# Study of Usage of Technology in Academic Interaction: Faculty Perspective

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*Abstract*: - Now day's technology plays important role in every domain of business. The availability & price of technological devices are affordable to everyone. The availability & speed of internet to at any place increased usage of internet access. This revolution has acquired the field of education by the various apps, websites, and technological device. Now days the technology is used in academics by the student, faculty & universities for their purpose.in this research paper we are focusing on the attitude of faculty to use of technology in academic interaction & its impact on teaching learning process form the faculty view.

Keywords: - Technology, application, Smart Phone, Internet, Academic Interaction

# I. Introduction:-

The technology has revolutionary changed every field of business. The change of business requirement for the employment, the prospective employee will have updated knowledge of various technology & its usage to get opportunity in market. Prospective employee will be the students of various courses & its responsibility of the faculty & institute to make capable & knowledgeable students as good employee & employer .so there is need of faculty, trainer & institute to give all the facility & technology infrastructure to the students. So faculty should change their teaching methodology & it should be technology enabled. So there is need of study the attitude of faculty, trainers towards usage of technology in academic interaction.

# II. Review of literature:-

The roles and responsibilities of college and university faculty members are closely tied to the central functions of higher education. Broadly defined, faculty fulfills three primary functions at University: teaching, research, and service (Fairweather, 1996). The teaching role of faculty members reflects their centrality in addressing the primary educational mission among colleges and universities. Faculty members are expected to provide instruction and student advising as assigned by the departmental chairman. In brief the main aspects of teaching responsibilities of faculty members are classroom teaching, academic advisement, course development, academic program review and course duplication review, all of them can be categorized as curriculum development process. If ICT tools are to improve institutional effectiveness and efficiency, it is obvious that their application in support of teaching and learning should be seriously considered. However, investments in this area should always be carefully balanced against other ways in which teaching and learning may be improved and strengthened

Simeo Boniphace Kisanjara in their research paper entitled "ICT Application In Teaching And Learning Processes By Tutors: A Case Of Two Selected Tanzania Teachers Colleges (Tcs)" [5] they have concluded, The application of f ICTs in teaching and learning processes by Teachers Colleges in has found to have positive impact on teaching, learning. The study found large extent of ICTs application by tutors although its application is not efficient despite the roles ICTs can play in education. The major reason being poor policy and project implementation strategies and limited or poor information infrastructure towards ICT application in teaching and learning process. In order to ensure that ICTs are widely applied in teaching and learning process in Teachers Colleges, the study comment the government to ensure that ICT policy statements are translated into reality. An ICT policy implementation commission should be created. This commission should be funded and given the power to provide ICT facilities in the colleges and monitor their use. ICT education should be made compulsory for all Colleges students .Efforts should be made by Ministry of Education to post teachers skilled in ICTs to each college to impart ICT skills to the students.

A study by Issa (2008) on ICT use in teaching and learning in public teachers colleges in Tanzania found out that even if tutors have attended several sessions of training in ICT still they are not effectively integrating ICT in teaching and learning meanwhile the study by Mswanyama (2004) on the role of ICT on learning and training in teachers colleges found that ineffective training in ICT for tutors hinders effective use of ICT in teaching and learning. In these two studies conducted in Tanzania context none of them focused on the applicability of ICT in enriching curriculum implementations in TCs in Tanzania. Therefore, this paper seeks to study on ICT application in teaching and learning processes by tutors: a case of two selected Tanzania teachers colleges

## III. Statement of the Problem:-

It is evident that the application of technology helps academic interaction more effective. It has been established that Technology has the capacity to empower faculty and students beyond traditional teaching and learning because Technology provides flexible teaching and learning. The strength of Technology in academic interaction can be seen in its qualities such as interactivity, intelligent guidance and dynamic feedback. The application of Technology enables to support student & teachers during the academic interaction where also both student & teachers s can have electronic discussions without meeting in face to face. As the increasing use of technology usage faculty should use technology in to academic interaction. So there is need to study the faculty opinions & attitude towards usage of technology in academic interaction. There is need of study is technology has positive impact in academic interaction if technology is used in academic interaction.

## IV. Objective:-

- 1. To study the impact of usage of technology in academic interaction.
- 2. To understand the behavior pattern of technology usage among the faculty of MBA course
- 3. To suggest remedial measures to proper usage of technology in academic interaction to improve teaching learning.

### V. Hypothesis:-

**H0:** There is significant difference in the technology used class & regular class.

## VI. Research Methodology:

The simple random sampling and purposive sampling methods will be adopted during the course of this study. In case of simple random sampling methodology the 20 institutes were selected out of 136 population of faculty to 101 faculty was selected for the study. For solving any type of problem, study of the whole population or universe is impossible. It is therefore decided to pick up sample units that can represent the universe, which are being covered by the research. In this research work the selected samples are

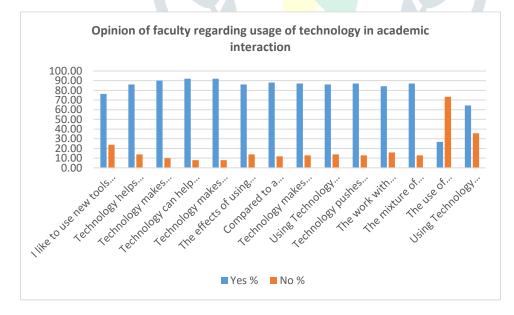
### VII. Sources of data collection:

In order to ensure most relevant and accurate feedback from the sample units the researcher has employed following techniques for collection of data. A survey is a systematic collection of data concerning technology usage in academic interaction by the faculty. The survey method consists of various techniques like observation, questionnaire, and interview

#### VIII. Empirical Data Analysis and Presentation:-

This section consists of the information regarding the response from faculty regarding usage of technology in academic interaction. The following analysis was made, based on the data collected through the questionnaire.

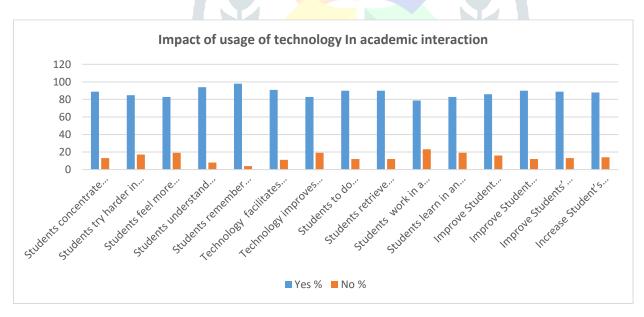
Sr.No	Parameter	Yes	%	No	%	Total
1	I like to use new tools of technology in my lessons.	77	76.24	24	23.76	101
2	Technology helps students to experience things more actively.	87	86.14	14	13.86	101
3	Technology makes the course content more lively.	91	90.10	10	9.90	101
4	Technology can help students to acquire understanding and insight.	93	92.08	8	7.92	101
5	Technology makes calculations and manipulations easier.	93	92.08	8	7.92	101
8	The effects of using Technology in teaching learning are visible in the short term.	87	86.14	14	13.86	101
10	Compared to a regular lesson, a lesson with Technology is more effective.	89	88.12	12	11.88	101
11	Technology makes things too easy for the students.	88	87.13	13	12.87	101
12	Using Technology encourages students to explore situations	87	86.14	14	13.86	101
13	Technology pushes students towards trial-and- improvement approaches.	88	87.13	13	12.87	101
15	The work with Technology promotes the students' systematic approaches.	85	84.16	16	15.84	101
17	The mixture of Technology use with other teaching formats is important.	88	87.13	13	12.87	101
18	The use of Technology in the lesson limits your freedom as a teacher.	27	26.73	74	73.27	101
19	Using Technology provides you as a teacher with more means to build whole class discussions on the students' ideas.	65	64.36	36	35.64	101



The above table & graph shows that opinion of the faculty regarding usage of technology in academic interaction. The 76.24 % faculty of MBA are using technology in academic interaction. The 91% faculty says usage of technology in academic interaction will make class more interactive & effective. 87.13 % of faculty

Sr.No	Parameter	Yes	Yes %	No	No %	Total
1	Students concentrate more on their learning	88	88.88	13	13.13	101
2	Students try harder in what they are learning	84	84.84	17	17.17	101
3	Students feel more autonomous in their learning	82	82.82	19	19.19	101
4	Students understand more easily what they learn	93	93.93	8	8.08	101
5	Students remember more easily what they've learnt	97	97.97	4	4.04	101
6	Technology facilitates collaborative work between students	90	90.9	11	11.11	101
7	Technology improves the class climate (students more engaged, less disturbing	82	82.82	19	19.19	101
8	Students to do exercises and practice	89	89.89	12	12.12	101
9	Students retrieve information	89	89.89	12	12.12	101
10	Students work in a collaborative way	78	78.78	23	23.23	101
11	Students learn in an autonomous way	82	82.82	19	19.19	101
12	Improve Student motivation	85	85.85	16	16.16	101
13	Improve Student achievement	89	89.89	12	12.12	101
14	Improve Students' higher order thinking skills	88	88.88	13	13.13	101
15	Increase Student's competence in transversal skills	87	87.87	14	14.14	101

says that technology makes class easy to understand it is observed that 73.27 % of faculty informed that there is no need to change teaching methodology to use technology in academic interaction.



Interpretation:-

The above table shows that impact of new technology on academic interaction .it is observed that 88% of student are concentrate on more than learning.it is observed that 84.84 % of student learn in the autonomous way.97.97 % students are remember easily where technology is used in academic interaction. Table shows 85 % students have increased their achievement when technology is used in academic interaction.

## IX. Testing of hypothesis:-

**H0**: There is significant difference in the technology used class & regular class. **H1**- there is no significant difference in the technology used class & regular class.

Sr.No	Parameter	Yes	No
1	Technology makes the course content more lively.	91	10
2	The use of Technology in the lesson limits your freedom as a teacher.	27	74

#### Interpretation:

The t test is used to test the hypothesis & calculated the t-value is 0.37565. The p-value is .371639. The result is not significant at p < .05.

From the above table we can see that, T-value is 0.3765 and p-value is 0.371639. If the p-value > 0.05 then the null hypothesis H0 is Accepted and the alternate hypothesis H1 is rejected. In above case the p-value 0.371>0.05 which shows the significant result. Therefore, here null hypothesis H0 is Accepted and H1 is rejected and concludes that, there is significant difference in the technology used class & regular class.

### X. Findings:

- It is observed that there is positive impact of usage of technology & academic interaction.
- It is observed that 88% of faculty is using technology in teaching learning process.
- It is observed that 87% student are more concentrating towards class when technology is used in teaching learning.
- It is observed that students change their learning style form dependent to independent of faculty.
- It is observed that 87% of students are learning their course, new skills by autonomous way with the help of technology.
- It is observed that there is increase in no of achievement in academics.

## XI. Conclusion:-

The use of technology has given positive impact of student performance & achievements. Daily updates in technology is giving new to the faculty to use it, so students are engaged to learn it. The use of technology has changed the attitude & behavior of the faculty & students towards academics. Faculty should use the technology but they have to fix the boundary so faculty can give the best.

#### XII. Reference:-

- 1. Fairweather, R. (1996). Literacy and popular culture in England 1750-1914. Cambridge: Cambridge University
- 2. Press, Cambridge
- Simeo Boniphace Kisanjara (2014)..ICT APPLICATION IN TEACHING AND LEARNING PROCESSES BY TUTORS: A CASE OF TWO SELECTED TANZANIA TEACHERS COLLEGES (TCs). Global Journal of Engineering Design and Technology, 3(1), pp.12-17.
- Issa, B. G. (2008). The Use of ICT in Teaching and Learning: A case study of Public Teachers Colleges in Tanzania. Unpublished Master of Education (Teacher Education) thesis Institute for Education Development, Eastern Africa, Dar es Salaam.
- Dr. Azhar Mahmood, & Nasir Hussain Bokhari. (2012). USE OF INFORMATION AND COMMUNICATION TECHNOLOGY: GENDER DIFFERENCES AMONG STUDENTS AT TERTIARY LEVEL. JOURNAL OF EDUCATIONAL AND INSTRUCTIONAL STUDIES IN THE WORLD, 2(4), 100-108.
- 6. Sushma Rani. (2015). GENDER SENSITIZATION TOWARDS FUTURE GADGETS IN EDUCATION. Operations Research And Applications : An International Journal (ORAJ), 2(4), 1-15.
- jafarzadeh-kenarsari, f., & pourghane, p. (2017). College Students, Experiences on Smart Phone Technology Usage: A Qualitative Content Analysis Study. *The Qualitative Report*, 22(11), 2864-2880. Retrieved from <u>https://nsuworks.nova.edu/tqr/vol22/iss11/2</u>
- Ugwulebo Jeremiah Emeka, & Okoro Sunday Nyeche. (2016). Impact of Internet Usage on the Academic Performance of Undergraduates Students: A case study of the University of Abuja, Nigeria. *International Journal Of Scientific & Engineering Research*, 7(10), 1018-1029.

