

Knowledge of Information Communication Technology among Students

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Abstract: *Information and Communication Technologies (ICT) are defined as all devices, tools, content, resources, forums, and services that can be converted into or delivered through digital forms, which can be deployed for realizing the goals of teaching learning, enhancing access to and reach of resources, building of capacities, as well as management of the educational system. These will not only include hardware devices connected to computers, and software applications, but also interactive digital content, internet and other satellite communication devices, radio and television services, web-based content, interactive forums, learning management systems, and management information systems. These will also include processes for digitalization, deployment and management of content, development and deployment of platforms and processes for capacity development, and creation of forums for interaction and exchange. The 21st century has seen ICT use becoming an inevitable part of life. Moreover, the ICT has the impact on students which enable them to any place learning. Use of the new technology of ICT, the off-campus delivery was an option for the students who were unable to attend the classes. Now a days, more students are accepted with this technology- facilitated learning settings. There is one of the examples that show the impact of ICT for the student. Traditional classroom learning has provided to learning in work-based settings which enable them to the access of courses and programs from their study places. This strategy not only have the impact of convenience for students but help to save the costs associated with the travel and time away from school and also situation and application of the learning activities within meaningful and useful contexts.*

Keywords: Information communication technology, knowledge of ICT, digitalization, interactive forums, management information systems, Traditional classroom

I. INTRODUCTION

Information communication technology (ICT) have become crucial in daily life to strengthen ourselves in the information society. ICT are basically information-handling tools-a varied set of goods, applications and services that are used to produce, store, process, distribute and exchange information. They include the 'old' ICTs of radio, television and telephone, and the 'new' ICTs of computers, satellite information transmitting devices and the internet. Information revolution has a deep impact on nearly all walks of life. The core one and the most promising tool of information age is the computer. But ICTs are more than just these technologies like telephone, radio and television, although these technologies are now given less attention, but they have a longer and richer history as informational tools. For instance, radio and television have been used for over forty years been used for open and distance learning, although print remains the cheapest, they were the most accessible and therefore most dominant delivery mechanism in both developed and developing countries. In recent years there has been a ground for interest in how computers and the internet can best be harnessed to improve the efficiency and effectiveness of education at all levels and in both formal and non formal settings. ICT can be best mean not only to develop social extension but also to expand agriculture research and education system. The information and communication technology can generate new opening to bridge the gap between information haves and information have not in the developing countries. The task force on "India as knowledge super power" emphasized the need to harness information communication technology for community transformation. The emerging ICT have momentous role to perform in social development. There are many possibilities of integration of technology for the overall social and rural development. Today a new paradigm of social development is fast emerging : in both developing and developed countries the overall development of rural areas expanding in new direction; old ways of delivering important

services to citizens are being challenged; and traditional societies are being transformed into knowledge societies all over the world.

In addition, the information and knowledge will travel faster and further through the use of ICT which in turn can help the student to be more effective in their learning. This is because the access of information or knowledge is essential for development of learning; time will not be wasted while they are on learning process. For those who have access to computer and internet can open up a wealth of information and learning resources by either on-line searching or by using CD-ROMs or DVDs for self-paced learning

1.1 Objectives

1. To study the socio economic background of students.
2. To know the knowledge of Information communication technology among students.

II. RESEARCH METHODOLOGY

To complete the above objectives by applying the appropriate research methodology in the present study, in the study area of research two group of targeted respondents i.e. undergraduate and post graduate students are running in the study. In district Kanpur Nagar, Chhatrapati Sahuji Maharaj University, Kanpur was selected purposively for the study and eight colleges are selected randomly with target of 50 students per college. The findings of the study have been properly discussed in the light of the valuable research material on the subject and the subsequently summarized throwing light on all major aspects covered within the scope of the study. The conclusion and action implication are made to satisfy the fruit bearing aspect of the research. District Kanpur Nagar Uttar Pradesh was purposively selected for the study. This helped in collecting the necessary information accurately and timely.

III. RESULT AND DISCUSSION

3.1 Place of access towards ICTs

Table 5.14 Distribution of the students based on their place of access towards ICTs as computer and internet

Access place	Boys						χ^2	P-level	Girls						χ^2	P-level
	Computer			Internet					Computer			Internet				
	A	B	C	D	E	F			A	B	C	D	E	F		
	Frequently	Occasionally	Never	Frequently	Occasionally	Never			Frequently	Occasionally	Never	Frequently	Occasionally	Never		
Library	120 (30.0)	60 (15.0)	20 (5.0)	90 (22.5)	100 (25.0)	10 (2.5)	17.619**	<0.01	110 (27.5)	65 (16.3)	25 (6.3)	90 (22.5)	55 (13.7)	55 (13.7)	14.083**	<0.01
Department	100 (25.0)	75 (18.7)	25 (6.3)	75 (18.7)	70 (17.5)	55 (13.7)	14.994**	<0.01	110 (27.5)	60 (15.0)	30 (7.5)	70 (17.5)	90 (22.5)	40 (10.0)	16.317**	<0.01
Home	180 (45.0)	20 (5.0)	-	140 (35.0)	40 (10.0)	20 (5.0)	31.667**	<0.01	190 (47.5)	10 (2.5)	-	170 (42.5)	30 (7.5)	-	11.110**	<0.01
Cyber café	85 (21.3)	75 (18.7)	40 (10.0)	65 (16.3)	100 (25.0)	35 (8.7)	6.771*	<0.05	65 (16.3)	90 (22.5)	45 (11.3)	55 (13.7)	110 (27.5)	35 (8.7)	4.083	>0.05

The perusal of table 5.14 reveals the distribution of boy respondents according to accessibility towards computer and internet, 30% of boy's access computer frequently and 22.5% of boy respondent were Access internet frequently in the college library. The observed value of $\chi^2(17.619^{**})$ significant at 1% and four degree of freedom. Whereas 25% of boys access computer frequently and 18.7 % access internet frequently in the college department. The calculated value of $\chi^2(14.994^{**})$ significant at 1% level. Majority of boy students 45.0 % frequently and 35.0 % students access internet frequently at home with observed value of $\chi^2(31.667^{**})$ was significant at 1% level. Whereas 21.3% of boy students access computer frequently and 16.3 % of students access internet frequently at cyber cafe/net cafe with calculated value of $\chi^2(6.771^*)$ significant at 5% level and for degree of freedom.

On other hand distribution of girl respondents according to accessibility towards computer and internet, 27.5% of girl access computer frequently and 22.5% respondents were access internet frequently in the college library. The observed value of $\chi^2(14.083^{**})$ significant at 1% and four degrees of freedom, Whereas 27.5% of girls access computer frequently and 17.5% of them access internet frequently in the college department with the calculated value of $\chi^2(16.317^{**})$ significant at 1% level. Majority of girl students 47.5 % were using computer frequently and 42.5% of student access internet frequently at home with observed value of $\chi^2(11.110^{**})$ significant at 1% level. Whereas 16.3 % of girl students access computer frequently and 13.7 % of student access internet frequently at cyber cafe/ net cafe with calculated value of χ^2 was significant at 5% level and 4 degrees of freedom.

Thus, the table indicates that maximum numbers of the students were frequently using computer and internet at home due to less accessibility in cyber cafe.

3.2 General Knowledge

Table 5.15 Distribution of the students based on their General Knowledge of ICTs

N= 400

S. No.	Knowledge of ICTs among students	Symbol	Yes	No	Mean Score	S.D.	Rank
1.	Setting up a system	A	235 (58.7)	165 (41.3)	1.59	1.08	V
2.	Turning on and off the system	B	365 (91.3)	35 (8.7)	1.91	1.35	II
3.	Open and creating a file and folder on a computer by using mouse	C	390 (97.5)	10 (2.5)	1.98	1.40	I
4.	Printing the documents	D	330 (82.5)	70 (17.5)	1.83	1.28	III
5.	Move/ copy files between drives	E	320 (80.0)	80 (20.0)	1.80	1.26	IV
6.	Formatting system and compressing the file size	F	205 (51.3)	195 (48.7)	1.51	1.01	VI
7.	Scanning text and pictures with antivirus	G	120 (30.0)	280 (70.0)	1.30	0.77	VII

Table 5.15 shows the knowledge of respondent for ICT, 97.5% of students know about open and creating a file and folder on a computer by using mouse with mean score of 1.98, standard deviation 1.40 and rank I, followed by 91.3 per cent of respondents who know about turning on and off the system with mean score of 1.91, SD 1.35 and ranks II. While 82.5 per cent of respondents agree that they know about printing document with mean score of 1.83, standard deviation 1.28 and rank III. 80% of students were having good knowledge about how to move or copy files between drives with mean score 1.80, standard deviation 1.26 and Rank IV. Whereas 58.7 per cent of students were know about setting up a system with mean score of 1.59, standard deviation 1.08 and rank V. 51.3% of respondents were having knowledge about formatting system and compressing the file size with mean score of 1.51, standard deviation 1.01 and rank VI as well as 30% respondents were having good knowledge of scanning text and pictures with antivirus with mean score of 1.30, standard deviation 0.77 and ranks VII.

In the discussion we found that percentage of students to open and creating file folder on computer by using mouse with first rank and last rank of a student in scanning text and pictures with antivirus.

3.3 Knowledge of MS Word

Table 5.16 Distribution of the students based on their Knowledge of MS Word

N = 400

S. No.	Knowledge of ICTs among students	Yes	No	Mean Score	S.D.	Rank
	MS Word					
	Symbol					
1.	Page up and down	400 (100.0)	-	2.00	1.41	I
2.	Editing text by using spell checker	320 (80.0)	80 (20.0)	1.80	1.26	II
3.	Inserting pictures, graphs and diagrams	125 (31.3)	275 (68.7)	1.31	0.79	III
4.	Creating and save new document templates and tables	95 (23.7)	305 (76.3)	1.24	0.69	IV

Table 5.16 shows distribution of the respondents according to knowledge of ICT regarding use of MS word 100% of students were having knowledge about page up and down in the computer system with mean score 2.00, standard deviation 1.41 and rank I, followed by 80% of students who were having knowledge about editing text by using spell checker with mean score of 1.80, standard deviation 1.26 and ranks II. 31.3 per cent of respondents were have good knowledge about interesting picture graph and diagrams with mean score of 1.31, standard deviation 0.79 and rank III, While 23.7 per cent of students were having knowledge about creating and saving new document templates and tables. Under the conclusion we have found that 100 % respondents were having knowledge about the page up and down in computer and some of them were know about editing text by using spell checker that really indicate that students were having interest to know about proper knowledge of ICT that will be help infuture.

3.4 Knowledge of MS Excel

Table 5.17 Distribution of the students based on their Knowledge of MS Excel

N = 400

S. No.	Knowledge of ICTs among students	Yes	No	Mean Score	S.D.	Rank
	MS Excel					
	Symbol					
1.	Feeding data into the cell	345 (86.3)	55 (13.7)	1.86	1.31	I
2.	Formatting a MS excel sheet	250 (62.5)	150 (37.5)	1.63	1.12	II
3.	Conversion of sheet from excel to other formats	205 (51.3)	195 (48.7)	1.51	1.01	III
4.	Understand and use relative and absolute cell-referencing	190 (47.5)	210 (52.5)	1.48	0.97	IV

Table 5.17 concede the distribution of respondents according to knowledge of ICTs regarding use of MS Excel, 86.3 % of students were having good knowledge about feeding data into the cell with mean score 1.86, standard deviation 1.31 and rank I, followed by 62.5 per cent of students who knew about formatting a Excel sheet in a better way with mean score 1.63, standard Deviation 1.12 and rank II. Whereas, 51.3 per cent of respondents were know about conversion of sheet from Excel to other format with mean score of 1.51, standard deviation 1.01 and rank III, while 47.5 per cent students were have good knowledge of understand and use of relative and absolute cell referencing with mean score of 1.48, standard deviation 0.97 and rank III.

Thus, it is concluded that maximum students were having good knowledge about feeding data into cell in this research study of different colleges. ICT is used as a tool for students to discover learning topics, solve problems, and provide solutions to the problems in the learning process. ICT makes knowledge acquisition more accessible, and concepts in learning areas are understood by students while getting engaged in the application of ICT. Similar study given by **Brush Glazewskiet al. (2011)**

3.5 Knowledge of MS Power Point

Table 5.18 Distribution of the students based on their Knowledge of MS Power Point

N = 400

S. No.	Knowledge of ICTs among students	Yes	No	Mean Score	S.D.	Rank
	MS Power point					
	Symbol					
1.	Preparing slide layout	265 (66.3)	135 (33.7)	1.66	1.15	I
2.	Creating a basic presentation	245 (61.3)	155 (38.7)	1.61	1.11	II
3.	Creating text animation	210 (52.5)	190 (47.5)	1.53	1.02	III
4.	Inserting pictures, graphs and diagrams	185 (46.3)	215 (53.7)	1.46	0.96	IV
5.	Producing appropriate handout formats and rearrange slides	160 (40.0)	240 (60.0)	1.40	0.89	V

The contemplation of the table 5.18 shows the knowledge of ICT regarding Microsoft PowerPoint, 66.3 per cent of students were have knowledge about preparing slide layout with mean score of 1.66, standard deviation 1.15 and rank I, followed by 61.3 per cent student were knew about creating a basic presentation with mean score of 1.61, standard deviation 1.11 and rank II. 52.5 % of students were knew that creating a text animation with mean score of 1.53, standard deviation 1.02 and rank III, while 46.3 percent of students were have better knowledge about inserting pictures, graph and diagrams with mean score of 1.46, standard deviation .96 and rank IV, followed by 40% of students were know about producing appropriate handout formats and rearrange slides with mean score of 1.40, standard deviation 0.89 and ranked V. From this table it appears that majority of students having knowledge about preparation of slide layout and creating a basic presentation, whether some of them were having knowledge of inserting pictures graphs and diagrams in this study area.

3.6 Knowledge of Internet and E-mail

Table 5.19 Distribution of the students based on their Knowledge of Internet and E-mail

N = 400

S. No.	Knowledge of ICTs among students	Yes	No	Mean Score	S.D.	Rank
	Internet and E-mail					
	Symbol					
1.	Access an internet site	360 (90.0)	40 (10.0)	1.90	1.34	I
2.	Creating e-mail account send and receive messages	335 (83.7)	65 (16.3)	1.84	1.29	III
3.	Attach files to outgoing and incoming	345 (86.3)	55 (13.7)	1.86	1.31	II
4.	Creating blog spot and face book account	180 (45.0)	220 (55.0)	1.45	0.95	IV

The contemplation of the table 5.19 shows the distribution of respondents according to knowledge of ICT among students regarding use of internet and email, 90% of students were have good access on internet site with mean score of 1.90, standard deviation 1.34 and rank I followed by 83.7 per cent of students were having knowledge about attach files to outgoing and incoming with mean score of 1.86, standard deviation 1.31 and rank II. 83.7% of respondents were showing their knowledge in field of creating email account and send receive message with mean score of 1.84, standard deviation 1.29 with rank III, while 45% of respondents were basic knowledge about creating blog spot and Face book account on internet with mean score of 1.45, standard deviation 0.95 and rank IV.

Thus, it is evident that majority of students have good access on internet site with good knowledge of use of internet and email but some of them were not having appropriate knowledge about creating blog spot and face book account.

3.7 Knowledge of World Wide Web

Table 5.20 Distribution of the students based on their Knowledge about World Wide Web

N = 400

S. No.	Knowledge of ICTs among students	Yes	No	Mean Score	S.D.	Rank	
	WWW (World Wide Web)						
	Symbol						
1.	Language specific browsing	A	108 (27.0)	292 (73.0)	1.27	0.73	VI
2.	Format specific browsing	B	135 (33.7)	265 (66.3)	1.34	0.82	III
3.	Downloading free software	C	265 (66.3)	135 (33.7)	1.66	1.15	II
4.	Downloading files	D	280 (70.0)	120 (30.0)	1.70	1.18	I
5.	PDF files downloading	E	125 (31.3)	275 (68.7)	1.31	0.79	IV
6.	Downloading audio and video files	F	120 (30.0)	280 (70.0)	1.30	0.77	V

Table 5.20 divulge the distribution of respondents according to knowledge of ICT about world wide web, 70% of respondents were having good knowledge of downloading files with mean score of 1.70, standard deviation 1.18 and rank I, followed by 66.3 % of students were showing their knowledge about free software with mean score of 1.66, standard deviation 1.15 and rank II. 33.7% of respondent were knowledge about format specific browsing with mean score of 1.34, standard deviation 0.82 and rank III, while 31.3 per cent of students were telling about good knowledge of PDF file downloading with mean score of 1.31, standard deviation 0.79 and rank IV. Under the research area we found that only 30% of students were new about downloading audio and video files with mean score of 1.30, standard deviation 0.77 and rank V, whereas 27% of respondent were knowledge about language specific browsing with mean score of 1.27, standard deviation .73 and rank VI.

Thus, in concluding lines we found that in this research study knowledge about World Wide Web maximum per cent of students were having about good knowledge about downloading file from free software browser so that it may be definitely helpful in their online or offline study through use of information communication technology.

IV. CONCLUSION

Information and Communication Technology is the fusion of computers and telecommunications. It describes exciting and innovative ways to provide learners lifelong global access to information, learning and support and computers enable people to work creatively.

The study depicts that majority of students were having knowledge about preparation of slide layout and creating a basic presentation, whereas some of them were having little knowledge about inserting pictures graphs and diagrams in MS Power point. We have found that maximum respondents were having knowledge about page up and down in computer and some of them knew about editing text by using spell checker that really indicate that students were interested to know about proper use of ICT that will be helpful.

V. RECOMMENDATIONS AND SUGGESTIONS

1. Students are very critical of their use of ICT therefore internet connection in computer should be appropriate with good quality infrastructure so that students gain qualitative information within sometime.
2. Good quality software and updated computer with RAM of high capacity should be available in smart class of college and in digital library also so that students can complete their assignment easily.
3. Maximum students have no knowledge about computer system although they have enough knowledge about mobile phone. So in the computer era each and every student should have proper knowledge about computer as it helpsthem in improving their academic performances.
4. There is need that the institutions should be invest more in computers and related technology as means of not only solving accessibility problem but also improving the availability of the facilities especially computers in the classrooms and computer laboratories.

The power supply is one of the major problems. The institution should buy generators in case of blackouts. Currently students suffer when there is blackout and school work becomes stand-still as they cannot use these ICT facilities. So Computer laboratories could be increased on campus and that could be done with private business people

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