

Impact of ICT as a Pedagogical Tool in Higher Education

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Abstract

Information and Communication Technology (ICT) in higher and other types of education engages learning and teaching with ICT. The main purpose of the research has shown that influence of ICT on students' performance and enhanced teaching methods. The analysis found that there is influence of projector, presentation software on teaching attitude in higher educational institutions in Chennai. It is also found that there is influence of projector and teaching attitude on students' performance in higher educational institutions in Chennai. Hence, it is concluded that the higher educational institutions should improve informatics teaching and to instigate ICT tools based education on the foundation of informatics focus with straight participation from informatics trainers.

Keywords: *projector, presentation software, teaching attitude, students' performance and ICT tools.*

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1.Introduction¹

The phrase “information and communication technologies” (ICT), refers to shapes of technology that are used to store, transmit, create and exchange information. This wide description of ICT contains such as television, radio, video, satellite systems, telephone, hardware and software, computer and network as well as the equipment and services connected with these newest technologies, such as electronic mail and video conferencing (Iahad, et al. 2012). ICT in higher and other types of education engages learning and teaching with ICT. The main purpose of the research has shown that influence of ICT on students’ performance and enhanced teaching methods. In latest years innovative technology and computer with internet have influenced spectacularly all features of our society. Moreover, the electronic equipments can be utilized to attain knowledge in daily life and also with less time-consumption it brings out frequently enhanced work.

Review of Literature

Prem Kumari Dhakal (2018) identified that the positive attitudes of lecturers along with the wants of the employ of the ICT tools for proficient development of educators and enlarge the presentation of the learners as the learners were established provoked by the modern development of the ICT tools.

Sambuu Uyanga (2005) studied on usage of ICT for secondary education in Mongolia. The analysis found that there is influence of ICTs tools on expansion of student talent to utilize ICTs for their lifetime learning actions, students’ behavior and instructor and student relations are some serious problems to be measured for increasing curriculum. Internet and computers are not broadly utilized for training excluding in Informatics class.

Glenda Gay, et al. (2006) researched that the entitled on "Perceptions of information and communication technology among undergraduate management students." The study was conducted in Barbados. The research found that the students were normally encouraging towards ICT. Males were extratending to include ICT in web based teaching when compared female teaching actions. Older students were

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extra attracted when compared new students in using ICT for teaching activities. The authors suggest that the positive attitudes and high usage toward ICT among tertiary level students.

Padraig Wims and Mark Lawler (2007) analyzed that the “ICTs in educational institutions in developing countries”. The study was carried out in Kenya. The research found that disclosure to computers in schools inclined the profession choices of previous students. The study concluded that improvement of the telecommunications segment is essential to hurry the crush of computer skill in educational institutions.

Sife, Lwoga and Sanga (2007) studied on "New technologies for teaching and learning." The study was conducted in developing countries. The authors concluded that higher educational institutions in developing countries should espouse e-learning equipment to develop training and learning developments. Academic, technical and cost problems should be taken into description for each definite technology when incorporating ICTs in teaching and also learning practices.

3. Materials and Methods

3.1. Research Design

To get better react to the investigate question, a correct research design is to be enclosed. (Cooper & Schindler 2001; Davis & Cosenza 1988). Based on the enclosed hypotheses of the study equally descriptive and inferential statistics were adopted. Descriptive, Exploratory and casual designs are few research designs.

3.1.1. Objectives of the Study

- To study the influence of projector, presentation software on teaching attitude in higher educational institutions in Chennai.
- To identify the influence of teaching attitude on students' performance in higher educational institutions in Chennai.

3.1.2. Hypotheses of the Study

- There is no influence of projector, presentation software on teaching attitude in higher educational institutions in Chennai.
- There is no influence of teaching attitude on students' performance in higher educational institutions in Chennai.

3.2. Framework of the Study

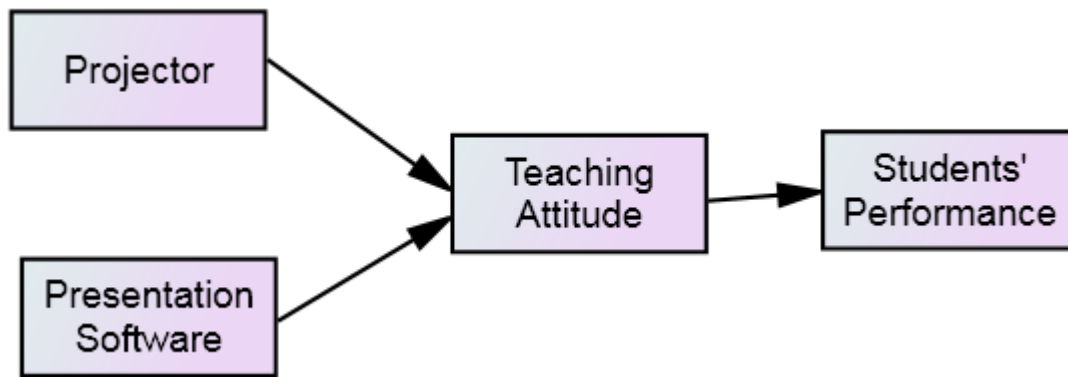


Figure 1: The conceptual framework

3.3. Questionnaire Construction

S.No.	Variable	Author
1	Projector	Self Design
2	Presentation Software	
3	Teaching Attitude	
4	Students' Performance	

The questionnaires were developed by researcher. The responses towards Projector, Presentation Software, Teaching Attitude and Students' Performance were five point likert scales from strongly agree to strongly disagree. For all the statements in the questionnaire construction, the alpha scores ranged from 0.85 to 0.93. This shows better reliability of the statements in the structured questionnaire.

3.4.1. Sampling Technique

Convenience sampling technique was used for the present study. There is only a less effort require to gather the primary data Srivastava (2008). Actually no pre idea of implementing is there.

3.4.2. Sampling Frame

150 questionnaires were distributed personally to those final year students. Out of 150 received questionnaires 102 were eligible and the remaining 48 were with flaws; hence the sample strength was 102.

3.4.3. Statistical tool

Path analysis was used for data analysis. It was used for influence of independent variables on dependent variable with respect to mediator variables.

4. Analysis and Interpretation

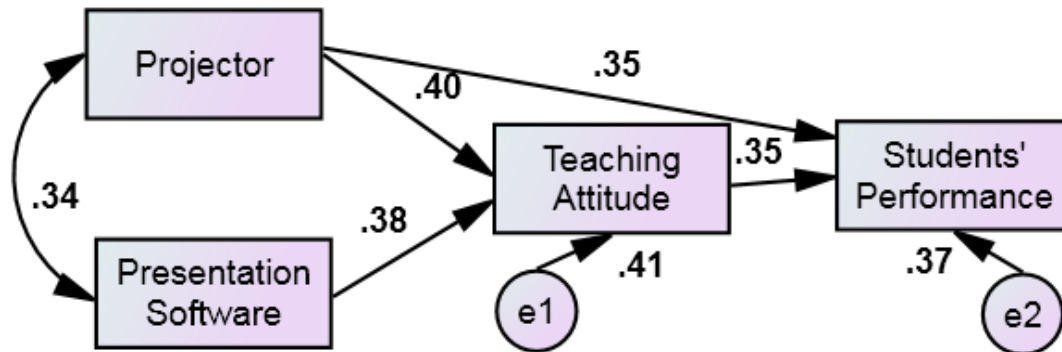


Figure 2: Model fit indications

Table 1: Model Fit Indication

Indicators	Observed Value	Recommended Value (Premapriya, et al. 2006)
Chi-Square	1.265	--
P Value	0.632	Greater Than 0.050
GFI	0.999	Greater Than 0.90
AGFI	0.964	Greater Than 0.90
CFI	0.999	Greater Than 0.90
NFI	0.999	Greater Than 0.90
RMSEA	0.001	Less Than 0.080

Source: Primary data

From the above table it is found that the calculated chi-square value is 1.265, p value is 0.317 which is greater than 0.05, which indicates that perfectly fit. It is found that RMSEA (Root Mean Square Error of Approximation) value is 0.055 which are less than 0.08, which indicates that it is perfectly fit Velaudham and Baskar (2016). The calculated CFI (Comparative Fit Index) value and NFI (Normed Fit Index) values are greater than 0.90 which means that it is a perfectly fit. Here GFI (Goodness of Fit Index) value and AGFI (Adjusted Goodness of Fit Index) values are greater than 0.90 which represent it is a good fit Velaudham and Baskar (2015).

Table 2: Regression Weights

DV		IV	Estimate	S.E.	C.R.	Beta	p
Teaching Attitude	<---	Projector	0.635	0.054	11.809	0.400	***
Teaching Attitude	<---	Presentation Software	0.753	0.067	11.230	0.380	***
Students' Performance	<---	Teaching Attitude	0.191	0.021	8.962	0.345	***
Students' Performance	<---	Projector	0.312	0.034	9.198	0.354	***

Source: Primary data

H₀: Projector do not influence teaching attitude.

Through the path analysis, regression weight as the value of CR was 11.809. The Beta value was 0.400 which indicates that 40% of influence is through projector training towards teaching attitude. The p value was 0.001; here the p value was less than 1% and the hypothesis was rejected. Hence, it can be concluded that the projector influences teaching attitude in higher educational institutions in Chennai.

H₀: Presentation software do not influence teaching attitude.

Through the path analysis, regression weight as the value of CR was 11.230. The Beta value was 0.380 which indicates that 38% of influence is through presentation software training towards teaching attitude. The p value was 0.001; here the p value was less than 1% and the hypothesis was rejected. Hence, it can be concluded that the presentation software influences teaching attitude in higher educational institutions in Chennai.

H₀: Projector do not influence students' performance.

Through the path analysis, regression weight as the value of CR was 9.198. The Beta value was 0.354 which indicates that 35.4% of influence is through projector training towards students' performance. The p value was 0.001; here the p value was less than 1% and the hypothesis was rejected. Hence, it can be concluded that the projector influences students' performance in higher educational institutions in Chennai.

H₀: Teaching attitude do not influence students' performance.

Through the path analysis, regression weight as the value of CR was 8.962. The Beta value was 0.345 which indicates that 34.5% of influence is through teaching attitude training towards students' performance. The p value was 0.001; here the p value was less than 1% and the hypothesis was rejected. Hence, it can be concluded that the teaching attitude influences students' performance in higher educational institutions in Chennai.

5. Findings

- The analysis found that there is influence of projector, presentation software on teaching attitude in higher educational institutions in Chennai.
- It is also found that there is influence of projector and teaching attitude on students' performance in higher educational institutions in Chennai.

6. Recommendation

- Higher educational institutions should improve informatics teaching and to instigate ICT tools based education on the foundation of informatics focus with straight participation from informatics instructors.
- Higher educational institution administrators need to address the gender differences regarding ICT practice as well as expand strategies to continue positive student and teachers attitudes and high practice of ICT.

7. Conclusion

ICT in higher and other types of education engages learning and teaching with ICT. The main purpose of the research has shown that influence of ICT on students' performance and enhanced teaching methods. The analysis found that there is influence of projector, presentation software on teaching attitude in higher educational institutions in Chennai. It is also found that there is influence of projector and teaching attitude on students' performance in higher educational institutions in Chennai. Hence, it is concluded that the higher educational institutions should improve informatics teaching and to instigate ICT tools based education on the foundation of informatics focus with straight participation from informatics trainers.

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