Influence of E-Leaning on Students' Academic Performance at the Open University of Tanzania

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Abstract
This study examined the influence of e-learning on students' academic performance at the Open University of Tanzania. The study employed convergent design under mixed research approach.The study included 262 students, 30 lecturers, 01 director of quality assurance, 01 director of examination syndicate, 05 instructional designers. Stratified, simple random, and purposive sampling techniques were used. Research instruments included interview guides, and document analysis schedule. The researcher used descriptive and inferential statistics for quantitative analysis.Descriptive statistics were analyzed using, frequency, percentage and mean score while in inferential statistics the hypothesis was tested using ANOVA. For qualitative data analysis, the researcher used thematic analysis.The findings indicated thatmoderated majority of students had GPA of lower second and extreme minority had GPA of first class. The findings indicated that there is no significant difference between students' mean score on academic performance and students involved in e-learning. The study concluded that e-learning had contributednegative impact on students' academic performanceat the Open University of Tanzania. The study recommends that the University managements and other educational stakeholders should assess the impact of e-learning on students' academic performance at the Open University of Tanzania in order to understand the status of e-learning.

Key words: Influence, E-learning, Students, Academic, Performance Open University Tanzania

1. Introduction

The current paradigm shift from traditional educational environments to online educational environments in higher education can also be seen as a challenge to create an active and interactive learning environment, theone which gives the learner opportunity to engage and think in multiple ways. Higher Education is changing very rapidly and trying to meet the needs of very diverse force which includes instructors, learners, in the educational institute and also made a significant mark in the corporate and governmental sector where employer from various industries use training, staff development and recruitment for their purpose (Kumar & Sridhar,2020).

In a nutshell e – learning is defined as acquisition of knowledge and skill using electronic technologies such as computer and Internet-based courseware and local and wide area networks. The term was introduced in 1995 when it was all called "Internet based Training"(IBT), then "Web-based Training"(WBT) to clarify that delivery could be on the Inter- or Intra-net, then "Online Learning" and finally e-learning. E-learning is the computer and network-enabled transfer of skills and knowledge. E-learning applications and processes include Web-based learning, computer-based learning, virtual education opportunities and digital collaboration.

Kumar and Sridhar (2020) point out that e-Learning in Higher Education is one of the major concern area which is recognized as an important factor, significantly contributing to the progress of an individual, social change and economic growth which leads to the holistic development of the nation.

Furthermore, e –learning or Online education can refer to completely virtual lessons, meaning there is no physical contact involved, but it can also include blended courses that mix face-to-face and virtual meetings, such as face-to-face courses with complementary activities performed on the Internet outside the classroom, which are common today (Ferreira et al.,2018).

In the same vein e-learning might be a powerful force for higher education institutions (HEIs) in Tanzania and might have influence on students' academic achievement in the Open University of Tanzania (OUT). As is the case with other African countries, the degree of influence of e-learning platforms on students' academic performance in Tanzania could be very slow despite potential opportunities provided by open- source technology and the encouraging environments created by the respective governments (Kisanjara et al., 2017). There have been some initiatives on the part of governments to develop ICT policies as a way forward to integrate e-learning in Tanzania (Tossy, 2017).

E-learning is also considered an important component of enhancing teaching and learning processes by Higher Learning Institutions in Tanzania. In the context of teaching and learning, e-learning encompasses the use of information, computers and technology to enhance communication in distance teaching and learning (Innocent &Masue, 2020). E-learning is a widely used technology in teaching and learning in HLIs particularly during this period of COVID- 19 pandemic.

Online teaching and learning is emerging as a growing trend in Open and Distance Learning (ODL) and isgaining wider popularity among Higher Education institutions in Africa. Online teaching and learning in the context of this study, refers to a method of instruction and acquisition of knowledge that is carried out in ODL with the help of computer and technologies via internet. Usage of technology offers a wide range of opportunities in ODL including

promoting the quality of interaction among learners, interaction between learners and lecturers as well as providing access to a plethora of resources (Mathew &Iloanya, 2016).

Additionally, e-learning is substantially becoming a popular effective learning approach within greater academic settings due to high use of web systems in learning. E-learning involves utilization of information and communication technology (ICT) to improve and help teaching and learning process which in turn influence students' academic performance (Mothibi, 2015). However, e-learning could influence students' academic performance positively or negatively.

Likewise, before the introduction of e-learning most high –income, middle, and low –income counties such United Kingdom, Italy, United States of America, Croatia, Turkey, India and Tanzania used print materials as a dominant approach in teaching and learning process. The OUT e-learning system uses the Modular Object-Oriented Dynamic Learning Environment (Moodle) platform, which is a free and open-source learning management system (LMS) that supplements face to face teaching and learning. Resources such as lecture notes and activities including, discussion fora, quizzes and assignments are integrated in the Moodle platform. Subsequently, students are engaged in varied learning activities, including uploading assignments, quizzes, exercises downloading learning resources as well as participating in discussion fora (Ghasia et al., 2020). With this regard the influence of e-learning on the actual performance of students at the Open University of Tanzania was not documented.

The researcher investigated influence of e-learning on the actual performance of students at the Open University of Tanzania which is normally measured in Grade Point Average (GPA). In a different context e-learning has different influence which depends on the level of investment in ICT and educational stakeholders' background of ICT. Generally, studies done by Tossy (2017), Hlutwa (2018) and Elifaki et al. (2019) indicatethat e-learning influenced positively or negatively actual students' performance.

2. Statement of the Problem
The current Open University of Tanzania is alluded to have problems in e-learning. There are contradictions whether e-learning influences students' academic performance positively or negatively. This is the major concern for educational stakeholders such as lecturers, students, parents. However, studies done by Elifaki et al. (2019) Hlutwa (2018)Tossy (2017) indicated that e-learning negatively influenced students' academic performance. Other studies done by Barkas and Shah (2018) Fayomi et al. (2015) indicated that e-learning has positively influenced students' academic performance. The debate is not conclusive among scholars, academicians, educational practitioners on the influence ofe-learning on students' academic performance. Therefore, these contradictions are a cause for investigation. Little has been done on the influence of e-learning on students' academic performance in the Open University of Tanzania. This study must be done in order to solve e-learning problem which could affect the Open University and the country at lager. Therefore, this study investigated influence of e-Learning on students' academic performance at the Open University of Tanzania.

3. Research Questions and Hypothesis
The study was guided by one research question and one hypothesis.

1. To what extent has e-learning influenced the academic performance of students at the Open University of Tanzania?

Ha: There is a significant difference between students' mean score in the academic performance and students involved in e-learning across five programs at the Open University of Tanzania.

4. Significance of the Study

The study wasexpected to contribute to formulation of suitable Tanzania ICT policy and the Open University of Tanzania ICT policy. With an increasing demand for tertiary education and rapid technological development the university should employ ICT in all its aspects. For this reason it is important to equip students with the right skills, which enhance their integration of e-learning in the process of teaching and learning.

This study is highly significant in enhancing the importance of e-learning in higher education. This information should help educational stakeholders in this case lecturers, students, parents and the government to avoid the barriers that are likely to hinder the development and expansion of e-learning in the Open University of Tanzania. E-learning can also be seen as a promising way for improving the quality of higher education and effectiveness of learning. It may provide increased flexibility of learning experience to students and enhance access to information resources for more students. E-learning could also lead to the enhancement of quality in higher education by leading to innovative pedagogies, new ways of learning and interacting by easy sharing of the new practices among learners and lecturers regarding the influence of e-learning on students' academic performance at the Open University of Tanzania.

Furthermore, the findings of this study should addto the body of knowledge on the influence of e-learning on students' academic performance at the Open University of Tanzania. E-learning is new technology in teaching and learning process in Tanzania. Other universities in Tanzania have started the basic process of ICT infrastructural expansion to include local area network implementation, Internet, computer labs and other facilities, as a way forward to the establishment of e-learning. Also the University could learn from the findings of this study on how best to implement the new technology.

5. Theoretical Framework

This study was guided by Diffusion ofInnovation Theory (DIT). Diffusion of Innovation Theory, developed by E.M. Rogers in 1962, is one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behavior, or product. Adoption means that a person does something differently than what they had previously done (i.e., purchase or use a new product, acquire and perform a new behavior). The key to adoption is that the person must perceive the idea, behavior, or product as new or innovative. It is through this that diffusion is possible. The theory focused mostly on the factors related to people rather than institutional and technical support factors, which confirms the importance of considering people in any implementation process. When considering a holistic systems approach to e-learning implementation, Rogers' (2003) theory was preferred as a basis for investigating the influence ofe-learning on students' academic achievement in most higher learning institutions. The theory relates to students' academic achievement due to the fact that the theory focuses on new technology, new ideas, and new practice of teaching by using new ICT technology. This indicates

that if this technology is well integrated in the teaching and learning process it would influence students' academic achievement at the Open University of Tanzania. The Diffusion Innovation Theory has five relating attributes of diffusion of innovation to e-learning implementation

The first attribute is relative advantage. It is the degree to which an innovation is perceived as better than the idea it replaces. The degree of relative advantage may be measured in economic terms, but social prestige factors, convenience, and satisfaction are also often important components.

This may be established through effective planning for users' engagement with the learning system, by establishing the innovation's convenience to the user and satisfaction that may be gained by using the innovation. Management level relative advantage may be established by identifying the system's Strengths, Weaknesses, Opportunities and Threats (SWOT) relative to its objectives. The use of e-learning which is new technology has relative advantage in teaching and learning in higher learning institutions compared to traditional face to face teaching and learning. Thus, the support outcomes must be better than existing methods of delivery and learning values of lecturers and students, and their previous experiences.

The second attribute is Compatibility. It is the degree to which an innovation is aligned on the culture in considering aspects such as existing values, attitude, past experiences, and needs of potential adopters. This may determine whether the e-learning technologies are consistent with the needs of lecturers and students in terms of delivery and learning outcomes. Comparable outcomes must be sufficiently consistent with institutional clear objectives, policies, and strategies for teaching and learning in the OUT. E-learning and teaching should be aligned with Tanzania culture. If e-learning was not aligned with Tanzania cultureit could influence negatively students' academic achievement in the Open University of Tanzania, hence rejected by society.

The third attribute is complexityin this case Rogers (2003, p. 257) asserted that users are unlikely to adopt an innovation if they perceive the innovation to be relatively difficult to understand and use. Computer hardware and software perceived as flexible, friendly, scalable, and meeting all user requirements and needs, has the likelihood of being accepted by all users. For example, if lecturers and students consider the learning technologies to be flexible and user friendly, then there is the likelihood of adoption. To overcome issues of complexity, training was required for lecturers, students and technical support staff. Training is particularly needed for the technical support staff on which the effective running of the system will depend; they required skills and competencies to manage the network traffic, bandwidth, and developing a redundancy plan.

The fourth attribute is trial abilityaccording to Rogers (2003, p. 258) asserted that the extent to which an innovation is tested, where limitations to the innovation are low and the gains are high, there is likelihood of acceptance. This raises issues of hands-on demonstration and engagement with the e-learning technologies to assist the decision-making process of adoption or rejection. Thus, the management influence and effective planning within this context is very important for users to appreciate and accept the innovation.

The fifth attribute is observability which focuses on a significant improvement in teaching and learning outcomes which will be evidence of the e-learning technology's ability to enhance

individual performance. Rogers (2003, p. 258) argued that individuals are willing to adopt an innovation when they are convinced (visibly shown) that the innovation improves performance or outcomes of set objectives. The focus of this research is a formative and summative evaluation of the implementation process.

6. Literature Review
This section contains empirical review based on the influence of e-learning to students' academic performance at the Open University of Tanzania.

6.1 The Influence of E-learning on academic performance of Students at the Open University of Tanzania
E-learning has dominantly become an effective mechanism in professional training as well as teaching and learning at tertiary level due to its speed, convenience and efficiency in accessing and processing information via web systems. There is the relationship between e-learning and students' academic performance. The results could reveal that use of associated information and communication technology for enhancing e-learning students' educational academic achievement (Mothibi, 2015).

In the United Kingdom, Shah and Barkas (2018) conducted a study on the impact of e-learning technology on students' engagement, attendance and performance. The study aimed to investigate whether student engagement has impact on students' performance. The study employed quantitative research study to examine two undergraduate engineering modules. Since the previous researcher used single instruments in investigating the student engagement on the impact of students' performances this might limit triangulation to validate findings and hence lower validity and reliability of findings. The current study intended to use multiple data collection for the purpose of triangulation of data.

The findings from Barkas and Shah (2018) indicate that student performance had a positive correlation with students' engagement through e-learning. Second, the other key finding was that student engagement from the aspect of e-learning had a significant positive connection in improving student performance at both levels, but student engagement as measured by attendance had an insignificant impact on performance. The findings also, confirmed that student engagement had a linear effect on the student performance from the regression analysis. This exposed the issue that students need to be involved more in online activities in order to improve their performance in a course module. From these results, it could be argued that the results might be different in other subject areas because of the nature and complexity of different modules, where various levels of online activities take place. However, the previous study did not show the current study to what extent e-learning influenced students' actual performance. Therefore, in fillingthis gap thecurrent study examined the influence of e-learning on students' actual performance at the Open University of Tanzania.

Elfaki et al. (2019) did a study on the impact of e-learning against traditional learning on students' performance and attitude in Saudi Arabia. The major aim of this study was to study the impact of E-learning on the students' academic performance. The researcher employed quasi-experimental research design to carry out the study in Najran University- College using questionnaires to collect data from 80 respondents. On top of that, the previous study used a

single research instrument which limit triangulation to validate the findings hence might cause invalidity and unreliability findings. The current study filled the gap by employing multiple research instruments such questionnaires, interview guide and document analysis schedule which might increase the reliability of the findings.

The findings from Elfaki et al. (2019) show that despite the benefits of e-learning, numerous studies pointed out that E-learning has a negative impact on students' achievements. They argued that students may feel isolated, parents may have concerns about children's social development, and students with language difficulties may experience a disadvantage in text heavy online environment. Though the study informed the present study that e-learning has a negative impact on students' achievement it did not identify the magnitude of the problem for both lecturers and students. Also, the study conducted in Saudi Arabia has different investment on e-learning compared to Tanzania and might affect students' academic performance. The current study investigated the influence of e-learning on students' actual performance achievement at the Open University of Tanzania.

Fayomi et al. (2015) conducted a study on the impact of e-learning in facilitating academic performance on tertiary institutions in Ota, Ogun State, Nigeria. The main purpose of the study was to investigatethe impact of e-learning on students' academic performance. The survey method was utilized for data collection from the field study. A clustered random sampling technique was used and estimated 214 sample sizes. A total of 250 questionnaires were distributed and 214 estimated with a total of 27 variables that were retrieved from the survey with a response rate of 86 percent.The personal characteristics of the respondents were analyzed with descriptive statistics involving frequency distribution and percentages. According to nature and purposes of the study used by previous study which was quantitative in nature required the large sample in order to increase validity and reliability of the findings. In quantitative study the large the sample could increase the validity and reliability of the study while the small sample lower validity and reliability of findings. Therefore, this study gives room for the current study to involve large sample which could add validity and reliability of the findings.

Fayomi et al. (2015) findings revealed that is a significant impact of e-learning in facilitating academic studies and self-development resulting to improved learning process and high academic performance. Although the finding of this study informed the present study on the impact of e-learning on students' academic performance but it did not indicate to what extent e-learning leads to students' academic performance at university level. The current study filled the gap by examining theextent to which e-learning influences the academicperformance by focusing individual Grade Point Average (GPA) at OUT.

Descriptive study by Hlutwa (2018) focused on influence of e-learning on students' performance in Higher Learning Institutions: A Case Study of United States International University-Africa in Kenya. The main objective of this research was to examine the influence of e-learning on students' performance in higher learning institutions. The study used a descriptive survey research design with structured questionnaires.The use of single instrument for data collection limited triangulation to validate findings. The current study employed convergent design in which the researcher collected and analyzed both qualitative and quantitative data in a single phase. The nature and purpose of the study triggered the researcher to use convergent design. Employing convergent design might produce findings which are reliable and valid. The target

population for the previous research was 920 students who are enrolled for graduate programs. Stratified random sampling was used to select a sample of students from the target population. The sample size was 279.The use of one category of participants in the previous study could not be appropriate in collecting information relating to e-learning and there is possibility of getting information which is inadequate. Therefore,   current study involved lecturers, students, which might provide accurate information. The more diversified the participants in quantitative study the more representative and hence accurate information. The researcher's data collection method that was used by this study focused on primary data collection method using only questionnaires. The use of only questionnaires limit triangulation and hence might lower validity of findings. The current study filled this gap by using a variety of research instruments such as questionnaires, interview guide and document analysis schedule. This   triangulation of findings guarantees reliable findings.

The findings by Hlutwa (2018) revealed that there is a problem with the integration of e-learning and students' performance in higher institutions. The previous researcher did not indicate how the integration of e-learning caused problems in students' actual performance in institutions of higher learning. Therefore, the current study filled this gap by investigating the influence of e-learning on students' academic performance at the Open University of Tanzania.

In Tanzania, Tossy (2017) did a study on measuring the impact of e-learning on students' achievement in learning process: an experience from Tanzanian public Universities. The main objective was to provide a model for measuring the impact of e-learning on students' achievements in universities. Thestudy employed mixed research methods where by survey and interviews were used in collecting data for building the model. Multiple regressions technique was used to analyze the hypothesized relationships conceptualized in the research model. However, the study did not mention the target population, sample size, sampling procedures which might raise questions on the authenticity of the findings. The study used mixed research approach. In same vein survey designwas used which is not appropriate with mixed research approach. Survey design is under quantitative approach so the application of survey design under mixed approach might lead failure in collecting andanalyzing data appropriately. The current study employedconvergent design which fits with mixed research approach. Also, the study just involved one instrument which limits triangulation to validate findings. The current study usedmultiple instruments in collecting datanamely interview guide and document analysis schedule.

Findings from Tossy (2017) reveal that measuring e-learning impact on students' achievements, indicators such as student engagement, student cognitive, performance expectancy, student self-esteem, student confidence on e-learning system have positive significant relationship with students' achievement. However, the previous researcher did not indicate whether e-learning has impact on students' academic performance in relation to Grade Point Average (GPA). However, the current study filled this gap by identifying influence of e-learning on students' academic performance at the Open University of Tanzania in relation to GPA. Also, researcher did not show whether the findings were generalized to the entire public University or not.

7. Research Methodology

The study adopted convergent research design under mixed research approach .In this case both qualitative and quantitative data were collected, merged the data and used the results to address the research problem. It is useful when the researcher has limited time for collecting data in the field and must gather both types of data in one visit. The researcher needs both quantitative and qualitative forms of information from every participant (Creswell& Plano Clark, 2018; Creswell& Creswell, 2018). The sample comprised 30 OUT lecturers, 262 OUT students selected by stratified followed by simple random procedures. 5 OUT Instructional designers were purposively selected.01 OUT director of quality assurance, and 01 OUT director of examination syndicate were not sampled but were directly included in the study.

The study essentially used a combination of both qualitative and quantitative data collection instruments such as interview guide for Director of Examinations Syndicate. Similarly, documentary analysis schedule was used to collect the information on the reports relating to actual performance in terms of GPA.Validity of the research instruments was determined by research experts and reliability of interview cross check codes developed by different researchers by comparing that that are derived independently.The researcher used both descriptive and inferential statistics in data analysis. For descriptive statistics data were collected from document analysis schedule. The descriptive data were analyzed using frequencies, percentages, and means. The interpretation of data was done in relation to research questions as indicated. For Inferential statistics, data were tested according to their assumptions at confidence level of 95% and significance level of 5%. For this study hypothesis one was tested by Analysis of Variance (ANOVA). The researcher used thematic analysis techniques to analyze qualitative data. The analyzed qualitative data from interview guides were summarized, coded and analyzed in each theme/ category and then relevant informationwas extracted, interpreted and discussed and presented in quotation and narration.

8. Findings and Discussions

This section provides the study results for the influence of e-learning on the students' actual performance at the Open University of Tanzania.

Influence of E-learning on students' Actual performance at the Open University of Tanzania

This section focuses on influence of e-learning on students' actual performance at the Open University of Tanzania. A document analysis schedule which contains students' GPAwas used to capture information regarding actual performance.The information was obtained fromthe faculty examination offices. The results are presented in Table 1.

Table 1: The Students' Academic performance in GPA at the Open University of Tanzania 2020/2021

Program	Class (G.P.A)				Total
	Pass (2.0-2.5)	Lower Second Class (2.6-3.4)	Upper Second Class (3.5-4.4)	First Class (4.5-5.0)	
LLB	10	65	29	-	104
BHRM	9	43	19	-	71

BASO	-	8	6	1	15
BSC ED	4	12	4	-	20
BED PM	13	99	37	-	149
Total	**36 (10.0%)**	**227 (63.2%)**	**95 (26.5%)**	**1 (0.3%)**	**359**

Source: Filed data (2022).

Data in table1 illustrates that moderatemajority of students 227 (63.2%) had a GPA of lower second class. The Open University of Tanzania offers   all programs though e-learning. This could mean that e-learning had contributednegative impact to students' actual performance at the Open University of Tanzania. These findings relate to the study by Elfaki et al. (2019) which discovered that despite the benefits of e-learning, numerous studies pointed out that E-learning has a negative impact on students' achievements. They argued that students may feel isolated, parents may have concerns about children's social development, and students with language difficulties may experience a disadvantage in text heavy online environment. In the same vein Hlutwa (2018) revealed that there is a problem with the integration of e-learning and student's performance in higher institutions.

Moreover, these studies indicated that e-learning had impact on students' performance. The level of investment of e-learning might be a challenge to integrating e-learning in higher learning institutions. E-learning is a new system for many countries and most countries were still in the infant stage of integration of e-learning in teaching and learning at higher learning institutions. The integration of e-leaning should be aligned with students' actual performance. The researcher had expected that e-learning could positively influence students' actual performance at the Open University of Tanzania. The researcher discovered that the majority of students had lower second class GPA. This was directly linked to students' lack of engagement in e-learning during the process of teaching and learning. It was noted that majority of students at OUT were not conversant with the e-learning platform which affected their academic performance.

Few students (0.3%) and (26.5%) had a GPA of first and upper second class respectively. This implies that e-learning still favours some few students who managed to acquire the GPA of first and upper second class. These findings concur with the findings obtained by Barkas and Shah (2018), Fayomi et al. (2015) which revealed that e-learning had positive influence on students' academic performance. These scholars indicated that if e-learning was well implemented in the teaching and learning process, it would have positive impact on students' performance. This means that students who diligently and readily engaged in e-learning platform performed well. Most Universities used Grade Point average (GPA) to measure students' academic performance. This justifies that, students with good GPA performed well and vice versa. Thus, first class and second class GPA indicated good performance. In the field of work, still GPA was used as a criterion for selection into different sectors. Not only that but also GPA was used as a criterion for some students to pursue further studies.

From the outcomes obtained, we are able to gauge that e-learning helps to improve the academic performance of students.However, e-learning was not reliable in all situations noticeably in rural areas where accessto e-learning was a challenge. E-learning was a good approach to teaching and learning for students at Open University of Tanzania. However, the students' performance depends on the level of investment in e-learning. There was relationship between the e-learning investment and students' performance. This was observed in most developed countries where the

level of investment was higher compared to middle and lower income countries, Tanzania inclusive.

In order to triangulate these findings the researcher conducted an interview with the director of examination syndicate to check the authenticity of the information obtained from the document analysis schedule which indicated that: *"From three years consecutively e-learning increased the performance of students at the Open University of Tanzania. E-learning such as online assessment specifically online assignments and quizzes had positive impact on students' academic performance"* (personal communication, February 25, 2022)

The above quotation implies that e-learning influenced students' actual performance at the Open University of Tanzania. However, the findings obtained from interview guide contradict those obtained from the document analysis schedule. These contradictions made the researcher based on findings which were found from document analysis schedule which indicated that there were lower performance among students at the Open University of Tanzania rather than what was obtained from the interview guide.

Null Hypothesis 1

Ho: There is no significant difference between students' mean score in academic performance across five programs on e-learning at the Open University of Tanzania.

An ANOVA was tested at 0.05 significance level and summarized in table 2. Before hypothesis testing, assumptions were tested. The assumption tested particularly the normality test indicated that p –value was greater than 0.05 hence data were normally distributed.

Table 2: Testing Hypothesis

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.189	28	0.400	0.884	0.636
Within Groups	64.191	142	0.452		
Total	75.380	170			

The findings in Table 3 were summed as: $F(28,142) = 0.884$, $P=0.636$. The findings indicated that P- value is greater than 0.05 significance level.Since the p-value from table 2 is greater than the significance level we fail to reject the null hypothesis. Therefore, there is no significant difference between students' mean score in the actual performance and students involved in e-learning across five programs at the Open University of Tanzania.

These findings compromise that e-learning has no significant influence on the students' academic performance at the Open University of Tanzania. This result was in line withDiffusion Innovation Theory which had attribute of complexity. This attribute asserted that users are unlikely to adopt an innovation if they perceive the innovation is relatively difficult to understand and use. Computer hardware and software perceived as flexible, friendly, scalable, and meeting all user requirements and needs, has the likelihood of being accepted by all users. For example, if lecturers and students consider the learning technologies to be flexible and user friendly, then there is the likelihood of adoption. This implies that e-learning could be complex to users particularly students hence affect the actual performance of the students. The poor performance noted could be due to complexity students encountered during integration of e-learning.

9. Conclusions

From the findings the researcher concluded that e-learning hadcontributed negative impact on students' academic performance at the Open University of Tanzania. The integration of e-learning in countries where the level of investment was low could affect the students' academic performance. In the same manner the hypothesis tested, concluded that there was no significant difference between students' mean score in actual performance and students involved in e-learning across five programs at the Open University of Tanzania. This could mean e-learning did not the impact to students' academic performance.

10. Recommendations

From the conclusions, the researcher made the following recommendations:

The University management and other educational stakeholder should assess the impact of e-learning on students' academic performance at the Open University of Tanzania in order to understand the status of e-learning for justifying the total investment of e-leaning at University level.

The Open University of Tanzania in collaboration with the Institute of Education Management and Technology should work out a plan for training of students on the issues dealing with e-learning on how to integrate e-leaning in the process of teaching and learning at the Open University of Tanzania. By so doing this could help students take their programs smoothly and hence would increase actual students' performance.

Furthermore, the university currently should offer blended classes where both online classes and traditional face to face run concurrently to improve teaching and learning. This could favour both students in rural and urban contexts. This would also increase students' performance at the Open University of Tanzania.

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