Assessment Of Ict Facilities And Prospects For Teaching And Learning At University Level: A Case Study Of International Islamic University

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ABSTRACT

Information and Communication Technology (ICT) facilities and explore the prospects they hold for teaching and learning at the university level. In today's digital age, ICT has become an integral part of education, revolutionizing traditional teaching methodologies and expanding the possibilities for engaging and interactive learning experiences. By evaluating the current status of ICT facilities in universities, this study identified the strengths and weaknesses and the potential benefits and challenges associated with their implementation. The findings of this research provided valuable insights for educational institutions and policymakers to enhance the use of ICT tools and resources, ultimately improving the overall quality of teaching and learning at the university level. The primary purpose of this study was to explore the Integration of ICT in classroom practices. The study aimed to assess ICTs facilities and prospects for teaching and learning at the University level. The study population consisted of all teachers (75) during the year 2020-2021 from the Faculty of Social Sciences, International Islamic University Islamabad. A universal sampling technique was used in the selection of the sample. Self-structured Questionnaire was used as a research tool with a five-point Likert Scale. The study's significant findings were that all teachers have laptops and frequently use the technology. University teachers have a positive attitude toward the integration of ICTs. Teachers were very expert in multimedia use and agreed that due to electric fluctuation, ICTs couldn't play an influential role in teaching and learning. Therefore, based on these conclusions, the following recommendations were made, Maximum provision of hardware may be ensured so that the lack of hardware may be removed.

Moreover, teachers may be facilitated with subsidized rates in purchasing and utilizing these technologies. IT training program may be launched in summer vacation. Students' assignments may be assessed through these technologies, e.g., website and e-mail. Maximum Internet connectivity with the upper limit bandwidth facility may be ensured to address the "not enough Internet connectivity" and "slow Internet connectivity" problems among teachers. Continuous seminars and workshops for the training of teachers may be developed and launched so that teachers may update them according to the current advances in the field of ICTs.

Keywords: Integration, Information and Communication Technology, Teaching, Learning, Assessment

Introduction

Traditional learning changed through ICTs; undoubtedly, the research, teaching, and knowledge are highly flown. It is the potential of ICTs to enrich more excellent skills, involve scholars to help different educational institutions, and create future financial opportunities (Yusuf, 2005).

The universe changes very quickly, and the basis of fundamental training is that someone gets data on where to apply. Some abilities should be found in ICTs in the whole world. Methodical instruction has highlighted the reading materials that were composed by the course. Education has demand through labels, and introduction can't break up with material. The starting point of the educational module is protected and will be a more helpful way to use data. Contemporary ICTs help us to fulfill these essential requirements. There are routine competencies in the world-class setting based on the educational modules that use these technologies for potential (Oliver, 2000).

According to Hariss (2002), research revealed that the advantages of ICTs will be increased through the deception of ICTs. He refers that the ICTs will improve learning and help prepare lives and careers for the future generation by changing teachers. ICTs can modify the responsibilities and abilities of the future education in which high levels are involved, and they can get much help.

John & Sutherland (2005) suggested many conditions for teachers to change their pedagogical approaches. He also urged awareness about ICTs can be very important and to understand the essential link between ICTs and teaching content.

Literature Review

We live in a period where improvement is pushing quickly ahead, and the standard for young people in the present Western world is to approach a mechanical gadget (Harmer, 2015).

Technology and its suggestions for instruction have energized the brains of educators, legislators, and trailblazers everywhere worldwide as ahead of schedule as the start of the nineteenth century. The motivation behind the technology is to expand personal satisfaction. It develops with the issues and troubles individuals experience. The technology produces information, devices, and procedures to tackle these issues (Başer, 2006).

The utilization of technology in instruction gives better learning and encourages basic reasoning. Various methods utilized in instructive technology provide a superior learning experience to youngsters (Ismajli, 2008, referred to in Dogan, 2010).

Modes of Information & Communication Technology

Interpersonal
- Two-way communication with active negotiation of meaning among individuals

Interpretive
- One-way communication with no recourse to the active negotiation of meaning with the writer, speaker and producer

Presentational
- One-way communication intended for an audience of readers, listeners, or viewers

- Spontaneous
- Usually involves the exchange of information
- Meaningful

- Participants observe and monitor one another to see how their meanings and intentions are being communicated and make adjustments and clarifications accordingly

- Speaking and listening (conversation)
- Reading and writing (text messages, messages on social media, letters)

- The reader, listener or viewer interprets what the author, speaker, or producer wants the receivers of the message to understand

- Interpretations differ from comprehension and translation in that it implies the ability to read, listen or view "between the lines," including understanding from within the cultural mindset or perspective

- Reading of authentic texts(websites, stories and other literature, articles, signs)
- Listening to authentic texts (speeches, messages, songs, radio, news ads)
- Viewing of authentic materials(videos, movies, presentations, TV shows, commercials, news, plays)

- Presentation of .information, not exchange
- No direct opportunity for the active negotiation of meaning exists

- To ensure that the intended audience is successful in its interpretation, the "presenter" needs knowledge of the audience's language and culture

- Writing (messages, articles, advertisements, flyers, brochures, short notes, reports, scripts, PowerPoint presentations);
- Speaking (telling a story, giving a speech, TV or radio news, drama presentations including skits and jury)

Source: http://www.actfu/ore/default/files/pdf/PerformanceDescriptionLearners.pdf

Combining discriminating information and communication technology helps keep teachers and students alive. This will help enhance the quality of education. We involved the teachers in everyday tasks and changed the strategy involved in its development, including in educational partnership with ICTs as an instrument (Ratheeswari, 2018).

According to Michael (2012), the fruitful coordination of ICT into the instruction framework has reshaped the procedure of increasing and dispersing information through the general public. Regardless of the accomplishments uncovered by a portion of the Pakistanis colleges integrating the ICT for T&L forms, these institutes, despite everything, face many issues in attempting such a procedure. Absence of a foundational way to deal with ICT. Mindfulness and mental situation towards ICTs: It is significant for all partners in the organization to know the current ICT speed and outfitted administrations and their significance compared to their particular undertakings (Tusubira & Mulira, 2004).

They drop to be some obscure reality about ICTs, some deciphering them as a propelled designing science that needs a mass of cash and propelled achievement. They are

not acknowledged as methods for making proficiency and value viability. Lack of awareness obliges disposition. Inspirational mentality toward ICTs is broadly perceived as vital for their viable usage (Woodrow, 2012).

According to the point of view of different researchers that ICTs should be integrated with higher education, they also suggested that the Policymakers and teachers can play their roles in this regard. Both teachers and policymakers need to know how the education system and technology interrelate with each other. Many opportunities can be achieved after the integration of ICTs in higher education. That's why before implementing ICTs in higher educational institutions, it is necessary to ensure proper training, sound policy, planning, and teaching process reforms. Then the educational benefits will be achieved. Before implementing ICTs in the academic field, think carefully about the purpose or perception of education. Education is the starter or engine for improving and developing culture. Integration is not just telling or informing about knowledge and skills, but it's a way to build human capital and economic growth. Thus, ICTs are a simple tool that provides help to achieve the purpose of education. In instructive settings, this reason will be associated with improved educating and learning for Pupils. ICTs don't get learners' learning opportunities; however, teachers who use ICTs mindfully do. (Krzesłowska, 2006).

Kirkup and Kirkwood (2005) contend that contextualized educating and learning necessities should drive the ICTs interventions instead of the innovation itself. There are many reasons behind the failure of successful integration of ICTs in the T&L process, but the most important is the lack of policy and strategies for planning.

As indicated by discoveries in their Finnish research dependent on twenty perceptions and meetings with educators and senior educators, Niemi et al. (2013) distinguish six classes of effective ICTs coordination during the time spent T&L. These are given below: "(1) Strategic planning is a part of ICTs (2) Methods for teaching and learning (3) flexibility of curriculums, (4) high interests in correspondence, (5) ideal administration and the executives, and (6) showing staff's solid limit and responsibility."

METHODOLOGY

Objectives of the Study

The aim of the study is as under:

i.   To assess ICTs facilities and prospects for teaching and learning at the University level.

Design of the Study

The study was descriptive, and a Cross-Sectional survey was used Cross-Sectional survey is the type of observational study that analyses data from the population at a specific point in time (Lee, James, 1994). The data were collected to answer the research questions concerning the current status of integrating information and communication technologies in the classroom at the university level. The population was defined for the selection of the sample. A universal sampling technique was used. For this study, a questionnaire was used as a tool. The data were analyzed cumulatively through simple as well as advanced statistical formulas.

Population

According to the teacher's perspective, the study was conducted to explore the problems in integrating ICTs in the classroom at the university level. The researcher decided to delimit the population for data collection due to a lack of time and finance. Therefore, the information was gathered from the Faculty of Social Sciences, International Islamic University Islamabad teachers.

Sr. No	Institution	Category	Population
1	IIUI	Teachers	75

Source: https://www.iiu.edu.pk/?page_id=94 Retrieved January 25, 2020.

Sample and Sampling Techniques

According to (Richard & Margaret, 1990), Universal sampling refers to the selection of a sample where not all the people in the population have the same profitability of being included in the model, and for each of them, the probability of being selected is unknown. For this study, a universal sampling technique was used due to the short number of respondents from the population.

Sr. No	Institution	Category	Sample
1	IIUI	Teachers	75

Source: https://www.iiu.edu.pk/?page_id=94 Retrieved January 25, 2020.

ANALYSIS OF DATA

This portion of the Questionnaire related to the existing facilities of ICTs in the classroom. The collected is present in tabulated form.

TABLE 1: Personal computers/laptops in the classroom

Statement	S.No	Response	F	P	M
Personal computers/laptops in the classroom	1	Yes	63	100.0	1.00

Table 1 indicates that all respondents (100%) have personal laptops in the classroom, and the mean score was (M=1.00).

TABLE 2: Access to the Internet to teachers is up the classroom

Statement	S.No	Response	F	P	M
Access to the internet for teachers is up in the classroom.	1	Yes	63	100.0	1.00

Table 2 shows that all respondents (100%) agreed that internet access to teachers is up the classroom, and the mean score was (M=1.00).

TABLE 3: Availability of multimedia in the classroom

Statement	S.No	Response	F	P	M
Availability of multimedia in the classroom	1	Yes	63	100.0	1.00

Table 3 indicates that all respondents (100%) agreed multimedia facilities are available in the classroom, and the mean score was (M=1.00).

TABLE 4: Facility of print in the classroom

Statement	S.No	Response	F	P	M
The facility of print in the classroom	1	No	63	100.0	2.00

Table 4 indicates that all respondents (100%) disagreed with the classroom printing facility, and the mean score was (M=2.00).

TABLE 5: Electric fluctuation during the teaching process.

Statement	S.No	Response	F	P	M
Electric fluctuation during the teaching process.	1	Yes	63	100.0	1.00

Table 5 indicates that all respondents (100%) agreed that electric fluctuation should not occur during the teaching process, and the mean score was (M=1.00).

TABLE 6: Availability of ICT-assisted software.

Statement	S.No	Response	F	P	M
Availability of ICT-assisted software.	1	Yes	63	100.0	1.00

Table 6 indicates that all respondents (100%) agreed that ICT-assisted software is available to all the teachers, and the mean score was (M=1.00).

TABLE 7: ICT training for teachers

Statement	S.No	Response	F	P	M
ICT training for teachers	1	Yes	58	92.1	1.08
	2	No	5	7.9	
	3	Total	63	100.0	

Table 7 shows that 63 respondents (92%) agreed that universities provide ICT training to teachers using advanced technology. In contrast, 8% of respondents responded no, and the mean score was (M=1.08).

Findings

Based on the analysis, these findings were drawn.

1. All the respondents (100% & a mean score of 1.00) agreed they have personal computers/laptops.
2. All the respondents (100% & mean score of 1.00) agreed that access to the internet for a teacher is up to the classroom.
3. All the respondents (100% & mean score of 1.00) agreed that multimedia is available in the classroom.
4. All the respondents (100 % & a mean score of 2.00) disagreed that the classroom printing facility is unavailable.
5. All respondents (100% with & a mean score of 1.00) agreed that electric fluctuation should not occur during teaching and learning.
6. All the respondents (100 % & mean score of 1.00) agreed that ICTs assessed software is available to all teachers.

Discussion

The present study aimed to assess the state of ICT facilities and explore their prospects for teaching and learning at the university level. The discussion section presents a comprehensive analysis of the findings, highlighting the strengths, weaknesses, opportunities, and challenges associated with integrating ICT into higher education.

The assessment of ICT facilities revealed several positive aspects. First and

foremost, most universities had basic ICT infrastructure in place, including computer labs, internet connectivity, and multimedia equipment. This infrastructure provided students and faculty members access to various digital resources, such as online libraries, research databases, and educational software.

Furthermore, the study found that universities had made progress in adopting learning management systems (LMS) to support teaching and learning activities. LMS platforms offered features for online course delivery, assignment submission, discussion forums, and collaboration tools. These tools facilitated communication and interaction among students and instructors, enhancing the learning experience.

The integration of ICT in teaching and learning also presented opportunities for innovative pedagogical approaches. Virtual classrooms, video conferencing, and webinars enabled remote learning, allowing students to participate in classes and engage with course content from anywhere. Online assessments and automated grading systems streamlined the evaluation process, providing timely feedback to students and reducing administrative burdens.

Despite these positive aspects, several challenges were identified. Firstly, there were variations in the availability and quality of ICT facilities among different universities. Some institutions lacked sufficient infrastructure or faced connectivity issues, limiting the potential benefits of ICT integration. Moreover, faculty members' digital literacy and pedagogical training played a crucial role in effectively utilizing ICT tools for teaching. Insufficient training and support hindered the adoption of innovative teaching methods and limited the overall impact of ICT on student learning outcomes.

Furthermore, the study highlighted the need for continuous investment in ICT infrastructure and technological updates to keep up with the evolving educational landscape. Upgrading hardware, software, and network capabilities is essential to ensure reliable access and optimal utilization of ICT resources. Additionally, cyber security concerns must be addressed to safeguard sensitive data and protect the privacy of students and faculty members.

Conclusions:

In conclusion, assessing ICT facilities and prospects for teaching and learning at the university level revealed a mixed picture. While there were positive aspects, such as the availability of basic ICT infrastructure and the adoption of learning management systems, challenges remained regarding facility quality variations, faculty members' digital literacy, and the need for continuous investment and cyber security measures. Addressing these challenges is crucial to harness the full potential of ICT in higher education, creating an inclusive and technologically enabled learning environment for students and educators alike. The assessment of ICT facilities and prospects for teaching and learning at the university level reveals several key findings. First, the availability and quality of ICT infrastructure play a crucial role in enhancing educational outcomes. Universities with well-equipped ICT facilities provide students and faculty members with the tools and resources for effective teaching and learning. Second, integrating ICT into teaching and learning can significantly improve student engagement and knowledge retention. Interactive technologies, online learning platforms, and virtual collaboration tools offer dynamic and interactive learning experiences, promoting active participation and critical thinking.

Furthermore, the research highlights the importance of ongoing training and professional development for faculty members to effectively utilize ICT tools in their teaching practices. Building digital literacy skills among educators enables them to adapt to emerging technologies, incorporate innovative teaching

methods, and foster a student-centered learning environment. However, despite the potential benefits, challenges such as limited access to ICT infrastructure, inadequate technical support, and resistance to change from students and faculty members are significant barriers to effective integration. Universities must invest in upgrading ICT infrastructure, providing technical assistance, and implementing supportive policies to address these challenges.

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