



ICT USAGE BY FEMALE STUDENTS IN HIGHER SECONDARY SCHOOLS OF DISTRICT ANANTNAG IN (J&K)

Dr. Farhat Bashir

Lecturer Government Degree college Kokernag (Anantnag)

ABSTRACT

Our world demands the technology enabled schools to provide the knowledge and skills through ICT to the students. ICT can be defined as “anything which allows us to get information, to communicate with each other, or to have an effect on the environment using electronic or digital equipments”. In the present paper an attempt has been made to study the usage of ICT by the females of Higher Secondary Schools of District Anantnag (J&K), India. The study was conducted on 100 female students. The total sample was selected from Higher Secondary Schools by Random sampling technique. The data was analysed with the help of simple percentage. The finding(s) of the study show that the usage of ICT by female students is very low. The paper concludes by considering that the ICT should be gender focussed and female students should be encouraged for the suitable usage of ICT in schools.

Keywords: ICT, Higher Secondary Schools, female students, gender focused,

INTRODUCTION The use of Information and Communication Technologies (ICTs) to deliver educational resources is considered normal in the 21st century, yet in developing countries it is often seen as a luxury especially at elementary and secondary levels. This has far reaching effects on teachers, learners and educational institutions in such societies, which often lack basic ICT infrastructure and also, there is limited or no support for the training of teachers and learners in the use of digital online information so sources. It is all the time more accepted that in the future, most information sources and desktop applications currently in use will be mainly accessed through the Internet, now often referred to as ‘the cloud’. This means that at secondary school level, ICTs should be adopted as a matter of urgency to enable teachers and learners to access such latest trend in Internet technology and application delivery (*Le Roux and Evans N, 2011*).

Now-a-days, the term information and communication technology (ICT) is delineated as all technical means used to handle information and aid communication, including computer and network hardware as well as necessary software (*Seemin Rubab, 2011*). ICT can be defined as “anything that allows us to get information, to communicate with each other, or to have an effect on the environment using electronic or digital equipments’ (*Siraj-Blatchford and Siraj-Blatchford, 2003*). ICT includes computers (including desktops, laptops, and hand-held computers); digital cameras and digital video cameras; creativity and communication software and tools; internet; telephones, fax machines, mobile phones, tape recorders; interactive stories, simulated environments, and computer games; programmable toys and “control” technologies; videoconferencing technologies and closed-circuit television; data projectors, electronic whiteboards and more (*Shah Archana and Godiyal Sunita, 2009*).

Advances in electronics-based information and communication technologies (ICTs) are rapidly transforming social and economic conditions across the globe. As the cost of ICTs continues to fall and their capabilities increase day by day, their applications are becoming even more vital to all sectors of the economy and society. Mansell and Wehn (1998) point out that the increasing spread and uses of ICT create new opportunities for low-income countries to harness these technologies and services to promote social justice and economic development. ICT has the potential to improve the quality of life by providing new tools for improving access to management as well as sharing of information and knowledge.

The interactive information and communication technologies (ICT; computers, the Internet, mobile phones, digital games) have changed the everyday life of adolescents worldwide. Consequently, ICT, as a necessary resource in the modern information society, might become a contributing factor towards educational inequality and divide between young people. ICTs hold great promise in the drive for development and poverty reduction. The socio-economic and political possibilities of unregulated access to and sharing of information for networking and mobilization for collective action; education, economic development, and individual empowerment can hardly be overestimated. A successful utilization of the information superhighway, however, is predicated on two assumptions: first, that everybody has a realistic opportunity to use ICTs as generally defined; and second, that ICTs are designed and set up in ways that can accommodate gender and cultural differences. These assumptions matter, because without regard to the social context in which ICTs are expected to operate, they can deepen and solidify existing economic, political and social inequalities' (*Mc Namara, 2003*). Awareness of the gender dimension of new technologies is particularly important for women's empowerment, because gender biases are notoriously deep-seated and complex as *Hafkin* (2000) explains: 'Technologies are value-laden from beginning to end ... and have been produced by Western men who do not understand the social, economic, or cultural contexts for use of these technologies'. Therefore, in order to ensure that the entire population reaps the benefits of new information and communication technologies for development (ICT4D), a clear understanding of the specific needs of women and other disadvantaged groups is imperative. While the literature on gender, ICTs and development is extensive, surprisingly little empirical data exists that systematically document women's needs and concerns regarding ICTs, as articulated by the women themselves, especially in the context of rural development projects (*Hafkin 2000; McNamara 2003; Rathgeber 1989, 2000; Sharma 2003*). Women's ability to take advantage of ICTs is, however, dependent on education, conducive policies and an enabling environment in their regions to extend communications' infrastructure to them (*Seemin Rubab, 2011*).

RATIONALE OF THE STUDY

According to various researches, girls are coerced by the male environment of the computer classrooms and are very conscious of their lack of technological fluency (*Cisco System, Gurer, Camp, West, and Ross, 2002*). Extending the theme of intimidation within the computer classroom, *Cphoon* (2003) indicated that at tertiary level woman who do choose an ICT major were overwhelmed by a lack of peer support. *Gurer and Camp* (2002) noted "quite a few first year computing courses assume a certain level of knowledge that, through no fault of their own, many female students have not yet obtained". Though many recent studies have revealed that women are progressing and education is becoming more and more accessible to them (*Census, 2011*), it is yet to be established that they get equal opportunities in the process of getting education. Information and Communication Technologies (ICTs) have influenced nearly every area of our society. Unfortunately, they have not yet succeeded in transforming our concept and practices of teaching and learning. Modern Technology seems to have influenced every area of our society, but it has had very little effect on our conceptions of teaching and learning (*Schank, 2007*). Various studies have shown that ICT is not used by adequate women students. *Aypay Ahmet* (2010) in his study found the gender difference in the use of ICTs study. The

male students have higher opportunities to access computers in other places except schools and home, than the female students. I have tried to study the usage of ICT in the higher secondary schools in Kashmir Division of Jammu and Kashmir State (India). The main aim of this paper is to study of usage of ICT by the female students in the higher secondary schools of District Anantnag.

Objectives:

1. To study the usage of ICT by female students in Higher Secondary Schools.
2. To give the suggestions for better use of ICT in Schools.

Methodology:

The present study is based on the survey carried out by the investigator in 2013 in District Anantnag located in south Kashmir situated 55 kms from the south-east of Srinagar. Anantnag district is spread over an area of 3984 sq.kms with a population of approximately 8.50 lakhs.

Sample and Sampling techniques:

The study was conducted on 100 females. The total sample was selected from Higher Secondary Schools. Random sampling technique was used.

Tool used:

To study the usage of ICT appropriate tool was not available. Hence, the researcher developed a questionnaire to fulfil the need. In order to investigate the use of ICT by females, researcher developed the questionnaire based on frequency system. Further, several judges were consulted. Initially, 30 items were collected then judges were consulted, they selected 15 items, further data was collected, finally judges were again consulted.

Data Analysis:

The data analysed with the help of simple percentage.

Table showing the usage of ICT by Female Secondary School Students (N=100):

Table 1: Usage of ICT by Female Secondary School Students (N=100)

S. No.	Equipments	Use of Equipments			
		Yes		No	
		No.	Percent	No.	Percent
1.	Computer	16	16	84	84
2.	Projector	0	0	100	100
3.	Microphones	79	79	21	21
4.	on-line learning	0	0	100	100
5.	L.C.D	0	0	100	100
6	Working models	0	0	100	100
7.	Epidiascope	0	0	100	100
8.	Globes	100	100	0	0
9.	Calculator	79	79	21	21
10.	Slides	0	0	100	100
11.	Microscope	79	79	21	21
12.	Charts	79	79	21	21
13.	Tape recorders	0	0	100	100

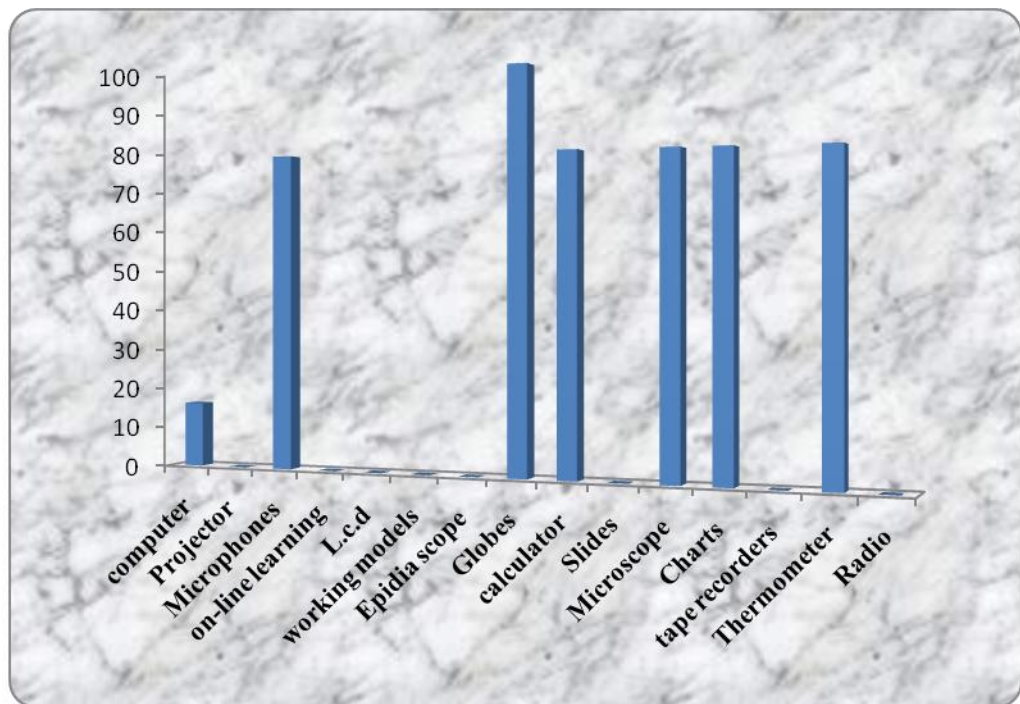
14.	Thermometer	79	79	21	21
15.	Radio	0	0	100	100
	Total	511	34.06	989	65.93

Source: Data Generated From Field Work

The above data in the table-1 clearly shows the percentage of female students using various ICT equipments like computer (16%), microphone (79%) globes(100%) , calculator(79%), microscope (79%) ,charts (79%), thermometer(79%), whereas, no female student used slides, projectors, LCDs, on-line learning, tape recorders, working models, epidiascope & radio, hence. Out of total (15) ICT equipments the used percentage is only 35.06 while as unused percentage is 65.93. As the present study got under way, it was realized that there were limited experiences in the use of ICTs for female literacy in the region/area of study. It is quite evident from the data that expensive and latest ICTs, for example, online learning, LCD, epidiascope, projector, etc. are not used by the female students whereas less expensive and readily available ICT equipments in schools, like globes, calculators, microscope, thermometer, etc. are frequently used.

The graphical representation of data reveals that the usage of globe is higher and usage of computer is lower and other ICT equipments like projectors, on-line learning L.C.D, working models, Epidiascope are not used at all by any of the respondents.

Graph showing usage of ICT among girls:



DISCUSSION

A detailed study of the data revealed that more than 95 percent of female students were found not using ICTs like projectors (100 percent), on-line learning (100 percent), LCD (100 percent), working models (100 percent), slides (100 percent), tape recorders (100 percent). The very low usage of ICT might be due to the fact that female students have fewer opportunities to access ICT, especially in the area which is quite sensitive to gender. It is an area where women and girls are at particular risk of exclusion from potential opportunities to participate due to diverse reasons. Confirmation of this can be found in the

statement of the Secretary General of the United Nations in his speech at the World Summit on the Information Society in Geneva in December 2003 in which he said there is “a gender divide, with women and girls enjoying less access to information technology than men and boys” (*Awe, J, 2008*).

Our data reveals that the usage of computers is very low, as 84 percent of females are not using computer in the Higher Secondary Schools. This might be due to the gender bias. *Aypay Ahmet* (2010) in his study revealed that the most of female students use computers only once or twice in a week, he found that 6 percent of female students did not use computer at all. The result indicates that the male students have higher opportunities to access computers in other places except school and home than that of female students. Socially and culturally constructed gender roles and relationships play a crucial role in shaping and limiting the capacity of women and girls to participate on equal terms in the information society (*Munyua, 2005*).

As far as 21 percent of female students opined that they do not use microphones, calculators, microscope, and charts in the school. The probable cause for this may be incompetency to use such technological devices and lack of interest and low participation in use of ICTs. The journey towards female inclusion in the general field of science and technology has been a long and difficult one. For the most part, women and girls are particularly vulnerable to constraints especially as more than two thirds of the world's illiterates are women, and they comprise 60 percent of rural populations where infrastructure is weakest. However, women's access to ICT and their effective use of it are constrained by factors that go beyond issues of technological infrastructure and socio-economic environment (*Tchombe, 2008*). Assessing the educational infrastructure reveals that there is gross shortage of secondary schools for girls (both co-educational and girls' schools). The drop-out of girls is extremely high mainly in the northern States, not only because the parental priority for girls' education is low, but also due to the poor access to schools in the rural areas (*Report of Eleventh Plan*). Such a dismay of female literacy in North India especially J & K, which is militancy affected reflects itself in the dismal participation of female students in ICTs.

ICT IN SCHOOLS: SOME SUGGESTIONS

For female learners to access the necessary technologies, and to overcome the several barriers to access them, some measures should be taken. In order to overcome the barriers to women's access and use of ICTs, the INSTRAW Collaborative Project on Gender and ICTs held four Virtual Seminars during 2002, and identified four approaches (*Huyer and Sikosha, 2003*). These included:

- ensuring a gender perspective in ICT-based projects: It was considered necessary to integrate gender perspective in the overall project cycle as a means of ensuring that structural barriers to women's access to and use of ICTs are diminished, if not completely removed;
- ensuring adequate and sustainable technology transfer: The tele-centres must explicitly address the needs of women and operate on the basis of a careful needs assessment or feasibility study and follow a well-developed project plan to achieve sustainability. Adequate transfer of know-how must accompany technology transfer. Several low-cost strategies such as use of audio and video technologies, use of local language, and presenting information in an entertaining and engaging way, could facilitate this;
- designing technologies appropriate to women's needs: Women should define their own agendas for the whole range of ICTs that include not just the sophisticated technologies but also the community networks, including the traditional media. Women must develop a sense of ownership of technology if the barriers to women's access to and use of ICTs have to be overcome;
- ensuring gender-sensitive ICT policy and regulation: In order to overcome persistent barriers to women's access to and use of ICTs, there is need for an adequate policy-making and regulation of the ICT sector development.

Achieving gender equality in ICT requires more than mainstreaming gender concerns into the ICT arena. It requires serious commitment and political will. The aim is both to ensure women's access to the benefits of ICT and to make ICT a central tool in women's empowerment and the promotion of gender equality (Munyua, 2005).

Hence, it is imperative to overcome the challenge of illiteracy before women can benefit from ICT, though use of audio and video technologies have been known to overcome the problem of women's illiteracy to a limited extent. If gender dimensions of ICT in terms of access and use, capacity building and employment opportunities, and potential for empowerment are explicitly identified and addressed, ICT can be a powerful catalyst for political and social empowerment of women and the promotion of gender capacity. There is, therefore, the need to develop gender specific indicators of ICT, and mainstream and monitor gender perspectives in all ICT initiatives.

In order to ensure availability of technology, it is indispensable to provide access to equipment, adequate communication infrastructure, electricity, Internet and technical support that will ensure that repair services and technical information is provided to women.

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