

INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) AWARENESS: PERCEPTIONS OF UNIVERSITIES IN LUCKNOW

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Today the most significant change in everybody's life is adapting themselves to technology. Pandemic and Lockdown coerced even the elderly to use smart phones, Internet, order online groceries, do online shopping, take advice through telemedicine and what not to survive in this pandemic and post-pandemic world. Information and Communication Technology did wonders in connecting and running the world especially during the pandemic.

In Education too our children could not have completed their academic course in time with out the support of Information and Communication Technology. Information and Communication technology was instrumental not only in the teaching learning process but also in assessment and grading of students. It actually enhanced the learning of the students and opened doors for advanced ways of teaching and learning with personalized instruction, collaborative learning, flipped classroom, multimedia etc.

Pupil-teachers who prepare themselves for the teaching profession must enrich themselves with Information Communication and Technology (ICT) Resources and make learning facilitated and interesting. Information Communication and Technology (ICT) supplements teaching learning process and universities being the centres of learning should encourage and provide more space for multi-cultural and phenomenally changing learning environments so that pupil-teachers can become triumphant, proficient, adroit, competent and versatile teachers of future India.

Related Literature

Al- Kathiri, F. (2014) conducted a study entitled *Beyond the Classroom Walls: Edmodo in Saudi Secondary School EFL Instruction, Attitudes and Challenges*. The study aims at prospects of integrating Edmodo into Saudi EFL female secondary school instruction. The sample consisted of 42 female second grade student at 4th secondary school in Riyadh, a public school supervised by Saudi ministry of Education. The participants were divided into two groups. Traditional teaching was given to experiment group along with a 6-week daily interaction by Edmodo traditional teaching was given to control group.

Questionnaire constructed was divided into three sections;

- i. A pre and post attitude scale containing 13 items
- ii. A post attitude scale containing 19 items
- iii. A post attitude skill containing 6 items

Mirzajani, H., Mahmud, R., Ayub, A.F.M. & Wong, S.L. (2016) conducted the study entitled *Teachers' Acceptance of ICT and its Integration in the Classroom*. The aim of the study to find teachers' acceptance of ICT and its integration in the classroom. The study aimed to find the attitude of teachers to use in classroom. It identified the factors which motivated the teachers to use in classroom. The findings showed that sufficient support of administration, adequate ICT resources and skill and knowledge of teachers motivate the use of ICT in classroom.

Patel, K. (2016) conducted a study *A Constructive Digital Appliance for Teachers: Edmodo*. The present study worked on Edmodo benefits in ICT equipped classroom collaborative tool for learning subjects. The sample consisted of 84 B.Ed. trainee students of Amity B.Ed. college Bharuch. The study is both survey and experimental in nature. Experimental design determines the effect of Edmodo on student language efficiency and comprehension ability. Survey method is used to gather data. This study recommended the Yerkes Dadson law of motivation for using Edmodo. The existing Indian education system is receiving distance education with great pace, though the role of teachers remains critical. Edmodo can be used to solve this problem by allowing tutors to post homework online, thus helping to differentiate it.

Hero, J. L. (2019) conducted a study entitled *The Impact of Technology Integration in Teaching Performance*. The study aims to find out the Impact of technology integration on the teaching performance of social science teachers. The study was done on social-science teachers from public high schools in division of City schools, Valenzuela City selected through universal sampling. Descriptive correlational design was used in the present study. The findings indicates that social science teachers are satisfied with all seven indicators of performance measured. The study reveals that the technology integration exerts a significant impact on teaching profession.

Objectives

- To study the pupil-teachers use of Information and Communication Technology Resources with reference to hardware resources, software resources and online resources in universities of Lucknow

Research Method

Survey method is used in the present study.

Research Tool

Research tools prepared and standardized by the researcher himself are used in the present study. They are as follows:

- Use of Information and Communication Technology Resources Scale (UICTRS)
- Perceptions of Use of Edmodo as a Tool of Learning Scale (PUETLS)

Sample and Sampling Technique

Babasaheb Bhimrao Ambedkar University, Lucknow, University of Lucknow, Lucknow and Integral University, Lucknow are selected using simple random sampling technique. A sample of 350 pupil-teachers were selected randomly from all the three universities.

Findings

Hardware Resources

Table 1: Type of University-wise differences of Pupil-teachers use of Hardware Resources of ICT

Source of Variance		SS	df	MS	F	p-value	F-critical
Hardware Resources	Between groups	215.44	2	107.72	4.627*	0.010	3.0217
	Within groups	8078.14	347	23.28			
	Total	8293.58	349				

*Significant at 0.05 level

Table 1 indicates that the calculated F value 4.627 is greater than F critical value 3.0217 at 0.05 level of significance which implies that there was significant difference in use of Hardware Resources between pupil-teachers of different universities.

Post-hoc Multiple Comparisons using the Bonferroni test were further performed.

Table 2: Post Hoc Multiple Comparisons with the Help of Bonferroni Test

Multiple Comparison				
Bonferroni Test				
Type of University	Pair	MD	SE	Sig.
Central University	State University	1.740*	0.627	0.017
	Private University	0.194	0.636	1.00
State University	Private University	1.546*	0.632	0.045

*Significant at 0.05 level.

Table 2 presents the tabulation of Post-hoc Multiple Comparisons with the help of Bonferroni test. The significance value of central university with state university was 0.017, which was lower than the significance value of 0.05. This indicates that these groups vary significantly in their use of hardware resources of Information and Communication Technology.

The significance value of central university with private university was 1.00, which was higher than the significance value of 0.05. This indicates that these groups do not vary in their use of hardware resources of Information and Communication Technology.

The significance value of state university with private university was 0.045, which was lower than the significance value of 0.05. This indicates that these groups vary in their use of hardware resources of Information and Communication Technology.

Software Resources

Table 3: Type of University-wise differences of Pupil-Teachers' use of Software Resources of ICT

Source of Variance		SS	df	MS	F	p value	F-critical
Software Resources	Between groups	109.80	2	54.90	4.819*	0.009	3.0217
	Within groups	3953.14	347	11.39			
	Total	4062.94	349				

*Significant at 0.05 level

Table 3 indicates that the calculated F value 4.819 is greater than F critical value 3.0217 at 0.05 level of significance which implies that there was significant difference in use of software resources between pupil-teachers of different universities.

Post-hoc Multiple Comparison using the Bonferroni test was further performed.

Table: 4 Post Hoc Multiple Comparisons with the Help of Bonferroni Test

Multiple Comparison				
Bonferroni Test				
Type of University	Pair	MD	SE	Sig.
Central University	State University	1.003	0.439	0.068
	Private University	0.302	0.445	1.00
State University	Private University	1.305*	0.442	0.010

*Significant at 0.05 level.

Table 4 presents the tabulation of Post-hoc Multiple Comparison with the help of Bonferroni test. The significant value of central university with state university was 0.068, which was higher than the significance value of 0.05. This indicates that these groups do not vary significantly in their use of software resources of Information and Communication Technology resources.

The significant value of Central University with private university was 1.00, which was higher than the significance value of 0.05. This indicates that these groups do not vary in their use of software resources of Information and Communication Technology.

The significant value of state University with private university was 0.010, which was lower than the significance value of 0.05. This indicates that these groups vary in their use of software resources of Information and Communication Technology resources.

Online Resources

Table 5 Type of University-wise differences of Pupil-Teachers use of Online Resources of Information and Communication Technology

Source of Variance		SS	df	MS	F	p value	F-critical
Online Resource	Between groups	644.36	2	322.18	1.266 ^{NS}	0.266	3.0217
	Within groups	88287.14	347	254.43			
	Total	88931.50	349				

NS Not significant at 0.05 level of significance

Table 5 indicates that the calculated F value 1.266 is less than F critical value 3.0217 at 0.05 level of significance which implies that there was no significant difference in the use of online resources between pupil-teachers of different universities. Pupil-teachers explore many online resources out of their personal and academic interest irrespective of their institutional support and thus acquaint themselves with online resources for individual and personalized learning.

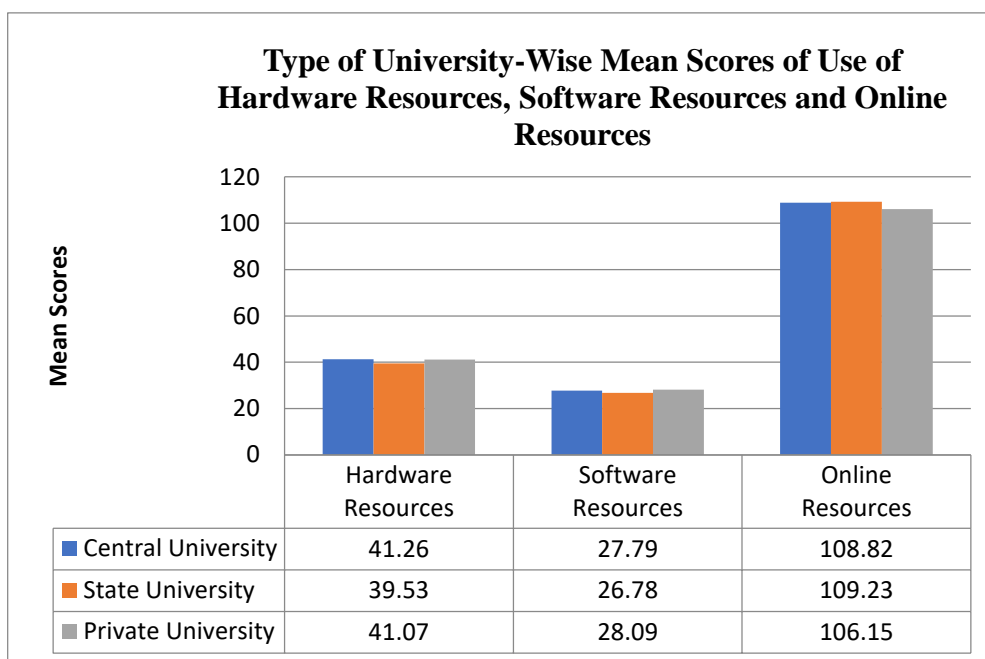


Figure 1: Type of University-Wise Mean Scores of Use of Hardware Resources, Software Resources and Online Resources

Impression

Universities are the centers of knowledge and enriched with divergent facilities to cater to the needs of the students. Different universities are equipped with different facilities as per their financial and budget provisions and degree of management. Thus pupil-teachers of different universities differ significantly in their use of hardware resources and software resources, but do not differ in their online resources as mostly these can be explored individually without institutional support.

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