

# Effectiveness of ICT in Enhancing Learning Procedure in Higher Education

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## Abstract

The article is shedding light on the concept of ICT and its integration in higher education. The pandemic crisis during 2019-20 has led to the enhancement of using technologies in education which are highly effective on the learning process of students. It becomes easier for the students in higher education to learn about their interested concepts and get access to information with the ICT tools. Many of the educational institutes of higher education use modern technologies for providing a better learning experience to the students and that effectively impacts the academic productivity of the students.

Primary quantitative design has been adopted for this study and based on that a survey has been conducted among some students of higher education. A survey is capable of gaining original and relevant data about the research concept. Further, SPSS software has been used for testing all the findings and generating graphs from the raw data. The statistical analysis with descriptive statistics, correlation statistics and others are one of the vital parts of this article. As a result, it is identified that ICT enables the access of more data for the students as well as enhances the engagement of students with learning and that positively impacts their academic performance.

## Keywords

Availability of ICT Tools, Higher Education, ICT, Students' Performance, Technological Integration.

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## INTRODUCTION

### Overview of the study

“Information & Communication technology (ICT)” refers to the components and infrastructure of modern computing. In recent times, ICT has become one of the most crucial factors in education as it brings efficiency in teaching as well as learning. Computers, laptops, internet and others are the most used ICTs in higher education which highly affects the learning process of the students [1]. Technologies are capable of improving the learning of the students as well as it bounds the knowledge area of the students. Therefore, there are positive and negative impacts of ICT in higher education. Demonstrating all the positive and negative impacts of using ICT in higher education on the learning process of the students is the main purpose of this study. Considering this, particular techniques are used for collecting authentic materials for this study which are presented in this article.

### Aim and objectives

The study focused on the effectiveness of ICT on improving learning of students in higher education. In regard to complete this goal, specific objectives are,

- To demonstrate the impacts of the integration of ICT on teaching process in higher education and its effectiveness of students' learning
- To find the connection between ICT integration in higher education and the performance of the students
- To elaborate the factors that are affecting the use of ICT in higher education

- To identify potential challenges for students and teachers regarding the use of ICT in higher education

### Hypothesis development

**H1:** ICT integration is positively impactful on teaching process of higher education

**H0:** ICT integration is negatively impactful on teaching process of higher education

**H2:** ICT has positive impacts on learning experiences of students in higher education

**H0:** ICT has negative impacts on learning experiences of students in higher education

### Significance of the research

There are many articles and journals that provide information about the use of ICT in higher education but most of the studies are focused on the effectiveness of ICT on the teaching processes. The particular article sheds light on the impact of ICT on the learning process of students in higher education which sustains the significance of this study. Apart from that, surveying students of higher education for gathering their personal opinions on the use of ICT in education enhances authenticity and significance of this study. The study will be capable of providing relevant data about the significant impact of ICT on the performance of students in higher education in future which also sustains the significance of this study.

**METHODS AND MATERIALS**

**Research design**

Choosing a particular research design gathering accurate data and information is important to achieve the main goal of this study. There are two categories of research designs such as quantitative design and qualitative design. The research has chosen *quantitative design* for this particular study in order to gather some numerical yet original data for sustaining the significance of this study [2]. Quantitative design refers to collecting numerical data by using specific sources and evaluating them quantitatively. This particular research design brings potential in a research study to provide genuine data with proper understanding.

**Sources for data collection**

There are different types of sources used for data collection in a research study and it is important to choose the accurate one based on the requirement of a study. As the research has chosen quantitative design for this particular article therefore it is important to choose sources that are capable of providing quantitative data. Considering this aspect survey is a primary source which is capable of collecting numerical data as well as government reports and company reports are the secondary sources which are also capable of gathering numerical and quantitative data [3]. It is more relevant to gather details about the opinions of the students in higher education regarding the use of ICT and therefore *primary sources* have been used for data collection. Students from different courses in higher education were approached for participating in a *survey* where **10 questions** related to the research topic were asked. Thus, the question can be considered as the instrument used in this process for gathering data from the students.

**Inclusion and exclusion criteria**

The opinions of students who have experienced the use of ICT in their education were included as well as the opinions of students who are below 18 years old were excluded from the findings.

**Sample**

Students from different educational backgrounds were asked to provide their personal opinions on the particular statements in the questionnaire. A total of 151 students have participated in the survey and all of them were above 18 years old and have experienced the use of ICT in their education. Therefore, the opinions of these 151 students were authentic and completed the criteria of this particular study. Hence, the *sample size for this article is 151*.

**Data analysis methods**

A survey has been conducted for gathering quantitative data which demands the use of a particular method for data analysis which suits quantitative data. *Statistical analysis* process is the most suitable method of data analysis for numerical and quantitative data which refers to the evaluation

of statistics [4]. Therefore, all the findings are statistically evaluated in this article and SPSS software has been used for generating all the statistics. Descriptive statistics correlation statistics regression statistics reliability statistics and others have been generated by using the specific software which are evaluated below.

**RESULTS**

**Descriptive analysis**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
3. Integration of ICT enables improvement in teaching processes in higher education	151	0	2	1.85	.509
4. Adequate availability of required ICT tools is a crucial factor that influence learning process of students in higher education	151	0	2	1.91	.399
5. ICT helps teachers to motivates teachers and that enhances their learning capabilities	151	0	2	1.85	.495
6. The use of ICT in education requires effective technological knowledge among teachers and students	151	0	2	1.93	.367
7. Improvement of teaching efficiency of teachers enhances understand and learning of different concepts among students	151	0	2	1.87	.485
8. Flexible timing and access to several information are the two crucial factors of ICT influencing learning experience of students	151	0	2	1.81	.562
9. Culture of educational institutes is another influential factor towards the use of ICT for teaching in higher education	151	0	2	1.83	.535
10. ICT improves learning experience of students which signifies a positive relationship between ICT integration and better student's performance	151	0	2	1.90	.428
Valid N (listwise)	151				

**Figure 1: Descriptive statistics** (Source: Refer to SPSS)

The figure above represents descriptive statistics which includes mean statistics of all the variables in this study. This particular type of statistics helps to understand whether all the components have a positive or negative relationship [5]. As for the figure the main statistics are 1.85, 1.91, 1.85, 1.93, 1.87, 1.81, 1.83 and 1.90. All the main statistics are needed to be more than 1 and in these statistics all the mean values are larger than 1 which signifies a positive relationship between the components of this article. Thereafter, positive relationship between the components or variables of a research study indicates that the independent variable is highly effective on dependent variable.

**Correlation analysis**

Correlation statistics is an important segment in statistical analysis which includes the evaluation of the significance values of the components [6]. The significant statistics are required to be less than 0.05 for indicating a positive relationship between the IV and DV of this study. The above-mentioned figure represents that all the significance

value of all the components is 0 which is definitely less than 0.05 and signifies a positive relationship between the IV and DV. Hence a positive relationship between the IV and DV of

this article proves that the integration of ICT is positively impactful on the learning process of students in higher education.

		Correlations							
		3. Integration of ICT enables improvement in teaching processes in higher education	4. Adequate availability of required ICT tools is a crucial factor that influence learning process of students in higher education	5. ICT helps teachers to motivates teachers and that enhances their learning capabilities	6. The use of ICT in education requires effective technological knowledge among teachers and students	7. Improvement of teaching efficiency of teachers enhances understand and learning of different concepts among students	8. Flexible timing and access to several information are the two crucial factors of ICT influencing learning experience of students	9. Culture of educational institutes is another influential factor towards the use of ICT for teaching in higher education	10. ICT improves learning experience of students which signifies a positive relationship between ICT integration and better student's performance
3. Integration of ICT enables improvement in teaching processes in higher education	Pearson Correlation	1	.792**	.974**	.729**	.974**	.927**	.965**	.851**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000
	N	151	151	151	151	151	151	151	151
4. Adequate availability of required ICT tools is a crucial factor that influence learning process of students in higher education	Pearson Correlation	.792**	1	.813**	.959**	.836**	.698**	.745**	.964**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000
	N	151	151	151	151	151	151	151	151
5. ICT helps teachers to motivates teachers and that enhances their learning capabilities	Pearson Correlation	.974**	.813**	1	.748**	.973**	.928**	.966**	.874**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000
	N	151	151	151	151	151	151	151	151
6. The use of ICT in education requires effective technological knowledge among teachers and students	Pearson Correlation	.729**	.959**	.748**	1	.769**	.643**	.686**	.887**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000
	N	151	151	151	151	151	151	151	151
7. Improvement of teaching efficiency of teachers enhances understand and learning of different concepts among students	Pearson Correlation	.974**	.836**	.973**	.769**	1	.883**	.943**	.898**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000
	N	151	151	151	151	151	151	151	151
8. Flexible timing and access to several information are the two crucial factors of ICT influencing learning experience of students	Pearson Correlation	.927**	.698**	.928**	.643**	.883**	1	.958**	.751**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000
	N	151	151	151	151	151	151	151	151
9. Culture of educational institutes is another influential factor towards the use of ICT for teaching in higher education	Pearson Correlation	.965**	.745**	.966**	.686**	.943**	.958**	1	.801**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000
	N	151	151	151	151	151	151	151	151
10. ICT improves learning experience of students which signifies a positive relationship between ICT integration and better student's performance	Pearson Correlation	.851**	.964**	.874**	.887**	.898**	.751**	.801**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	N	151	151	151	151	151	151	151	151

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Figure 2:** Correlation statistics (Source: Refer to SPSS)

**Regression analysis**

Coefficient statistics is also another vital part which leads to the understanding whether there is a positive or negative relationship between the IV and DV of this research study [7]. This particular statistic is also based on the significance values which need to be lower than 0.05. Identified significance values of the components as per the coefficient statistics are 0.249, 0, 0.010, 0, 0, 0.781 and 0.008. Each of the significance values are less than 0.05 and that indicates a positive relationship between the IV and DV which sustains the significance of this study.

Model summary is a critical part of regression statistics which includes the value of r square and the value of standard

error of the estimate. The value of standard error of the estimate requires it to be less than 1 and as per the above figure the value is 0.075. This signifies that the predictors or components are constant in this study and the IV is highly impactful on the DV.

Anova is another important segment of regression analysis which includes the values of regression and residual. The main square value in regression is 3.815 for all the components and that signifies a great impact of the IVs on the DV as the value is more than 1. In addition to that the significance value in regression is also identified as zero for all the components which indicates positive relationship between the IV and DV of this study.

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.035	.033		1.067	.288
	3. Integration of ICT enables improvement in teaching processes in higher education	-.083	.072	-.099	-1.157	.249
	4. Adequate availability of required ICT tools is a crucial factor that influence learning process of students in higher education	1.097	.066	1.022	16.722	.000
	5. ICT helps teachers to motivates teachers and that enhances their learning capabilities	.191	.074	.221	2.593	.010
	6. The use of ICT in education requires effective technological knowledge among teachers and students	-.389	.060	-.333	-6.479	.000
	7. Improvement of teaching efficiency of teachers enhances understand and learning of different concepts among students	.323	.076	.366	4.254	.000
	8. Flexible timing and access to several information are the two crucial factors of ICT influencing learning experience of students	.012	.042	.015	.279	.781
	9. Culture of educational institutes is another influential factor towards the use of ICT for teaching in higher education	-.167	.062	-.209	-2.679	.008

a. Dependent Variable: 10. ICT improves learning experience of students which signifies a positive relationship between ICT integration and better student's performance

**Figure 3:** Coefficient statistics (Source: Refer to SPSS)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.985 <sup>a</sup>	.971	.969	.075

a. Predictors: (Constant), 9. Culture of educational institutes is another influential factor towards the use of ICT for teaching in higher education , 6. The use of ICT in education requires effective technological knowledge among teachers and students , 7. Improvement of teaching efficiency of teachers enhances understand and learning of different concepts among students , 8. Flexible timing and access to several information are the two crucial factors of ICT influencing learning experience of students , 4. Adequate availability of required ICT tools is a crucial factor that influence learning process of students in higher education , 5. ICT helps teachers to motivates teachers and that enhances their learning capabilities , 3. Integration of ICT enables improvement in teaching processes in higher education

**Figure 4:** Model summary statistics (Source: Refer to SPSS)

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.706	7	3.815	678.446	.000 <sup>b</sup>
	Residual	.804	143	.006		
	Total	27.510	150			

a. Dependent Variable: 10. ICT improves learning experience of students which signifies a positive relationship between ICT integration and better student's performance

b. Predictors: (Constant), 9. Culture of educational institutes is another influential factor towards the use of ICT for teaching in higher education , 6. The use of ICT in education requires effective technological knowledge among teachers and students , 7. Improvement of teaching efficiency of teachers enhances understand and learning of different concepts among students , 8. Flexible timing and access to several information are the two crucial factors of ICT influencing learning experience of students , 4. Adequate availability of required ICT tools is a crucial factor that influence learning process of students in higher education , 5. ICT helps teachers to motivates teachers and that enhances their learning capabilities , 3. Integration of ICT enables improvement in teaching processes in higher education

**Figure 5:** ANOVA statistics (Source: Refer to SPSS)

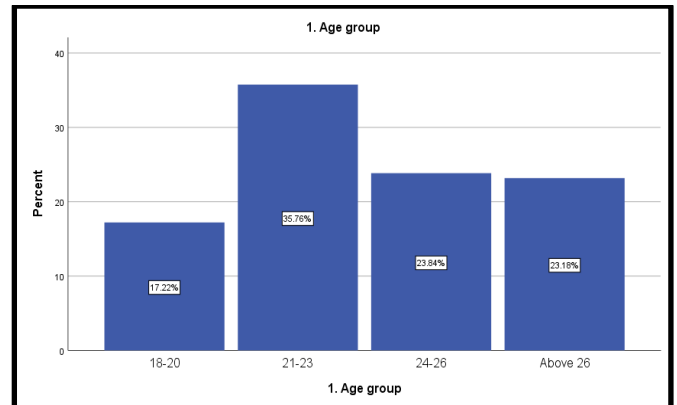
**Reliability analysis**

Reliability Statistics	
Cronbach's Alpha	N of Items
.978	8

**Figure 6:** Reliability statistics (Source: Refer to SPSS)

Reliability statistics is important in statistical analysis for ensuring that all the findings and data are reliable [8]. The value of Cronbach Alpha requires to be less than 0.70 for indicating that all the findings and data are reliable. As per the figure above the value of Cronbach Alpha for the 8 components is 0.978 which is less than 0.70 and signifies that all the findings are reliable. This reliability check was important for sustaining the significance of this article.

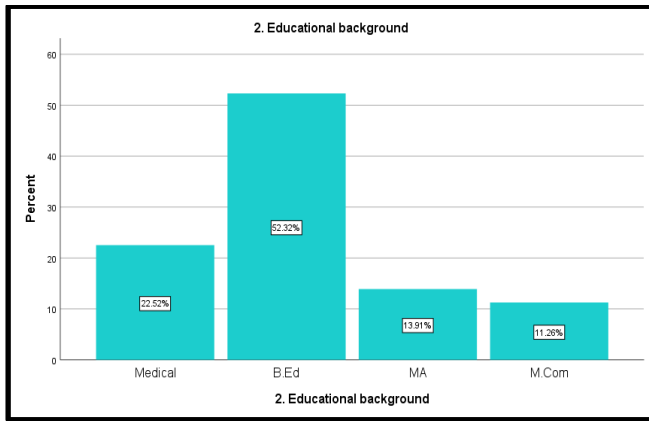
**Bar graph analysis**



**Figure 7:** Age groups of the participating students (Source: Refer to SPSS)

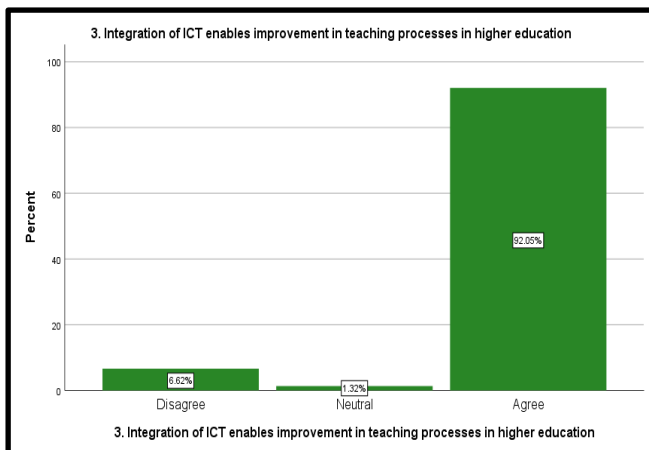
There were four age groups of the participants and all the participants were above 18 years old and have experienced the use of ICT in their higher education. Four particular groups were 18 to 20 years old group 21 to 23 years old group 24 to 26 years old group and above 26-year-old group. The figure above represents that about 17.22% of the respondents were from the first group, 35.76% of the students were from the second group, 23.84% of the students were from the 3rd group and 23% of the participants from the last and 4th group. It is noticeable that most of the students in this survey were between 21 to 23 years old who are continuing their courses in higher education.





**Figure 8:** Educational background of the participating students (Source: Refer to SPSS)

Next the students were asked about the educational background for ensuring that all of the students are doing their higher education. About 22.52% of the respondents are doing medical, 52.32% of the students are doing B.Ed, 13.91% of the students are doing MA and 11.26% of the participants are doing M.com. It can be noticed is that most of the participants were the students of B.Ed who have also experienced the use of ICT in their higher education.

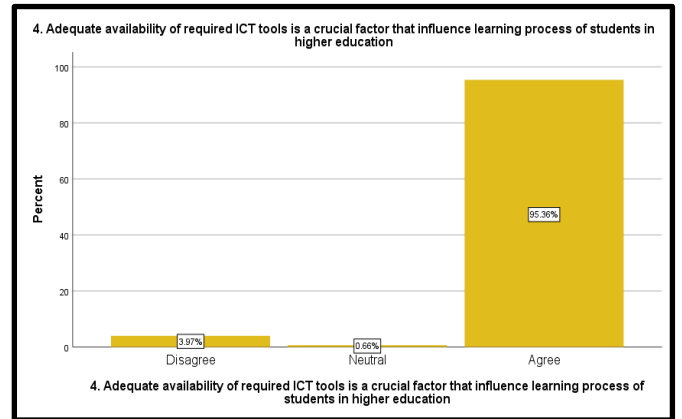


**Figure 9:** Integration of ICT enables improvement in teaching processes in higher education (Source: Refer to SPSS)

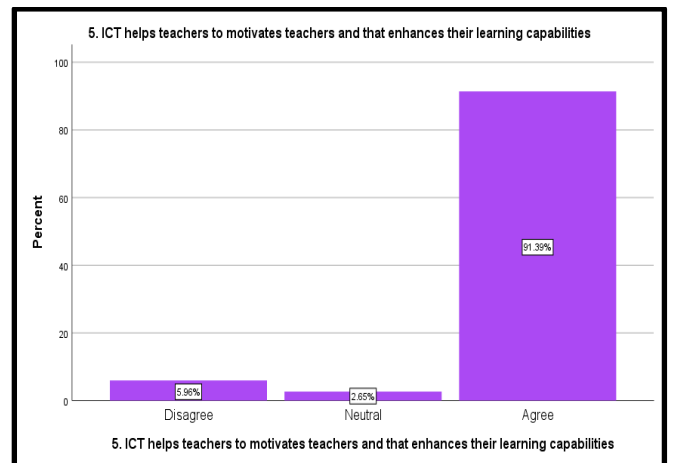
At first the students were asked whether integration of ICT leads to the improvement of teaching processes in higher education or not. About 92.05% of the students, which is almost all of the participants, have agreed and stated that ICT enables addicted information for the Teachers which improves the teaching processes in higher education. Besides, 6.62% of the students have “disagreed” with the statement that sometimes the use of ICT is challenging for teachers which can negatively impact their teaching processes in higher education.

The next question for the students was about the importance of adequate ICT tools and its impact on the learning process of the students in higher education. More than 95% of the students have agreed and opinionated that availability of adequate ICT tools such as computers,

software, strong internet and others are highly important for an improved learning experience for the students in higher education. Moreover, 3.97% of the students have “disagreed” with the main statement and they think that these tools are easily available in education institutes nowadays therefore this is not a crucial factor.



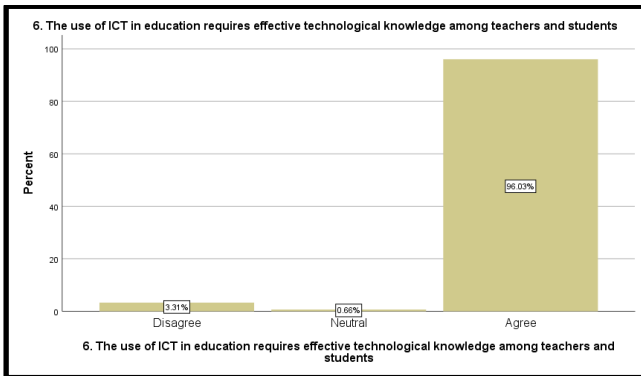
**Figure 10:** Adequate availability of required ICT tools is a crucial factor that influence learning process of students in higher education (Source: Refer to SPSS)



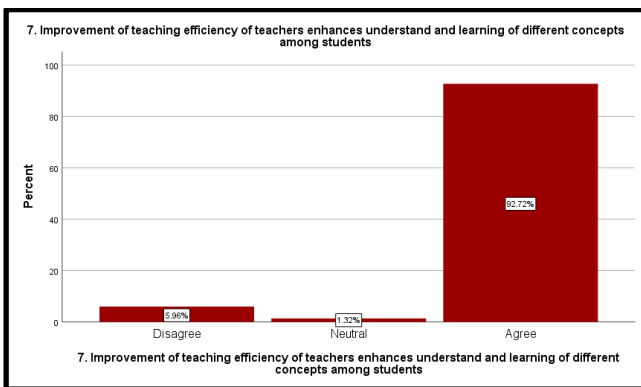
**Figure 11:** ICT helps teachers to motivates students and that enhances their learning capabilities (Source: Refer to SPSS)

Next the students were asked about the significant role of ICT in motivating students and its positive impact on their learning capabilities. More than 90% of the students have agreed and stated that ICT enhances communication between the teachers and students which makes the teachers able to motivate their students and that obviously enhances learning capabilities of the students.

Next the students were asked whether the potential use of ICT requires a higher level of technology skills and knowledge among both teachers and students. About 96.03% of the students in the survey have positively opinionated that the use of computing software and other technology-based device request effective technological knowledge among students and teachers.

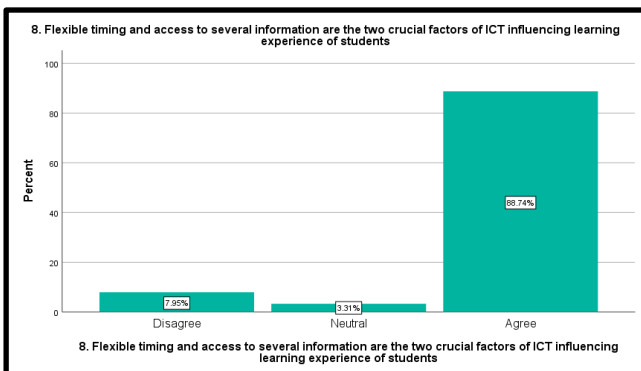


**Figure 12:** The use of ICT in education requires effective technological knowledge among teachers and students (Source: Refer to SPSS)



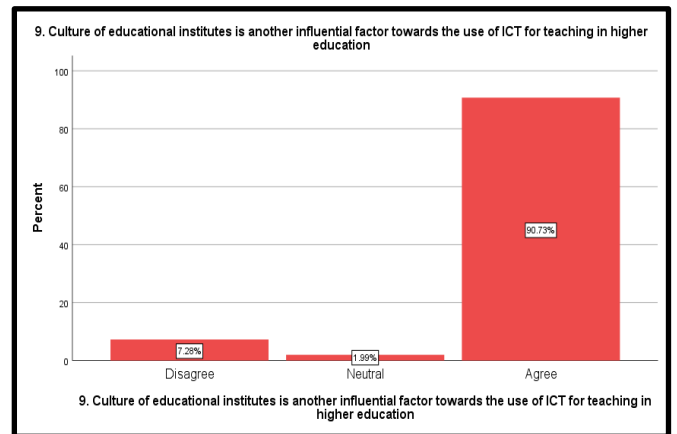
**Figure 13:** Improvement of teaching efficiency of teachers enhances understand and learning of different concepts among students (Source: Refer to SPSS)

The next statement was about whether the development of teaching efficiency contributes to better understanding and learning of students regarding different concepts. More than 90% of the students have agreed and opinionated that teaching efficiency has a crucial role in improving understanding and learning of students in higher education. Apart from that, 5.96% of the students have “disagreed” and stated that only teaching efficiency is not enough attentiveness of the students is also important for better understanding and learning.



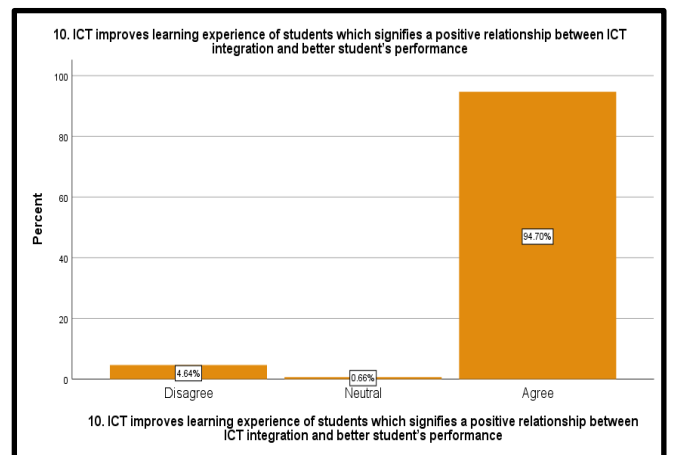
**Figure 14:** Flexible timing and access to several information are the two crucial factors of ICT influencing learning experience of students (Source: Refer to SPSS)

Next the students were asked whether accessibility to higher information and flexible timing are the major factors that influence learning experience of students while using ICT. About 88.74% of the students in the survey have positively stated that flexible timing is definitely the major factor of ICT that is influencing learning capabilities of students in higher education but accessibility to information might not be the crucial factor. Thereafter, 7.95% of the respondents have provided negative responses and stated that using technological devices is not easy for everyone and therefore it becomes difficult for some people to get access to adequate information.



**Figure 15:** Culture of educational institutes is another influential factor towards the use of ICT for teaching in higher education (Source: Refer to SPSS)

More than 90% of the students have agreed that the culture of an educational institute is an important factor that enables the use of ICT for teaching in higher education. Apart from that 7.28% of the students have “disagreed” and stated that mobile phones are available everywhere which can be used for teaching and learning and therefore culture of the education institutes is not that much important.



**Figure 16:** ICT improves learning experience of students which signifies a positive relationship between ICT integration and better student’s performance (Source: Refer to SPSS)

Next the students were asked whether there is a positive relationship between ICT integration and improved academic performance of students in higher education. Nearly 94.70% of the students in the survey have agreed and opinionated that ICT is contributing to the improvement of learning experience of students which has a positive impact on their academic performance. This supports the second alternative hypothesis of this study and the null hypothesis is rejected.

## **DISCUSSION**

### **Impact of ICT on teaching process in higher education**

Modern technology is highly impactful on the teaching process in higher education. E-learning, techno conference, group discussion, e-modules and others are the components of ICT in higher education [9]. The use of these technologies enhances the access to more and more information regarding the concepts which enhances the knowledge of teachers that can be used in their teaching process. Furthermore, ICT enhances connectivity between teachers and students which is important for improving student engagement [10]. The participants were also asked about the effectiveness of ICT on teaching processes in higher education and almost all of the participants have agreed and stated that improvement of teaching processes is one of the greater contributions of ICT in higher education. This signifies that the first alternative hypothesis is approved and the null hypothesis is rejected as there are positive impacts of ICT on the teaching process.

On the other hand, it is identified that integration of ICT enables visual presentation of concepts and ideas which enhances efficiency in the classroom and the teaching process. It becomes easier for the teachers to define several concepts and for the students to understand the concepts [11]. Delhi 92.72% of the students in the survey have opinionated that teaching efficiency improves the understanding and learning of different concepts among students. Furthermore, ICT is also capable of motivating the teachers to improve their cells and developing their teaching process in higher education.

### **Connection between ICT and students' performance**

The study tried to identify the connection between ICT and students' performance. It is identified that the integration of ICT enhances the efficiency in teaching processes and that positively impacts the learning experience of the students. It is important to improve learning for a better academic performance in higher education. Thereafter, technology helps teachers to access more authentic data and that helps to motivate the students to be engaged with their learning [12]. About 91.39% of the participants in the survey have stated that integration of ICT helps teachers to effectively motivate their students and that enhances their learning capabilities. Improvement of motivation among students enhances their engagement and attentiveness towards their studies and that boosts their academic performance.

On the other hand, most of the students in higher education prefer to do part time jobs and therefore flexible timing for

education enhances their learning capabilities. The use of ICT enables flexible timing for students in higher education which signifies that the students can learn concepts anytime by using technology [13]. More than 85% of the students in the survey have stated that flexible timing and access to adequate information are the most important factors of using ICT that influence the performance of the students. In addition to that students are free to learn based on their personal interest while using modern technology which also enhances the attentiveness of the students. In short, the use of ICT enhances the attentiveness of students in higher education towards their study and that automatically enhances their learning experience and academic performance.

Furthermore, visual presentation of concepts is a critical factor of ICT that improves the efficiency of teaching and understanding of the students. Therefore, improvement of understanding regarding learning concepts has a positive impact on academic performance of the students in higher education [14]. It is identified that the use of ICT has the potential to improve the learning experience of students and boost their productivity in higher education. This signifies that there is a positive connection between ICT integration and academic performance of the students in higher education.

### **Factors affecting the use of ICT in higher education**

There are several influencing factors for the integration of ICT in higher education which are discussed in this portion of the study. Use of modern technology in education requires some specific tools such as computers, software, internet connection, laptop and others. Therefore, it can be stated that adequate availability of these particular tools associated with ICT is a crucial factor affecting the use of these technologies in higher education [15]. More than 95% of the students in the survey have opinionated that availability of adequate equipment and tools of ICT is an important factor that is highly influential towards the learning process of students in higher education. On the other hand, the use of modern technology demands effective knowledge of technology and that can be considered as another crucial factor influencing the use of ICT in higher education [16].

Lack of technological knowledge among teachers and students can lead to a teaching and learning process which is negatively impactful on students' performance. Some of the educational institutes provide specific training to the Teachers for enhancing their technical skills and knowledge. About 96% of the students in the survey have also acknowledged that the use of ICT in education demands effective technology and skills among both teachers and students. In addition to that, the culture of the institute is another factor that affects the use of ICT in higher educational studies [17]. The culture of the institute should be supportive towards the use of technology in education for motivating both the teachers and students to efficiently use ICT for their learning.

## CONCLUSION

It can be concluded that the integration of ICT is highly impactful on the learning experience of students in higher education. There are several positive sides of ICT in higher education as well as a few negative impacts are also identified. In recent times the use of ICT is common in higher education as it improves attentiveness and engagement of students towards the learning which positively impacts their academic performance. The use of modern technologies enhances the knowledge boundary of students and they can gain knowledge about any concept from anywhere by using technology which is the biggest beneficial site of ICT for the students of higher Education.

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## APPENDIX: SURVEY QUESTIONNAIRE

1. Age group
  - a) 18-20
  - b) 21-23
  - c) 24-26
  - d) Above 26
2. Educational background
  - a) Medical
  - b) B.Ed.
  - c) MA
  - d) M.Com



(Please rate your opinion against the following statements as per the following scale  
0 = disagree, 1 = neutral, 2 = agree)

<b>Statements</b>	<b>0</b>	<b>1</b>	<b>2</b>
3. Integration of ICT enables improvement in teaching processes in higher education	10	2	139
4. Adequate availability of required ICT tools is a crucial factor that influence learning process of students in higher education	6	1	144
5. ICT helps teachers to motivates teachers and that enhances their learning capabilities	9	4	138
6. The use of ICT in education requires effective technological knowledge among teachers and students	5	1	145
7. Improvement of teaching efficiency of teachers enhances understand and learning of different concepts among students	9	2	140
8. Flexible timing and access to several information are the two crucial factors of ICT influencing learning experience of students	12	5	134
9. Culture of educational institutes is another influential factor towards the use of ICT for teaching in higher education	11	3	137
10. ICT improves learning experience of students which signifies a positive relationship between ICT integration and better student's performance	7	1	143