

Ict As An Integrated Tool In Teaching Learning Process – A Comparative Study On Faculty And Student Attitudes

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Abstract- The recent developments in the field of ICT impacted every field of our lives. The teaching learning processes is not far behind in identifying and acknowledging the potential scope of ICT in education and thus embraced ICT as a tool to further enhance the productivity of quality learning outcome. Multiple studies suggested that mere incorporation of technology as an instrument unless supported by the positive attitude and skill set of both the teachers and learners will not result in the far-reaching benefits expected from the ICT inclusion in the education. In this regard, an empirical study was conducted to know the attitudes of undergraduate students and faculty of engineering in the twin cities of Hyderabad towards ICT in education and compare if there is any significant difference in their attitudes towards use of ICT integration in the teaching learning process using Mann Whitney U Test. The test results showed that there is a significant difference in the attitudes of students and faculty towards inclusion of ICT in teaching learning process.

Key Words: ICT in education, ICT faculty and student attitudes

I. INTRODUCTION

The latest developments happening in the contemporary times witness unprecedented growth in the field of information and communication technology. The new technologies are impacting every area of our lives and the millennial generation is encompassed by ICT. The process of teaching and learning is not far behind in identifying and acknowledging the potential scope of ICT in education and thus embracing ICT as a tool to rapidly enhance the progressive learning of students. It has been observed from various studies that the solitary use of technology will not suffice to impart the needed knowledge in the students but it is also impacted by the attitudes and perceptions of both. Vourletisis(2017) observed the differences in the attitudes by freshmen and senior students towards use of ICT in education, Ina Blau (2012) opined that the teacher's acceptability to change in their professional lives and communication has an impact on the teaching leaning process, Ahamed and ADulaziz (2004) measured the relationship between performances of students and their attitudes towards ICT, Kubiakto (2010) on factors influencing differences of attitudes. With the easy accessibility of digital devices to almost every student of higher education, the present study focuses to know if there is any difference between the attitudes of teachers and students of higher education institutions on their perceived use of integrating ICT in to teaching learning process.

II. OBJECTIVES :

To know the attitudes of faculty and students towards the use of ICT

To study if there is a significant difference between faculty and students attitudes towards use of ICT in teaching learning process.

Five hypotheses were framed for the study:

H01: There is no significant difference in the attitudes of students and faculty on use of ICT in improving searching and learning skills.

H02: There is no significant difference in the attitudes of students and faculty on use of ICT in saving time and increase productivity

H03: There is no significant difference in the attitudes of students and faculty on use of ICT through facilitating learning

H04: There is no significant difference in the attitudes of students and faculty on use of ICT in helping find updated information

H05: There is no significant difference in the attitudes of students and faculty on use of ICT in improving learning skills.

III. METHODOLOGY:

78 undergraduate students and 26 faculty of Engineering were surveyed administering a structured questionnaire. The questionnaire consisted of two parts. Their demographic details of age, gender, branch, year of study, experience etc., comprised the first part and their skills in ICT and attitude towards integrating ICT in the teaching learning process were surveyed in the second part. The attitudes and skills were collected using 5 point Likert Scale. The responses were compared using Mann Whitney U test to compare and know if there are significant differences between attitudes of students and teachers towards the use of ICT.

IV. ANALYSIS AND INTERPRETATION:

The following tables present the faculty attitude towards use of ICT in teaching learning process:

Table 1: Faculty attitude towards use of ICT

Faculty attitude towards Use of ICT	Strongly Disagree	Disagree	Doesn't make change	Agree	Strongly Agree
Save time and increase productivity	5	4	3	8	6
Improves Searching and learning skills	3	0	1	17	5
Facilitates learning	13	6	0	4	3
Help find updated information	2	1	6	10	7
Improving learning skills	2	0	1	13	10

Table 2: Student attitude towards use of ICT

Student attitude towards Use of ICT	Strongly Disagree	Disagree	Doesn't make change	Agree	Strongly Agree
Save time and increase productivity	13	12	15	28	10
Improves Searching and learning skills	11	10	16	27	14
Facilitates learning	12	12	13	28	13
Help find updated information	9	8	19	26	16
Improving learning skills	14	1	13	25	26

Table 3 presents the Hypothesis and the results of the Mann Whitney U Test for the hypothesis tested with their respective p values.

Table No.1: Significance values of Hypothesis testing.

Hypothesis	Parameter	p-value	Remarks
H01	Improves Searching and learning skills	0.02926	Significant, H0 is rejected
H02	Saving time and increase productivity	0.0164	Significant, H0 is rejected
H03	Facilitate learning	0.0139	Significant, H0 is rejected
H04	Help find updated information	0.00714	Significant, H0 is rejected
H05	Improving learning skills	0.00854	Significant, H0 is rejected

From the above results it is observed that the p values of all the hypothesis are less than 0.05 and hence they are rejected. It implies that there is a significant difference in the attitudes of faculty and students towards use of ICT in teaching learning processes.

The attitudes of students and faculty on ICT usage in improving of searching and learning skills, saving time and increase productivity, facilitation of learning, helping find updated information and that ICT improves learning skills are significantly different. This findings indicate that the usage of ICT by students and faculty may be different and that can affect in the implementation of ICT in the educational process.

V. CONCLUSION:

The study can be further analyzed to understand the differences based on demographic parameters and how they can impact the effectiveness of the teaching learning processes. Such studies can be beneficial to construct the

adaptive ICT inclusion methods in teaching learning processes as found needed based on the student and faculty requirements which may lead to effective realization of the maximum potential of ICT in education.

VI. REFERENCES:

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