

Implications On the Effectiveness of Online Tertiary Education at Higher Education Levels of Imparting Education in Zambia

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ABSTRACT:

This article aims at analyzing the effectiveness of the online tertiary education at higher education levels in Zambia. The background of this study is based on the policy direction of the revised curriculum of 2013 where stress and emphasis was given to teaching in Colleges and Universities using online teaching and learning platforms. The need for online teaching and learning methods has become the priority in most institutions of the world and in the space taken to study in this paper. This type of system is to enhance teaching prospects to students staying in distance from the place of the establishment of the institution. Furthermore, the pandemic effect on society in most parts of the world favored the tertiary teaching learning methodology and strategizes the innovative approach to imparting of education that became the most need to the reality in modernity. Nevertheless, this paper harps on the effectiveness of such an approach and a sample space was taken to comprehend the practicality of such usage. On analytical performances to derive a positive result, questionnaire method was taken to practice, which was specially designed to be used amongst the students of higher education levels. More than 100 students were taken for sample space and the students from the universities and colleges of varied professionalism took part in the survey. The survey turned to be a positive expression of effectiveness as taken to study.

Key words: Effectiveness, emphasis, policy, curriculum, tertiary, pandemic, innovative, questionnaire, analytical, universities, performances, professionalism.

Introduction: Tertiary level education is at a higher perspective of learning which takes a lift to credentials from secondary school level to college level of education. This type of teaching-learning programming ascends into university programs. The effectiveness of tertiary education can be well analyzed through this mode of ascendance that reflects the growth of online version of educating the students in each of the organizations that believe in perpetual continuance of education to the people of all ages for their upgrading and societal uplift. However, the paper delves into varied factors such as the general education background in Zambia as taken to practice, the general perspectives of online teaching schools, attitude of students towards the online learning, attitudes of parents towards online teaching and learning and challenges of online tertiary education in Zambia.

Change in educational systems in the modern days:

Over four decades there has been a rapid change in educational patterns in Zambia with modulated essential changes formulated in the curriculum. Zambian education department has worked into the efficiency of the tertiary education and has patterned newer prospects of making tertiary education highly applicable to the students of higher education systems. It has been understood that the need for quality education is the essential feature of a country's development. Most importantly, curricula taken to usage provides the necessity for the change towards tertiary education required essentials that can be taken to application and henceforth, the Ministry of Education has defined curriculum as “ a specific of the desired knowledge, competence, skills, attitudes and values which students need to achieve”. This defined fact holds good to the pretext of Zambian education. This provides the essential information that is necessary for schools and colleges to adhere to attain their vision and mission in imparting education to students from all walks of life. The goals of education can be achieved through the prescribed syllabus, well-structured time-table with recommended text books and proper directives from the education ministry of the nation in stipulating the pattern of work in adhering to the conductance of tertiary education to enhance effective learning experience.

Significance of the study:

A new perspective taken to study and with the prevalence of pandemic has turned to be an effective and an efficient mode of transmitting o knowledge over near and long distances. The study turned to be very important because it contributed to the body of knowledge and imparting of knowledge to students through teaching using online platforms. It was also hoped that the information generated in this study would contribute to the current online tertiary education, on teaching in public schools. The study was also important because the finding provided very important information that would be useful to school administrators, teachers, students, the Ministry of Education (MOE) and the government at large. The findings would further help educators, policy makers and other stakeholders to strengthen strategies and policies of transforming the education sector from using both online teaching and face-to-face teaching as medium of instruction. The need for resourceful tertiary education has become the need of the modernism. The sample space taken for survey had ample support to the topic take to concern, though there was discernment in application by some who had less knowledge on online platform and its workability.

Purpose specified:

Interactive online learning allows students to uncover new information by exploring digital libraries and websites. As further technologies are introduced to the field of education, distance learning facilitates the global dissemination of information and knowledge (Hasifah, 2020). The contention is that online learning is important because it can enable more effective self-learning. Students can choose the time they spend, the content they learn, and the direction of their learning. Furthermore, students also have the opportunity to revisit challenging topics until they feel confident in their understanding. Practically, online learning allows students to study in a “safe” environment, without experiencing embarrassment about asking questions or being troubled any means or forms of harassment. Tertiary education on online platform enhances self-independence and self-assessed learning potentials.

Tertiary education is a developing phenomenon which has and is paving way for social and economic development through educational patterns of novice. The concept of this developing phenomenon can be analyzed on four major pursuits:

- The formation of human capital (primarily through teaching);
- The building of knowledge bases (primarily through research and knowledge development);
- The dissemination and use of knowledge (primarily through interactions with knowledge users); and
- The maintenance of knowledge (inter-generational storage and transmission of knowledge) [Tertiary Education for the Knowledge Society – Volume 1 – ISBN 978-92-64-04652-8 © OECD 2008]

Observational Relevance:1 - Attitude of students towards online learning

The preferential aspects of Tertiary Education lie within the choice of the students and their interest to pursue education on the manner of its application. In fact it is a behavioural approach that implies the choice as required. Institutions have taken responsibility to diversify and to provide the needed options for the students. Students' behavioural concerns play a major role in the establishment of tertiary education. Behavior is strongly influenced by an individual's attitudes. The choice based on positive or negative attitude of students which is an observation that corresponds with the nature of students' engagement with e-learning (online learning). In research analysis, several references have been made in terms with the challenges and opportunities associated with e-learning and the prospective focus with the onset of pandemic over years.

Observational Relevance: 2 - Attitudes of parents towards Online Teaching

Parents' involvement is the priority in the choice of the tertiary education. The awareness created by the educational institutions of the tertiary education has given a wide opening to the choice that can be made for the online platform and the supportive concerns of the parents depicts the parents' attitude to modern ways of learning skills for their wards. Individuals' aspirations play a principle outlet towards tertiary education. The preference shown by the parents' gives an impetus to the students in enrolling for the course with digital online service feature. It is in fact become the most affordable means of educating oneself.

Observational Relevance: 3 – Status of tertiary education in Zambian context

The online teaching and learning in educational institutions in Zambia should not therefore be confined to the four walls of the classrooms because every community, however small it is, had resources that can be used to strengthen the online learning in public schools. One scholar said “we have two modern types of parents in the modern world. Those that are perceived as BBC (Born Before Computer) parents and those that are perceived as BAC (Born After Computer)”. It was the parents who led their children, students at home to have a positive or negative attitude towards online learning and teaching. Therefore, this means that parents had a negative attitude towards that online learning and teaching, then their children will also have a negative attitude towards the subject and vice versa.

Challenges affecting Online Learning and Teaching in Zambia

It has been identified that many educational institutions are making substantial reforms towards tertiary education, providing necessary requirements to enhance the needs of the society and that of the students in Zambian. The digital media has opened up on a wider scale and in specific certain institutions has

diversified the skills and adaptive features to the modern applications for the benefit of the students who enroll in the institutions. The new strategies have been set with governmental support for the future. Clearer accountability of the application is taken care by the institution through which the tertiary education sector has contributed to quality, efficiency, equity and efficacy of the system of education. Nevertheless this is the concern in Zambia and according to Wildana et al. (2020), the online learning models used during the COVID-19 pandemic equipped students with knowledge in a similar way to face-to-face learning. However, online learning provides more experience will be the importance of process learning that balances the development of time and technology based on self-regulatory capabilities, which is definitely owned by each student. According to Wildana et al. (2020), the regulations enforced by the head of an educational institution are most important when delivering online learning.

Possible Outcomes:

The availability of the internet and the cost of internet packages determine the continuity of online learning. However, in practice, this study found that students experienced limited internet access because of their geographical location, or as a result of limited finances with which to purchase internet packages. Students' level of literacy, and their ability to access online learning, is also crucial to the effectiveness of online learning. Hazwani et al. (2020) found that internet connection was the most significant factor to influence the effectiveness of e-learning. Hazwani et al. (2020) contend that management personnel need to improve dormitory areas to provide all students with access to the internet. Internet connection must be moderate or good in order to suffice.

According to Nurul Haidah et al. (2020), students keep pace with social change by adapting to the availability of new technologies. This adaptation is crucial, as modern life is embedded in technology. Once these skills have been attained, students are able to adapt regardless of their circumstances and respond to the emergence of new or familiar problems. Consequently, students will possess a variety of technology skills that they can apply in the future. This initiative has encouraged the use of ICT and social media applications as an important platform to help teenagers and students engage in remote learning. These initiatives and recommendations prioritize students that will take important examinations, such as the SPM, PT3 and UPSR, which impact the instructions introduced during the CMCO. However, the existence of social media and modern communication applications still allows teachers to direct students' online learning experiences (Nor Shela&MohdShafi 2020).

Research Design:

The research writing has made use of both qualitative and quantitative method. Qualitative was used by the researcher to illustrate qualities or description of findings (Kothari, 2004). This suited the study owing to the fact that the study required quality in describing the views of teachers, lecturers, parents and students on the use of online teaching platforms when teaching in in Zambia especially in colleges and universities. On the other hand, quantitative method was used to tabulate the figures or statistics of the findings in terms of; frequency tables, charts and graphs to represents views of the respondents. The displayed figures quantified the findings on the use of online teaching platforms schools of Zambia which are represented on a minor scale in this research writing due to space dimensional concerns though a large number of statistical calculations have been done

Sample choice- Observational Study:

Zambia has quite a good number of Institutions that possess tertiary education that has stretched in all 10 provinces. There are many universities in Zambia but the information gathered or this research writing is focused on five (5) public universities in the province of Lusaka, Central province and Copper-belt province which includes the University of Zambia, Chalimbana University, Kwame Nkrumah University, Mulungushi University and Copperbelt University.

Target Population

A research population was generally a large collection of individuals or subjects that was the main focus of a scientific query. In target population, the entire group of individuals or subjects to which the researcher is interested usually have generalized conclusion (McMillan and Schumacher, 2001). The population was 100 which included head students, teachers and lecturers of Computer Science, and members from the community in Luaska and Choma.

Sample size

The sample size for the study was 100 respondents. It comprised of students, teachers and lecturers, and the community members/parents.

Sampling Procedures

The researcher used both simple random sampling and purposive sampling. According to (Kothari, 2004) simple random sampling is a subset of a statistical population in which each member of the subset has an equal responsibility of being chosen and purposive sampling is defined as a form of non-probability sampling in which decisions concerning the individual to be included in the sample are taken by the researcher based on the characteristics (Kothari, 2004). One lecturer was picked from each sampled universities. Purposive sampling was used to pick them while students and parents / community members were randomly sampled.

Research Instruments

Questionnaires were used to the gathered data in the field. While Creswell, (2003) stated that, "questionnaire is an instrument with open and closed questions or statements to which a respondent must act" the questionnaires in the study consisted of open ended (free response) questions. The questionnaire as a data collection instrument is frequently used in education research.

Data collection procedure:

The researcher personally went to concerned institutions where the questionnaires were administered and the respondents had to complete them in their own spare time. The respondents were explained on the nature of study and its importance, the respondents found the study interesting and showed willingness to take part. An arrangement was made for the collection of the questionnaires after being filled at a letter stage.

Data Analysis

The study used both qualitative and quantitative data analysis. The quantitative data analysis was done using a computer statistical package for social Sciences (SPSS) programme. The responses from the

respondents were categorized and analysis using tables and percentages. The final scores were qualified and expressed in percentages. On the other hand, qualitative data was analyzed by content description of the finding.

Few samples presented on statistical analysis:

1) Online Teaching Perceived as a challenging method in teaching.

Response	Frequency	Percentage %
Agree	76	76
Disagree	24	24
Total	100	100

The above table showed that 76 percent of the respondents agreed that online teaching is a challenge in teaching in most of Tertiary Public Schools. On the other hand, 24 respondents disagreed to this perception and showed 24 percent of those respondents in disagreement. However, some students at five (5) of the surveyed public schools that were interviewed totally disagreed that online teaching is a challenging method in teaching.

2) **Significance of online teaching and learning method in relation to exams that are set in hard copy format.**

Response	Frequency	Percentage %
Agree	87	87
Disagree	13	13
Total	100	100

The above table showed that 87 percent of the respondents agreed that the teaching using online teaching method has no value in relation to exams that are set in hard copy format. On the other hand, 13 respondents disagreed to this perception and showed 13 percent of those respondents in disagreement. Not with standing, most teachers or lecturers that were interviewed clearly stated that they see no value in continuing to teach all the subjects using online teaching methods when students are examined in using hard copy format.

3) **The learners/students easily understand the lesson concept as they able to save the video and going through after.**

Most learners/students easily understand and able grasp the concept of the lesson as they able to save the video of the lesson and able to go through again on their spare time, they are able to learn with fewer challenges. Below table shows that respondents views on the benefit learners easily understand the instructions due to the familiar language.

Response	Frequency	Percentage %
Agree	94	94
Disagree	6	6
Total	100	100

The above table showed that 94 percent of the respondents agreed that learners easily understand and grasp the concept of the lesson as a benefit in teaching using online teaching method while 6 percent of the respondent’s disagreement to this benefit.

4) Students are able to grasp and understand the concepts easily.

Knowledge, concepts and ideas are grasped easily by learners/students when taught using online teaching platforms as they find interesting and able research for reliable materials. Respondents showed their benefit and the results were tabulated in the table as shown below.

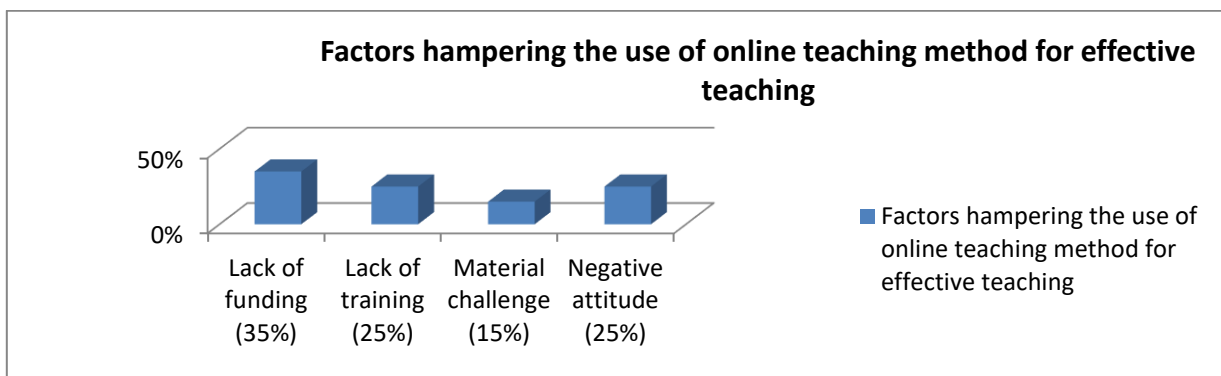
Students are to grasp and understand the concepts easily.

Response	Frequency	Percentage %
Agree	88	88
Disagree	12	12
Total	100	100

According to table above, 88 percent of the respondents agreed that learners grasp and understand concepts easily when learning and taught using online teaching method. On the other hand, 12 percent of the respondents disagreed to this.

5) Factors hampering the effective use of online teaching method when teaching:

Teachers/Lecturers who teach using online teaching method face variety of challenges in executing their duties. Any new policy has its strengths and limitations. In 2013 revised curriculum, teachers face a lot of challenges in implementing the curriculum which required them also to teach using online teaching method. However, the major factors that hamper the execution of teaching and learning using online teaching method in teaching in Tertiary educational institutions are tabulated in the bar graph in table below:



The table above showed that lack of funding by the government so that schools can buy other supportive materials for effective online teaching. 35 percent of respondents stated that luck of funding by government hampered the effective online teaching.

Accordingly 25 percent of the respondents eluded that the lack of any form of training to teachers/lecturers on online teaching facilities has hampered effective teaching in Tertiary education. These respondents said that many teachers/lecturers have hampered the effective online teaching in

Tertiary institutions. These respondents said that many teachers/lecturers lack intensive training on online teaching facilities.

As indicated in the visual graphic above 15 percent of respondents said that materials challenges are hampering the effective online teaching in most Tertiary institutions. According to the field data collected, many students including some teachers/lecturers have difficulties in finding necessary materials to use on online teaching and learning.

The study also reviewed that 25 percent of the respondents stated that most of the learners/students and some teachers/lecturers have negative attitude toward the online teaching and learning methods in Tertiary Public schools hence, hampered the smooth delivery of quality education.

By and large Tertiary institutions selected from five (5) provinces are located in urban areas and big numbers of learners/students are somehow familiar with internet facilities. Therefore, it can be deduced that online teaching and learning method is used. It can further be said that, most of the universities selected learners/students are very familiar with the internet facilities due to that for them online teaching and learning was not much a challenge. Precisely the views of respondents states the fact whether they relate what they learn from online teaching and learning. Furthermore, the other respondents stated that only for those that are familiar with the internet facilities it is easy to relate the lesson from online learning and teaching. Respondents further argued that those learners/students who did not attend learn computer studies in schools have more challenges compared to those who did computer studies during their academic learning.

Benefits to learners/students when online teaching method is used in teaching:

The benefits of using online teaching method in teaching to the learners/students of teaching using online teaching method, saves the students from expending too much as they do not travel, saves time, easy to plan on how to learn and turns to be enjoyable. Most of these benefits are aimed at bettering the learners/students acquisition to technology knowledge and abilities.

Recommendation

Based on the findings, the following are the recommendations for the betterment to education:

- Teachers/lecturers need to take an in-service training in tertiary education pattern with ample awareness on the application of computers.
- Infrastructure development must also be maximized to enhance effective teacher education.
- A standardized syllabus in teacher training colleges/universities should be introduced for the benefit of practicality of tertiary education.
- The books as required should be printed for easy accessibility for the teachers and the students.
- Increased funding should be made possible to support tertiary educational systems to meet the needs of the students

Summation of major relevance:

- (i) Based on the work of Mailizar et al. (2020), the student's voice is a significant consideration in this context. Therefore, further research is necessary to identify the challenges that restrict students' abilities to achieve their goals.

(ii) Hazwani et al. (2017) have concluded that students' attitudes influence the effectiveness of e-learning. Accordingly, students that are optimistic and enthusiastic will not experience e-learning as an obstacle to their academic success.

(iii) Adnan (2020) found that students felt that conventional learning differed greatly from online learning. Furthermore, students felt that face-to-face learning is crucial for effective learning, and that group assignments are difficult to complete online.

In lieu to the above referred summative features, it is a must that consideration on such avenues should be taken to study for clarified significance on introducing tertiary education in higher learning prospects.

Work Cited:

1. Baird, J. (1988), "Quality: What Should Make Higher Education 'Higher'?", Higher Education Research and Development, Vol. 7, No. 2.
2. Eaton, J. (2004), "Accreditation and Recognition of Qualifications in Higher Education: the United States", in Quality and Recognition in Higher Education: The Crossborder Challenge, Centre for Educational Research and Innovation, OECD, Paris
3. Geiger, R. (2004), Knowledge and Money: Research Universities and the Paradox of the Marketplace, Stanford University Press, Stanford.
4. Horsburgh, M. (1999), "Quality Monitoring in Higher Education: the Impact on Student Learning", Quality in Higher Education, Vol. 5, No. 1.
5. Merisotis, J. (2002), "On the Ranking of Higher Education Institutions", Higher Education in Europe, Vol. 27, No. 4.
6. Watty, K. (2003), "When will Academics Learn about Quality?", Quality in Higher Education, Vol. 9, No. 3.
7. Tertiary Education For The Knowledge Society – Volume 1 – ISBN 978-92-64-04652-8 © Oecd 2008