

## IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY USE IN CLASSROOM LEARNING AMONG COLLEGE STUDENTS: A STUDY

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### ABSTRACT

The present study attempts to highlight the impact of information and communication technology use in classroom learning among college students with special reference to Udalguri District B.T.A.D. Assam. Simple Random Sampling has been used by the investigator to collect the reliable data. A sample of 80 college students has been taken. The collected data has been analyzed and interpreted with the help of Mean. A self-structured questionnaire has been used to gather the necessary data. The study reveals that the mean score for the positive option exceeds than that of the negative ones. This clarifies the truth that use of ICT in classroom learning has a great and positive impact upon the students and their academic performance.

**Keywords:** Information and Communication Technology, Positive Impact, College Students, Academic Achievement.

## INTRODUCTION

Today the people of the world live in a generation of continual digital revolution. They use information and communication technology (ICT) and the Internet virtually every day. Technology is booming rapidly from year to year and the younger generations are the ones caught in this rapid change. Technology plays an important role in people's lives especially today's College students. Technology has become routine among college students, permeating many aspects of their lives, including learning. In the past few years, technology has saturated the life of the college students. The common educational appliances of ICT including laptop, tablets, interactive white boards or smart boards, e-readers, flipped classrooms, smart phones, have opened the door to shorthand typing, abbreviations, emoticons and instant message, causing some people to fear the decline of the formal learning. ICT has grown quickly for academic use and infiltrated the educational arena. ICT is viewed as having bridged the gap in communication that existed.

The mediums of ICT exist to provide communication among people regardless of the distance, making it open to people easily share information, files, pictures, videos, create blogs and send messages, and conduct real-time conversations. It also strengthens the ties between people of those systems. ICT is playing a large and influential role in decision-making in the occasions from the global world economically, politically, socially and educationally in a very short time regardless of the distance. The driving factors for adoption of ICT are the progressively ubiquitous access, convenience, functionality and flexibilities of social technologies. There has been various overview and opinions which recognized four major advantages of ICT use in higher education. These include, enhancing relationship, improving learning motivation, offering personalized course material and developing collaborative abilities. This means that social networking activities have the possibility of enhancing student contact and is used to improve their participation in class, particularly where introverted students are involved. Students can function in online group learning, with less or no anxiety of needing to raise questions before peers at school.

ICT cannot be neglected only because of the fear to decline of the formal learning. Its mediums have become an essential part of academic life on college campuses. Adopted as a communication tool among students and professors, ICT has increasingly become a new means of communication and collaboration, thereby the rising its use among college students has become a global phenomenon. ICT enhances social engagement, direct communication, speed of feedback and relationship building. In college learning settings ICT is used as an educational tool that instructors use to foster student interaction and enhance student engagement and build better communication skills. Moreover its use can enhance communication among students and teachers, can help to reduce stress and increase satisfaction among students, can promote, enhance and support the teaching-learning process. It further can help in preparing students network and find employment. Despite the positive advantages, ICT can also be a disadvantage to students in some ways like it can be a distraction in the classroom and be used to trigger cyber

bullying or malicious behaviour on college campuses. Spending too much time in using ICT may affect students' learning outcomes and physical and mental health. Furthermore, its use can result in miscommunication because the writing can be lacking in the opportunity for explanation, expressions and clarification that are found in face-to-face interactions.

### **NEED AND SIGNIFICANCE OF THE STUDY**

Different institutions nowadays are developing groups on several Websites. While using the increase of technology helpful for getting together with others along with the recognition on the internet, Internet sites are now being an activity that's done mainly on the web, with Websites. Linked with this principle of collaborative development among learners, ICT enables learners and teachers to share and publish information as a result of the learning activities like course materials as course syllabus, course notes, assignments, test cases, etc. By publishing and presenting their work to a wide audience through blogs, wikis, podcasts, learners benefit from the opportunity to appropriate new ideas and transform their own understanding through reflection. Students especially, at higher level of learning can function collaboratively by exploring the opportunities given in online social atmosphere to resolve certain academic issues or issues with peers. This is indicative that through collaborative or team learning through integration of ICT, students can establish positive contact, using the goal of working towards particular final results, both in offline and online modes. It is very essential to study how effective and positive is the impact of ICT use on classroom learning and academic performance of students, especially at college level. Therefore, on the bases of the influence of ICT both merits and demerits, this study has been carried out to highlight the potentials of ICT in the academic setting by collaborative classroom communication learning and improve the students' academic performance.

### **OBJECTIVE**

- a. To study the impact of Information and Communication Technology use in classroom learning among college students.

### **METHODOLOGY**

The descriptive survey method has been used for this study. 80 college students have been taken as sample for the study.

#### **Tool Used**

A Questionnaire consisting of 20 items was designed, which included five sections- interaction with peers, interaction with teachers, engagement of students, collaborative learning and academic performance. Interactivity with the peers was measured using a subset of four items, interaction with teachers was measured using a subset of four items, engagement was measured

using three items, collaborative learning was measured using four items and finally, students' academic performance was measured using five items.

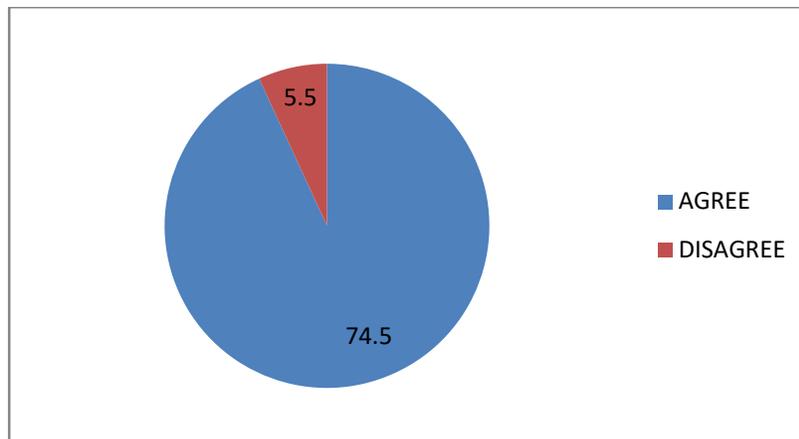
### DATA ANALYSIS AND INTERPRETATION

The following table shows the analysis of the collected data from the sample students. 'A' refers to 'Agree' and 'D' stands for 'Disagree'.

**TABLE-1**

Sl.No.	Statements	A	D
1	Using the ICT in class facilitates interaction with peers.	75	5
2	Using the ICT in class gives me the opportunity to discuss with peers.	66	14
3	Using the ICT in class facilitates dialog with peers.	77	3
4	Using the ICT in class allows the exchange of information with peers.	80	
Total Mean		74.5	5.5

**Figure 1 Mean for Agree and Disagree Option regarding ICT use and improvement in interaction with peers**



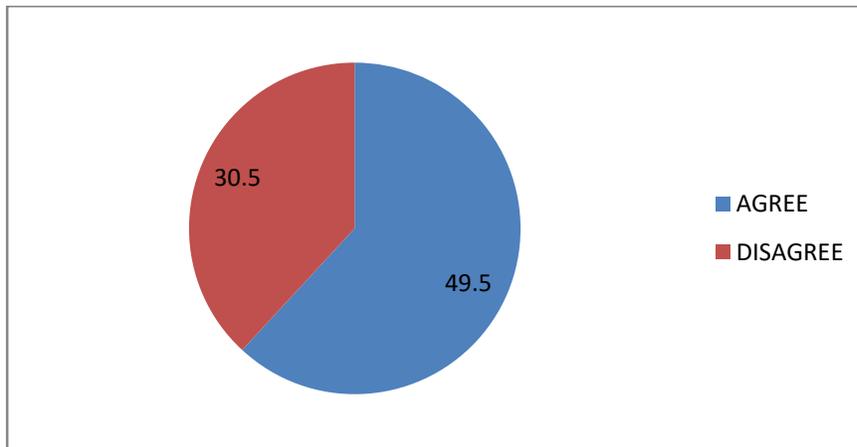
**Interpretation:** The table 1 and figure 1 above indicates that the mean (74.5) for Agree option exceeds the mean (5.5) for Disagree option. This clarifies the fact that ICT use helps in improving interaction with peers during classroom learning.

**TABLE-2**

Sl.No.	Statements	A	D
1	Using the ICT facilitates interaction with teachers.	45	35
2	Using the ICT in class gives me the opportunity to discuss	43	37

	with teachers.		
3	Using the ICT in class facilitates dialog with teachers.	60	20
4	Using the ICT in class allows the exchange of information with teachers.	50	30
Total Mean		49.5	30.5

**Figure 2 Mean for Agree and Disagree Option regarding ICT use and improvement in interaction with teachers**

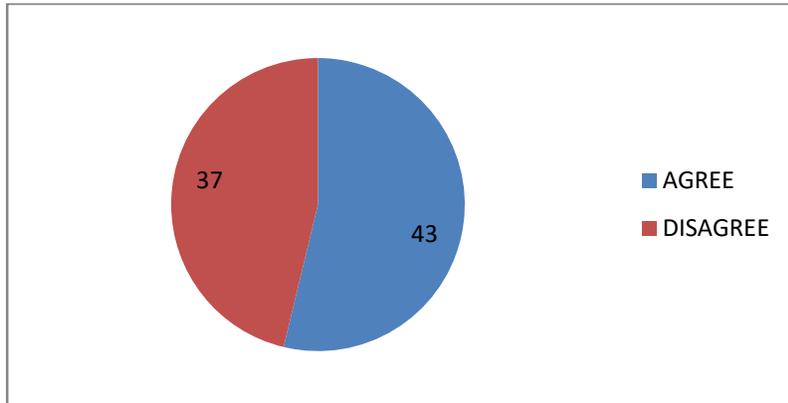


**Interpretation:** The table 2 and figure 2 above indicates that the mean (49.5) for Agree option exceeds the mean (30.5) for Disagree option. This reveals that ICT use leads to improvement of interaction with teachers during classroom learning.

**TABLE-3**

Sl.No.	Statements	A	D
1	By using the ICT this class has favoured my personal relationships with my peers and teachers.	43	37
2	By using the ICT in this class, my peer and faculty interactions make me feel valuable.	48	32
3	By using the ICT I feel that my opinions are taken into account in this class.	38	42
Total Mean		43	37

**Figure 3 Mean for Agree and Disagree Option regarding ICT use and improvement in engagement of students**

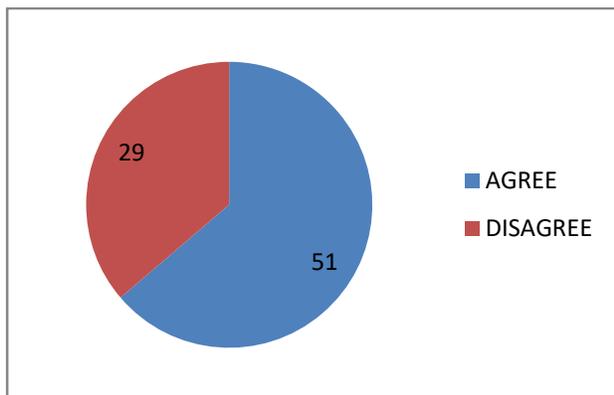


**Interpretation:** The table 3 and figure 3 above indicates that the mean (43) for Agree option exceeds the mean (37) for Disagree option. This states that ICT use improves engagement of students in classroom learning.

**TABLE-4**

Sl.No.	Statements	A	D
1	I feel that using ICT for collaborative learning in my group is effective.	70	10
2	I am able to develop research skills through peer collaboration.	25	55
3	I am able to develop new skills and knowledge from other members in my group.	49	31
4	Collaborative learning experience through ICT is better than a face-to-face learning environment.	60	20
Total Mean		51	29

**Figure 4 Mean for Agree and Disagree Option regarding ICT use and increase in collaborative learning**

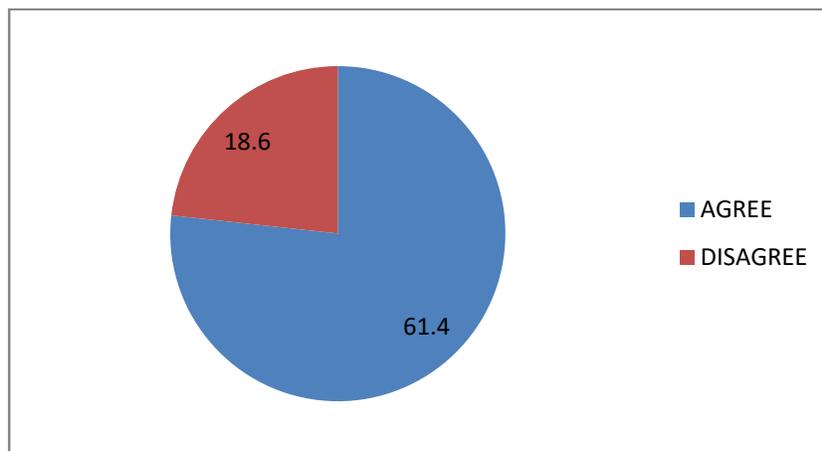


**Interpretation:** The table 4 and figure 4 above indicates that the mean (51) for Agree option exceeds the mean (29) for Disagree option. This indicates that ICT use increases collaborative learning in the classroom.

**TABLE-5**

Sl.No.	Statements	A	D
1	Use of ICT helps to facilitate academic activities and coordinate with peers.	75	5
2	Use of ICT helps to facilitate academic activities and coordinate with teachers.	49	31
3	Group discussions can be arranged with my classmates using ICT and this will improve my academic performance.	70	10
4	Use of ICT helps to build a student-lecturer relationship with my lecturers and this improves my academic performance.	48	32
5	Use of ICT improves my interaction with classmates and lecturers thus help me to improve my academic performance.	65	15
Total Mean		61.4	18.6

**Figure 5 Mean for Agree and Disagree Option regarding ICT use and improvement of academic performance**



**Interpretation:** The table 5 and figure 5 above indicate that the mean (61.4) for Agree option exceeds the mean (18.6) for Disagree option. This shows that ICT use enhances the improvement of academic performance of students.

## FINDINGS AND DISCUSSION

The study reveals that most of the sample students support the use of ICT in classroom learning and have strongly opined that its use creates great interest, attention and understanding of the subject matter very easily. It facilitates interaction with peers, teachers, evokes effective group discussion, collaborative learning, improved academic achievement, active engagement of students in the class. This clearly signifies that ICT use in classroom learning has a great positive effect on learning process.

The results of the study is similar to that made by **Simin Ghavifekr and Wan Athirah Wan Rosdy** which supports that ICT integration has a great effectiveness for both teachers and students.

## CONCLUSION

ICT has gained wider acceptability and usability with the rapid globalization. From the study it can be concluded that ICT has emerged to be an unavoidable means for the students specially, higher level students to proceed effectively in their academic performance. The study unveils that through the use of ICT students feel more comfortable with their peers to create a learning environment where they can discuss and share many information in group enough freely. However, due to shyness, fear or introvert nature most of the students are not able to develop good learning environment with the teachers and share educational views. Despite this, ICT has opened up a new mode of learning new things very effectively with active participation of the learners. This in turn has resulted in progressive academic achievement among the learners or students. Moreover its use has enhanced communication among students and teachers, can help to reduce stress and increase satisfaction among students, can promote, enhance and support the teaching-learning process.

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