



Research Article

INFRASTRUCTURAL AND INFORMATIONAL ISSUES FACED IN UTILIZATION OF ICT TOOLS IN LEARNING ACTIVITIES BY UNDERGRADUATE STUDENTS OF RVSKVV UNIVERSITY

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Abstract: The rapidly growing uses of technology in today's world are pushing students to consider the integration of ICT into their studies. It has been a challenging time for the education system with an unprecedented health crisis. There has been much research in this field, but there is little information available about the specific challenges and strategies used by students to overcome these obstacles. The present study was conducted in Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior, Madhya Pradesh. The study was conducted using a survey research design. A total of 200 undergraduate students were selected with the help of simple random sampling without replacement under a proportionate scheme. The results of the study regarding issues faced by the students indicated that most of the students felt inadequate or unreliable Internet connectivity. Majority of the students reported that they felt difficulty because of less interaction with other students than in a traditional face-to-face class. So they suggested that proper internet connectivity should be provided and Most of the students suggested that establish a productive learning environment and set a schedule for completing and reviewing assignments using ICT tools in learning activities.

Keywords: *ICT tools, Learning activities, Students and issues*

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Introduction

Information and communication technologies (ICTs) can be generally known as the technologies that make possible communication, processing and transmission of communication by electronic means. ICT is an umbrella term that includes diverse number of technologies like radio, TV, telephone which are the old ICTs and computer, internet, wireless and satellite technologies which are the new ICTs.

Information and communication technology (ICT) has become a major source of change or innovation and development of efficiency for many sectors over the world. The application of ICT has become a critical component of both the outside and inside classroom learning process for university students, especially in the education sector.

ICT in education is becoming increasingly important as the world moves rapidly into digital media and information. According to some studies, information and communication technologies (ICTs) can and do play a number of roles in education, including preparing graduates and citizens for an information society, improving educational outcomes, as well as improving teaching and learning quality. In today's global network society, social structure and organizational arrangements are largely made up of information networks powered by informational and communication technologies [1]. ICTs broadly defined here to include mobile phones, laptops, apps, internet platforms, networks and databases, as well as underlying infrastructure are a pivotal factor in the existing social order particularly during the COVID-19 global pandemic. Besides the identification, tracing, understanding, management, treatment, and perception of pandemics, information and communication technologies have a wide range of applications" [2]. ICTs offer us the greatest chance of maintaining social order during a pandemic. It is only through an ICT platform that information can be provided on-demand, actively communicated, and personalized to overcome the limitations of broadcast and passive communication.

After seeing the significant contribution of ICT, So the study helps for effective use of ICT tools with the help of objective –issues and their suggestion for effective use of ICT tools in learning activities.

Material and Methods

The present investigation was carried out in RVSKVV University, Gwalior (M.P.). In the investigation, Survey research design was used. The population of the study was consist of Undergraduate students (UG) including B.Sc (Ag) / B.Sc(Horti), from all five colleges (Indore, Sehore, Khandwa Gwalior and Mandsaur) of RVSKVV Gwalior (MP).

200 UG students were selected from college wise prepared list with the help of simple random sampling without replacement under proportionate scheme. The dependent variable studied was utilization of ICT tools and students' satisfaction. A structured interview schedule was used to collect data personally. Both qualitative and quantitative data were collected. The qualitative data were adapted into quantitative form by giving suitable scores. The collected data were quantified, classified, tabulated and presented on the basis of frequencies and percentages. To assess the issues in utilization of ICT tools in learning activities Students were questioned to mention the problems faced by them during the usages of ICT tools. The issues offered were summarized based on the number and per cent of respondents who reported for the respective issues [3-6].

Result and Discussion

The data shows that the majority of the students (80.50%) felt inadequate or unreliable Internet connectivity because of their rural background, followed by 70 per cent complaining about a lack of computers or laptops and also inadequate computer labs in college and hostels. Additionally, 60 per cent of the students reported that they suffered from wastage of time, distractions, and inefficient time management.

Table-1 Distribution of Agricultural Under Graduate students according to their issues they face during use of ICT tools

SN	Issues	UG (N-200)	
		F (%)	Rank
	Infrastructural issues		
1	Inadequate/unstable Internet connectivity	161(80.50)	I
2	Wastage of time, distractions, and inefficient time management	120(60.00)	III
3	Lack of computers or laptops and also Inadequate computer labs	140(70.00)	II
4	Lack of suitable online environment at home (e.g., presence of children, other family members)	105(52.50)	V
5	Less free access to resources	110(55.00)	IV
6	Lack of power supply	65(32.50)	VI
	Informational issues		
1	There is a plethora of websites today that offer online courses with the same content and topics.	40(20.00)	VI
2	Invalid data	96(48.00)	IV
3	Less interaction with students than in a traditional face-to-face class.	156(78.00)	I
4	Sometime article available only in abstract form and cannot download full article	120(60.00)	II
5	Extensive use of irrelevant content	66(33.00)	V
6	There is a high likelihood that you will encounter outdated content on a website.	116(58.00)	III

Table-2 Distribution of Agricultural under Graduate students according to their suggestion regarding utilization of ICT tools

SN	Suggestions	UG (N-200)	
		F (%)	Rank
	Infrastructural suggestion		
1	Proper internet connectivity should be provided	165(82.50)	I
2	Engage students in higher-order thinking skills through the use of ICT tools; Utilize ICT tools for learning assistance and progress in subjects.	120(60.00)	IV
3	Well-furnished computer laboratory should be established within the hostel/college campus for easy access to computer services.	161(80.50)	II
4	All colleges and hostels should offer 24x7 Wi-Fi accesses to students.	140(70.00)	III
5	Library services should be available 24x7 for students.	110(55.00)	V
6	Proper power supply in hostels and college campuses.	80(40.00)	VI
	Informational issues		
1	Links to e-portals or websites made for research/academics/course/subjects should be provided and information should be updated on a periodic basis.	60(30.00)	VI
2	Valid data should be provided	96(48.00)	III
3	Establish a productive learning environment and set a schedule for completing and reviewing assignments using ICT tools in learning activities.	151(75.50)	I
4	Full length research paper/articles/chapters should be downloaded from internet	105(52.50)	II
5	Valuable information or data should be provided and create a list of keywords and put keywords in the meta description of online content to get relevant content	66(33.00)	V
6	Online content should be updated timely.	72(36.00)	IV

55 per cent of the students reported that they suffered from less free access to resources. 52.50 per cent of the students suffered from a suitable online environment at home (e.g., presence of children, other family members), and 32.50 per cent of the students suffered from a lack of power supply, respectively.

Informational issues

Majority of the students (78.0%) reported that they felt difficulty because of less interaction with other students than in a traditional face-to-face class, followed by 60 percent of the students who stated that sometimes articles are available only in abstract form and they could not download the full article, 58 per cent complained that there is a high likelihood that you will encounter outdated content on a website. You may look at a course on the website and wonder when it was last updated, 48% of students faced difficulty by invalid data, 33 per cent reported extensive use of irrelevant content, and 20 per cent reported there are a plethora of websites today that offer online courses with the same content and topics.

Suggestion regarding utilization of ICT tools in learning activities

The suggestions regarding infrastructural issues given by UG students revealed that the majority of the students (82.50%) suggested that proper internet connectivity should be provided. Followed by 80.50 per cent suggested that all colleges and hostels should offer 24x7 Wi-Fi facility access to students, 70 per cent suggested that a well-furnished computer laboratory should be established within the hostel/college campus for easy access to computer services. Furthermore, 60 per cent recommended engaging students in higher-order thinking skills through the use of ICT tools; utilising ICT tools for learning assistance; and progress in subjects. While 55 per cent suggested that library services should be available 24x7 for students, and 40 per cent said that proper power supply in hostels and college campuses is a must.

Suggestions regarding informational issues

Most of the students (75.50%) suggested that establish a productive learning environment and Set a schedule for completing and reviewing assignments using ICT tools in learning activities, followed by 52.50 per cent suggested that full length research papers/articles/chapters should be downloaded from the internet, valid data should be provided (48.0%), online content should be updated timely (36.0%), Valuable information or data should be provided and create a list of keywords and put keywords in the meta description of online content to get relevant content (33.0%), and links to e-portals or websites made for research/academics/course/subjects should be provided and information should be updated on a periodic basis. (30.0%).

Conclusion

According to the study's findings, the majority of the students felt that there was insufficient or unstable Internet connectivity because of their rural background. Most of the students felt difficulty because less interaction with students than in a traditional face to face class; 58 percent of the students who stated that there is a high likelihood that you will encounter outdated content on a website etc. So, their some possible suggestions are suggested by the students that proper internet connectivity should be provided, establish a productive learning environment and Set a schedule for completing and reviewing assignments using ICT tools in learning activities, full length research papers/articles/chapters should be downloaded from the internet for effective use of ICT tools in learning activities.

Application of research: ICT in education can be seen in improving the capabilities of instructors, changing the educational structure, creating opportunities for greater and more comprehensive learning, enhancing the educational quality, and improving technical skills. So we need to focus on the issues and suggestions faced by the students in learning activities.

Research Category: Agricultural Extension and Communication

Abbreviations: ICT- Information Communication technology

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Cultivar / Variety / Breed name: Nil

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