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Usage Of Ict In Secondary Schools In The District Town Of Burdwan, West Bengal, India

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Abstract: ***In the present investigation attempts have been made to know the present status of usage of ICT by the teachers in classrooms in secondary schools situated in the district town of Burdwan, West Bengal, India. 226 teachers from 20 secondary schools in the District town of Burdwan, West Bengal, India were randomly selected. For the present study opinion of these teachers of various faculties were collected through a questionnaire supplied to them. From the present study it is evident that schools in Burdwan, a District town of West Bengal, India, ICT is used in classrooms but there is significant difference in usage of ICT as regards arts and science subjects taught there by the teachers, gender of the teachers and having internet facility of the teachers or not at their home. It is indicated from the present investigation that in near future in all the schools of West Bengal ICT would be widely used.***

I. INTRODUCTION

ICT i.e. "Information and Communication Technology" refers to technology which provides communication through Tele technology. It is similar to Information Technology (IT) but focuses primarily on communication technologies. ICT includes internet, wireless network, cell phone and other communication media. For the past few decades information and communication technologies provided society new communication capabilities. For example, people can communicate with others in different countries using technologies such as instant messaging, voice over IP (voIP) and video-conferencing. Social networking like face book allows users from all over the world to remain in contact and to communicate on a regular basis.

Modern information and communication technologies have made the vast globe into a "global village", in which people can communicate with others across the world as if they were living next door.

The term ICT has been used by academic researchers since 1980 (Melody *et al* 1986, Silverstone 1991) but in 1997 Stevenson used the term in the British Government's report(Stevenson 1997) and in 2000 in the revised National Curriculum for England, Wales and North Ireland it became famous.

ICT has been introduced in the teacher education programme and it is changing rapidly by use of ICT. ICT is the most powerful tool which teacher can use to change the learning society. Teachers who like to introduce ICT into their classrooms, should have believe in effectiveness of technology, should have believe that the use of technology will not cause any disturbance, and finally teachers should have believe that they have control over technology (Zhao and Cziko 2001).

ICT provides teachers the online resources which can be used in professional development such as development of new method of teaching and development of modern practical ideas. ICTs also allow the creation of digital resources like digital libraries where the students, teachers and professionals can access research material and course material from any place at anytime (Cholin 2005). Use of power point presentation can enhance a traditional lecture. To teach any topic the subject matter delivered through lectures can be presented in a better way through power point presentation. CAI is useful in supporting student centred approaches. The use of ICT develop skill. ICT can be used to remove communication barrier (Lim and Chai 2004). Teacher can use ICT to communicate with students beyond the classroom and also with global communities. Use of ICT benefits teachers to

greatly improve the quality of education. ICT helps in rethinking of teaching practices (Fleckone 2002).

The 21st century is characterised with the emergence of knowledge based society wherein ICT plays a vital role (Oliver 2002). In India the National Curriculum Framework, 2005 (NCF2005) has highlighted the importance of ICT in school education. ICT in schools has been subsumed in the Rashtriya Madhyamik Siksha Abhiyan (RMSA). Now ICT in schools is a component of the RMSA. In schools ICT was launched in December, 2004 and revised in 2010 to provide opportunities to secondary stage students to build their capacity on ICT skills and make them learn through computer aided learning process. Government of India has announced 2010-2020 as the decade of innovation. In circular number 7, dated 22.02.2010, the NCERT had invited responses from teachers involved in the teaching and learning of Mathematics at the senior secondary stage. NCERT wants that teachers will acquire the skills for using the world wide web and senior secondary level students will get motivation to use ICT tools for taking up complex, multidisciplinary problems such as biochemistry, bioinformatics, environmental science, forensic science, nanotechnology etc. CBSE believes that ICT and computing technology will bring immense benefits to every classroom, will improve academic outcomes of learners and will enhance the productivity of teachers in classrooms. Technology can greatly assist teachers in classroom to teach difficult and abstract subject matter concepts effectively if the right digital instruction materials, supporting technology infrastructure and intensive training is provided to the teachers. This may require setting up of at least one classroom equipped with LCD projector and facility for computer mediated instructions. At first step in this direction, all CBSE affiliated schools are advised to set up at least one classroom in their schools equipped with technology to enable usage of digital instruction materials in it. Teachers wishing to teach a topic with ICT resources can take the class in this classroom. Proper advance scheduling may help teachers in their venture.

In the present study attempts have been made to know the present status of usage of ICT by the teachers in classrooms in secondary schools situated in the District town of Burdwan, West Bengal, India.

II. METHODOLOGY

226 teachers from 20 secondary schools in the District town of Burdwan, West Bengal, India were randomly selected. For the present study opinion of these teachers of various faculties were collected through a questionnaire supplied to them.

The data obtained from these teachers have been presented in tabular forms. The data were analysed and assessed by calculation.

III. RESULT

The data collected are presented in 3 separate Tables which are given below.

Gender of teachers	No. of schools visited	No. of teachers met	No. of teachers use ICT in classrooms	% of teachers use ICT in classrooms
Male	20	110	74	67.2%
Female	20	116	62	53.4%

Table1: Difference in educational usage of ICT based on gender of teachers

It is evident from Table 1 that there is a significant difference between male and female teachers with respect to their educational usage of ICT.

Subject Taught	No of School visited	No Of teachers met	No of teachers use ICT in classrooms	% of teachers use ICT in classrooms
Arts	20	100	50	50.0%
Science	20	126	88	69.8%

Table 2: Difference in educational usage of ICT based on subjects taught by the teachers

Table 2 shows that there is significant difference in educational usage of ICT between the teachers teaching arts and science subjects.

Internet facility at home or not	No. of schools visited	No. of teachers met	No. of teachers use ICT in classrooms	% of teachers use ICT in classrooms
Teacher having internet facility at home	20	120	97	80.8 %
Teacher not having internet facility at home	20	106	38	35.8%

Table 3: Difference in educational usage of ICT based on internet facility available to the teacher at home or not

From Table 3 it is evident that there is a significant difference in educational usage of ICT between the teachers having internet facility available at their home or not.

IV. DISCUSSION

MHRD (Ministry of Human Resource Development) wants to establish Smart Schools in every District town in every State of India in collaboration with the State Governments so that these schools serve as role model and technology demonstrators among neighbourhood schools. These schools will provide computer aided education to the Secondary and Higher Secondary students whether these are Government schools or Government aided schools.

From the present study it is evident that schools in Burdwan, a District town of West Bengal, India, ICT is used in classrooms but there is significant difference in usage of ICT as regards arts and science subjects taught there by the teachers , gender of the teachers and having internet facility of the teachers at their home or not.

In "ICT in SCHOOL SCHEME" of MHRD there is provision related to intervention of teachers such as capacity enhancement of all teachers in ICT and motivation through honouring them with national ICT award.

MHRD has also provision for appointing a full time teacher in each Secondary school and Higher Secondary school who is duly qualified in ICT. MHRD has provision for in-service training for all teachers in Secondary and Higher Secondary schools to enable them to impart ICT–enabled teaching. Bottino (2003) mentioned that use of ICT can improve performance in teaching and also develop relevant skills. Plomp *et al* (2007) stated that the experience of many teachers is that the use of ICT is motivating for the students as well as for the teachers themselves.

MHRD has decided that 150 Smart schools would be set up by the State Governments at the District level with 40 computers in each such school. In this regard the ratio of the economic sharing between Central Government and State Government would be 75:25. So far, 87,033 Government and Government aided Secondary and Higher Secondary schools have been approved for coverage under "ICT in SCHOOL SCHEME" and it is hoped that in the long run in every school of the District town of Burdwan (West Bengal, India) ICT would be widely used.

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