

INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTs): Means to Quality Higher Education in Kashmir

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ABSTRACT: *In the present scenario, we are in a digital era. It is difficult to think of any event in our day to day life without using Information and Communication Technologies. Information and Communication Technologies (ICTs) have a greater significance in revolutionizing the modern information society. Present-day schools and classrooms are no exceptions. Education is a very socially oriented activity and quality in education has usually remained a debatable problem since ancient times. The role of ICTs in stimulating quality in higher education can never be ignored. The use of ICTs in education advances itself to more student-centered learning. It is evident that an upsurge in the use of ICT in education with integrating technology to the curriculum has a noteworthy and positive impact on student's achievement. It is obvious that the students who are continuously exposed to technology have enhanced 'knowledge', presentation skills, innovative competencies, and are ready to put more efforts into learning as compared to their counterparts. The proposed study is meant for investigating the present higher education system of Kashmir and to provide possible suggestions to integrate ICTs in education with the intension to enhance the practices that are directly or indirectly concerned with teaching and learning process. The study is based on data collected from different higher educational institutions of Kashmir using different tools like Checklist, observations, Questionnaire, and other tools and techniques.*

Key Words: : ICTs, Quality Education, Teaching and learning process.

Introduction

India's higher education system is the third largest in the world, next to the United States and China. About 8.15% (68 millions) of Indians are graduates (**Census 2011**). The Higher education systems of India have grown-up rapidly in last few decades. This expansion has led to degraded quality higher education. This impetus continued due to instantaneous advancements in different fields which eventually lead to the prolonged demand of skilled and competent manpower in this globalized society (**Ajit Mondal 2012**). Information and communication technology (ICT) has transformed different aspects of life. The introduction of ICT in the higher education institutions has thoughtful implications, especially concerned with key issues of access, equity, management, efficiency, pedagogy and quality. ICT provides lot of improvements at Schools, Colleges, Universities, workplace, home and in every aspect of our day to day lives. The International Telecommunication Union (ITU) stated that "The key to the information society is universal access to ICTs. Everybody should have equal opportunity to be a part of the digital world and nobody should be starved of to get the probable benefits of Information and Communication Technologies (ICTs) (**Ashok Kumar Veerasamy 2012**). The primary goal of higher education Institution is to provide quality higher education for students, and research work. ICTs plays significant role in bringing quality in higher education. Therefore Information communication technology (ICT) has positive influence in higher education directly or indirectly. Now a days, ICT is becoming a means for medium of instruction in higher education Institutions. (**Musa Dima Genemo 2016**) In higher education Institution of developed countries, ICTs are being used as medium of instruction by using multimedia, video lecture, E-Learning and other ICT are used as medium of instruction in the class room settings. The main benefit of ICTs is that it solves the communication gap between different higher education Institutions and integrating ICTs in classroom settings helps both students and teachers to bring improvement in teaching learning process, research, and self-study.

Purpose of the Study

The main purpose of the proposed study is to investigate the impact of Information Communication Technology (ICTs) on Higher Education Students of Kashmir valley especially rural and urban Degree

Colleges of Kashmir valley. Under the proposed study the following objectives have been framed and will be specifically, investigated;

- 1) To investigate and compare the use of Information Communication Technology (ICTs) among urban and rural degree College students of Kashmir valley.
- 2) To investigate the impact of Information Communication Technology (ICTs) on the academic achievement of urban and rural degree College students of Kashmir valley.
- 3) To provide some possible suggestions to strengthen the integration of Information Communication Technology (ICTs) in degree Colleges.

Research Questions

In the proposed study, the following research questions were formulated.

- 1) How far does the urban and rural degree College Students of Kashmir valley use ICTs in their studies?
- 2) How far does ICTs impact the academic achievement of urban and rural degree College Students of Kashmir valley?
- 3) How far does urban and rural degree college students differ in using ICTs in their respective areas?

Methodology

The methodology for the said study was equipped with proper procedures in order to properly fit the study, so that to reach the goals for which the study was intended to reach. To get the probable results, proper quantitative tools and techniques were used for data collection such as check-list and questionnaires. The Data collected through questionnaire permits the researcher to go through objective analysis. Under such type of study the researcher can accessibly reach the probable statistical findings. The data collected from the research tools were analysed properly by using different types of software like SPSS and Minitab, so that to quantify the results appropriately and to put it in the form of columns and tables that would helpfully enhance and encompass the research analysis. The proposed study is free from personal bias, since, the analysis is based on statistical analysis of data which enhances the validity and reliability of the study. The study has been undertaken in Kashmir Division of Jammu and Kashmir State. The main focus of the study is to find out the access of ICTs over different colleges of Kashmir and compare the accessibility between urban and rural colleges and its impact on their teaching learning process.

Tool construction

The check-list and Questionnaire was developed after thorough literature review, and by taking help of previous research tools. Both Questionnaire and interview schedule comprises of close ended questions. A separate Questionnaire was constructed for both teachers and students in order to get the probable results for the proposed study.

Data collection and Sample

The sample for the proposed study was selected from 6 degree colleges of Kashmir division by using the technique of Stratified Random Sampling. Firstly a list of total number of degree colleges was prepared and then 6 colleges were selected from each strata using Stratified Random Sampling technique i.e., 3 degree colleges from urban areas and 3 degree colleges from rural areas. Six (6) degree colleges were selected for the proposed study, including three (3) urban degree colleges and three (3) rural degree colleges from each one of the six (6) colleges, a sample of twenty five (25) students and ten (10) teachers were taken. Thus the total sample comprised of 150 students and 60 teachers. After the sample was selected, the data was collected by using tools.

Data Analysis

The data collected using different tools was subjected to rigorous statistical analysis. The data analysis has been done using various tools and software like SPSS and minitab. The mean and percentages were computed on the collected data. Content analysis was used for analysis of data collected through open ended questions. The t-test was used for comparing the use of ICT among rural and urban degree college.

Descriptive analysis

Table 1.0: Showing the use of ICTs among Urban and rural Degree College Students of Kashmir division.

Use of ICT	Group	N	Mean	Std. Deviation	t-value	Level of Sig.
	Rural	150	7.94	2.407	12.94	Sig. at 0.01 level Sig.at 0.01
Urban	150	11.10	3.018			

The data presented in table 1.0 reveals that there is a significant difference between rural (M= 7.94; SD = 2.407) and Urban (M= 11.10; SD =3.018) degree college students on use of ICT services dimension. The calculated t-value 12.94 which exceeds the table value is significant at 0.01 level (≥ 2.59). The mean score indicates that urban students have more use of ICT services dimension than rural students. Hence one of the objective of our study is realized.

Table 1.1: showing the relationship between ICT literacy and academic achievement of rural and urban degree college students of Kashmir division.

Group	Academic Achievement	N	Mean ICT Literacy
Urban	0-50%	44	11.67
	50-70%	74	13.23
	70% and above	32	15.26
	Total	150	
Rural	0-50%	73	7.24
	50-70%	58	8.89
	70% and above	19	9.71
	Total	150	

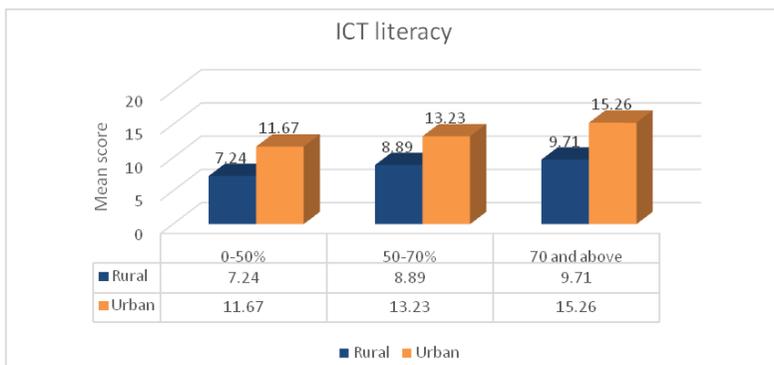


Figure 1.3: Showing the mean comparison of ICT literacy between Urban and Rural degree college students and its relationship with academic achievement.

The table 1.1 specifies the relation between academic achievements and ICT literacy of Urban and Rural degree college students of Kashmir division. The relation between ICT literacy and academic achievement of 150 Urban college students presented in the table 1.1, depicts that 44 students have mean score of 11.67 in ICT literacy and the academic achievement of 0-50%, 74 students have mean score of 13.23 in ICT literacy and the academic achievement of 50-70% and 32 students have mean score of 15.26 in ICT literacy and the academic achievement of 70% above. While as the relation between ICT literacy and academic achievement of 150 Rural college students presented in the table 1.1 represents that 73 students have mean score of 7.24 in ICT literacy and the academic achievement of 0-50%, 58 students have mean score of 8.89 in ICT literacy and the academic achievement of 50-70% and 19 students have mean score of 9.71 in ICT literacy and the academic achievement of 70% above. The above table 1.1 helps us to achieve another objective of the study.

Results

1. Access to ICTs for urban and rural college students of Kashmir

The outcomes of the study depicts clearly that there is a significant difference between the rural and urban degree college students regarding the use of information and communication technologies (ICTs). The

meanus age of ICTs among rural and urban degree college students shows significant difference at 0.01 level of significance. The findings of the research can be justified on the basis of many other researchers conducted that supplement the outcomes of the present study. The study also depicts that rural degree college of Kashmir have a very meager infrastructure available for ICTs as compared to urban degree colleges of Kashmir, it can also be said that infrastructure in the urban degree colleges of Kashmir is not up to mark.

2. Impact of Information Communication Technology (ICTs) on academic achievement of urban and rural degree college students of Kashmir.

The Proposed study depicts that in both rural and urban degree colleges, those students who use more ICTs have better academic achievement than those who use less ICTs. Table 1.1 clearly indicates that there is a positive correlation between ICT literacy and academic achievement of degree college students. The study reveals that the students of urban degree college students have higher academic achievement than rural degree colleges because of difference in access to information and communication technologies (ICTs) , as the urban degree colleges is having good infrastructure than that of rural degree colleges.

Conclusion

The findings of the present study shall brings us to deep insight that ICTs play an uncharacteristic role in higher education institutions especially in degree colleges of Kashmir. The study also depicts that there is significant difference between the access and infrastructure of urban and rural degree colleges of Kashmir. The study shall prompt the administration at college level and other stakeholders who are involved in administration of these higher education institutions in order to frame sound policies for the integration and implementation of ICTs in higher education institutions and to bridge the gap of access and infrastructure between urban and rural degree colleges.

Suggestions

After getting the deep insight from the proposed study, the fallowing suggestions can bebrought out to bring enhancement in higher education by integrating ICTs both at rural and urban degree colleges.

1. There is lack of Proper ICT infrastructure in degree colleges of Kashmir especially in rural degree colleges and hence needs to be improved at the earliest. In case of urban colleges it needs further up-gradation.
2. Degree college students especially from rural colleges should provide suitable training for ICT facilities in their colleges so that the students may likely to get attracted towards ICT which may ultimately enhance their academic achievement.
3. The study also suggests that the degree colleges should provide free workshops and seminars to students regarding the benefits of ICTs in Higher education.

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