim that the degree of usage of (ICT) support services in (TVET) in developed countries is high with majority of(TVET) tutors having reached very advanced stages in utilizing (ICT) in teaching and learning, in Africa the scenario seems different. For instance, Okeke. Ezanwafu, Umoru (2012) found out that (ICT) utilization by students during learning was very low in Nigerian Technical Colleges. According to Chiwerei;Azih&Okoli (2013) (2012)most learners in (TVET) colleges in Africa are subjected to traditional chalk and lecturer talk methods with very minimal exposure to (ICTs) although computers and accompanying e - resources are now widely viewed as driving forces in the delivery of instruction in today’s Technical education and training the world over. These observations may indicate gaps that still exist in (TVET) in Africa.
Studies seem to indicate that utilization of (ICTs) in teaching in (TVET) yield benefits. It is widely accepted worldwide that developments in (ICTs) have made a lot of impact in teaching and learning of commercial subjects in (TVET) (Gulavani& Joshi, 2014; Ohiwerei, et al., 2013; Aristovnik, 2012). For instance, Ali et al (2013) maintain that use of (ICT) in (TVET) education help increase motivation, deepens understanding and improve application and retention. As Gulavani& Joshi (2014) and Aristovnik, (2012) posit, (ICT) tools aid learners by developing critical cognitive, evaluation and synthesizing skills. This argument is supported by Yusuf et al (2013), who points out that, (ICTs) provide accurate and fast feedback to learners. According to Mutanga&Munhande (2013) (ICTs) enable lectures and learners to interact effectively. Not only can course materials such as lecture notes, assignments and syllabi be made available on the internet, but online discussion and collaboration can occur. Okeke et al (2012) observed that learning supported by (ICTs) provide opportunities for constructive learning through resource- based student centered settings. It is against all these benefits accruing from utilization of (ICT) services in (TVET) that this study sought to assess tutors and students’ views on the role of (ICTs) in teaching/learning of commercial programs at Mutare Polytechnic College.

However, there are many factors that have been identified as disturbing effective utilization of (ICTs) in teaching and learning of commercial courses at polytechnic colleges in Africa. As pointed out by Ali,Haolader& Muhammad (2013),effective utilization of (ICTs) in (TVET) colleges in Africa seem to be constrained by factors such as student characteristics and lecturer characteristics. For example, Okeke et al (2012) found out that students’ (ICT) access at home was important in enhancing learning. Sarkar (2012) also found out that students without access to (ICTs) at home were disadvantaged and such students’ often lacked extra support from their colleges. Chiwere;Azih&Okoli (2013;Ugochukwu 2012) noted that, in developing countries not all college students have a personal computer or a home computer . Pyla (2012) maintains that, lecturers’ integration of (ICTs) into teaching is influenced by lecturers’ (ICT) readiness. Oke,Ezanwafok&Umoru(2012) also found out that majority of lecturers in higher education in Africa only have basic knowledge in utilizing (ICT) tools in supporting students’ learning. This argument is also supported by Gulavani& Joshi (2014) who points out that many (TVET) faculty members are reluctant to innovate and experiment with new (ICT) tools in the delivery of their courses. While there are many notable innovations coming out of (ICT) lecture room in (TVET) colleges in developed countries(Feoma&Adu 2013), it seems in developing countries there is little value addition being generated by (TVET) lecturers and students in the area of (ICTs) utilization (Sang&Kang 2012;Mutanga&Munhande 2013).

It is widely believed that lack of relevant (ICT) resources for (TVET) students is a barrier to (ICT) utilization readiness (Mutanga&Munhande 2013;Shahadat 2012).For example, lack of relevant (ICT) resources to support teaching in (TVET) in colleges is widely perceived as a hindrance in boosting technology and innovation in Zimbabwe (Mutanga&Munhande ibid). Yusuf, Afolabi, Loto (2013) reports that low levels of funding has resulted in inadequate (ICT) facilities to support (TVET) in colleges. Sarkar (2012) bemoans the difficulty in maintain (ICT) support services due to irregular power supply resulting in low levels of utilization among students. In a research conducted Ohiwerei, Azih and Okoli (2013), the cost of basic computers and accessories for effective learning in (TVET) are beyond the reach of many students in Nigeria. Torok&Ushir (2012) recognize that, the exorbitant internet connection fee is a major hindrance obstructing wider application of (ICTs) in (TVET) in colleges. In many developing countries, costs associated with acquisition, installation, operation and maintenance of (ICT) networks specifically for (TVET) is prevalent (Mutanga&Munhande, 2013;Okeke et al 2012).It was against these constraints that this study sought to identify factors that could be affecting usage of (ICTs) in teaching and learning of commercial courses at Mutare Polytechnic College.

1.3 Statement of the Problem

Despite Mutare Polytechnic College’s efforts to position (ICT)s as a central tenet of supporting teaching and learning across all its (TVET) programmes, many college students and lecturers appear to be under utilizing the enhanced services offered. In particular, the extent of computer usage in teaching/learning in the Commerce Division at Mutare Polytechnic is very low. The focus of this paper was therefore to evaluate (ICT) student support services in supporting (TVET) at the college with particular reference to the Commerce division.

1.4 Purpose of the Study

To evaluate utilization of (ICT) learner support services in teaching and learning in the Commerce Division at Mutare Polytechnic College

1.5 Research Objectives

1. To assess the extent of usage of (ICT) services by commerce students and lecturers at Mutare Polytechnic college.
2. To identify factors affecting usage of (ICT)s in teaching and learning of commercial courses at Mutare Polytechnic college.
3. To evaluate the role of (ICT)s in teaching/learning of (TVET) commercial courses at Mutare Polytechnic College.
4. To assess commerce lecturers and students’ readiness in utilizing available (ICT) services in teaching and learning.

1.6 Research Question

How effective are (ICT) learner support services in supporting teaching and learning in the commerce division at Mutare Polytechnic College?

1.7 Sub-Questions

1. What is the extent of usage of (ICT) services by commerce students and lecturers at Mutare Polytechnic College?
2. What factors affect usage of (ICT)s in teaching and learning of commercial courses at Mutare Polytechnic College?
3. What is the role of (ICT)s in teaching/learning of (TVET) commercial courses at Mutare Polytechnic College?
4. To what extent are commerce lecturers and students ready to utilise (ICT) services in teaching and learning?
2. Main Body

2.1 Research Design

The study used the descriptive survey design. A descriptive research design was ideal because it enabled data to be collected from many commerce students in a short time. It was the best design to describe the views of a representative sample of commerce students and tutors (Leedy & Ormad, 2010). As pointed out by Zikmund et al (2009) the descriptive survey is the best design in presenting an accurate and detailed description of the problem under study. The design was the best tool to describe the characteristics, attributes of students and tutors and their views on learning/teaching activities at the college (Zikmund et alibid). It was therefore easier to collect and analyze all tutors and students’ views on issues under study in a short space of time.

2.2 Population

The population comprised all the lecturers, students and (ICT) staff in the Commerce Division.

2.3. The sample

The sample therefore consisted of 54 respondents comprising of 14 lectures, 36 students, 2 (ICT) staff and 2 heads of (ICT) and commerce division.

2.4 Sample and Sampling techniques

A stratified random sample of two lecturers from each department was selected, giving a total of 14 lecturers representing the seven departments in the division. Stratified random sampling was also used to select 36 students enrolled in commerce programmes during the semester under study.

2.5. Purposive sampling

Purposive sampling was used to select 2 (ICT) staff and 2 heads of (ICT) and Commerce department respectively.

2.6 Instrumentation

Questionnaires were personally administered to the lecturers and students. All the 50 questionnaires were completed and returned. Questionnaires consisted of both closed and open ended questions. Closed questions facilitated collection of extensive data on similar areas while open ended questions enabled respondents to express their ideas openly on complex issues.

2.7 Interviews

Interviews were administered to (ICT) staff and heads of (ICT) and Commerce departments. Interviews were exploratory with semi structured questions that allowed clarification of complex issues.

3. Results and Discussion

3.1 The extent of usage of (ICT) services by commerce students and lecturers

3.1.1. (ICT) support staff and heads of divisions’ views

Data from interviewed (ICT) support staff and heads of divisions show that lecturers used the traditional chalk board and lecturer method. Participants were also of the view that CD-ROM services, interactive boards, video and sound, projectors and power point presentation were hardly used in lessons. While information searches using internet facilities was widely used by both students and lecturers, e-library and its electronic facilities was rarely used as a source of information. The participants were of the view that students and tutors lacked skills in utilizing these facilities and were generally not motivated in utilizing them. Sharing of information through the internet and e-mail among students, lecturers, heads of department was rarely practiced in the Commerce division. Participants were also of the view that learning platforms such as Moodle, Fronter, Skoleintra and dissemination of information through Web pages and platforms were barely used at the department.

3.2 Tutors and students views on factors affecting utilization of (ICT) in teaching and learning

Majority of students (28) agreed that traditional chalk and talk lecture methods were effective. Majority (30) of the students indicated that print materials were preferred library sources than e-library books. Reasons given by many students (35) were that they neither had personal computers or internet connectivity to use at home. Majority of students (30) expressed that personal Wi-Fi interconnections through cell phones and laptops were not a reliable mode of sourcing learning materials as connectivity sometimes failed or slowed down. These findings concurred with Oke; Ezenwafo & Umoru (2012); Ugochukwu (2012) observations that levels of (ICT) usage among college students in many African countries was still very low. These results are also in agreement with Chiwerei, Azih & Okoli (2013) who claimed that very few students in developing countries utilized internet facilities for studying while at home.
3.3 Tutors’ views on the role of (ICT) support services in (TVET) in commercial programmes

Majority of tutors [11 (79%)] agreed that (ICT) services contribute to comprehension of theoretical and practical aspects of learning commercial subjects. The majority [9 (64%)] were of the view that (ICT) services facilitate interaction and collaboration among students and tutors. A large majority of tutors [13 (93%)] agreed that effective utilization of (ICT) services at the college develops communication, creativity and problem solving skills. All tutors [14 (100%)] agreed that utilization of (ICT) services enables provision of up to date learning materials in (TVET).

The findings seem to imply lecturers are fully aware and appreciate the benefits of integrating (ICT) support services in the traditional teaching/learning methods. It would appear that given the opportunity, they would be motivated to adopt (ICT) technology in teaching/learning. These findings conform to findings of Ali et al (2013) and Gulavani&Joshi (2014) that (ICT)s improve the quality of teaching and learning, is time saving and motivates.

3.4.1 Tutors readiness in utilizing available (ICT) services

Majority of tutors [10 (71%)] had personal computers (laptops) and a large majority [12 (86%)] agreed that computers were handy in facilitating teaching. However, very few [1 (7%)] integrated (ICT)s into their usual/lecture chalk teaching. Very few tutors 7% were using interactive boards, video and sound, projectors and power point presentations in teaching. These results seem to concur with Gulavani&Josh (2014) that majority of (TVET) tutors were reluctant to innovate and experiment with (ICT)s. Very few tutors [11 (79%)] expressed low levels of pedagogical knowledge and skills to apply (ICT) software tools in supporting course delivery. These findings are similar to Okeke; Ezenwafou&Umoru (2012); Ugochukwu (2012) findings that majority of (TVET) tutors in Africa lack basic knowledge and skills in utilizing (ICT)s in supporting teaching.

3.4.2. Students’ readiness in utilizing available (ICT) services

Very few students 31% had personal laptops while major while all 100% depended on internet services in computer laboratories. Very few students (35%) used mobile gadgets to access study material. This could imply that students’ utilization levels of (ICT) tools at home and in hostels was low. As already pointed out by Oke,Ezenwafou&Umoru(2012), not all (TVET) students have computers to use at home. However, majority of students indicated that shifting the (TVET) curriculum into embracing e-learning technologies was very important. Despite such benefits provision of relevant resources seemed to be hindered by inadequate facilities and costs.(Sarkar 2012;Okeke 2012).

4. Conclusions

Conclusions that could be drawn from the study are that lectures at Mutate Polytechnic rely on chalk and lecture methods and rarely blend their teaching with (ICT) tools available. Tutors generally lack sufficient pedagogical knowledge and skills to support their teaching with (ICT) services. While there is low utilization of (ICT) services by students, services available do not have the capacity to meet the needs of all students. However both tutors and students appreciate benefits of integrating (TVET) with (ICT) services.

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