



## **A study on ICT competency of newly appointed school lecturers**

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### **Abstract**

Information and Communication Technology (ICT) is a buzz word now a day. It has proliferated every field including school education and considered a must be skill for teachers. But still many teachers, especially teachers working in state or municipality run schools are running down in this competency. Schools management and other education facilitating agencies organizing various activities to groom the teachers in such an important skill. This paper has studies the ICT competencies of 30 newly appointed school lecturers in Economics subject in Gurugram district, falling in National Capital Region (NCR) of Haryana state. Yet Gurugram city is considered cyber and software hub but the study reveals that most of teachers are not well prepared for essential skill of 21<sup>st</sup> century.

**Keywords:** ICT, national capital region, teachers

### **1. Introduction**

NCF-2005 emphasized ICT in education and has been subsumed in the Rashtriya Madhyamik Shiksha Abhiyan (RMSA). The Information and Communication Technology (ICT) in Schools was launched in December, 2004 and revised in 2010 to provide opportunities to secondary stage students to mainly build their capacity on ICT skills and make them learn through computer aided learning process. The National Policy on ICT in Education aims to devise, catalyze, support and sustain ICT and ICT enabled activities and processes in order to improve access, quality and efficiency in the school system. The Scheme is a major catalyst to bridge the digital divide amongst students of various socio economic and other geographical barriers. One of the major components of scheme is teacher related interventions, such as provision for engagement of an exclusive teacher, capacity enhancement of all teachers in ICT and a scheme for national ICT award as a means of motivation.

#### **1.1 What is ICT?**

Information and Communication Technologies are defined as all devices, tools, content, resources, forums, and services, digital and those 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. This not only includes 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 repositories, interactive forums, learning management systems, and management information systems. It also includes processes for digitization, deployment and management of content, development and deployment of platforms and processes for capacity development, and creation of forums for interaction and exchange.

#### **1.2 ICT in school education**

Information and Communication Technologies have enabled the convergence of a wide array of technology based and technology mediated resources for teaching learning. It has therefore become possible to employ ICT as an omnibus support system for education. ICT can be very gainfully employed for digitizing and disseminating existing print resources like books, documents, handouts, charts and posters, which have been used extensively in the school system, in order to enhance its reach and use. ICT can address teacher capacity building, ongoing teacher support and strengthen the school system's ability to manage and improve efficiencies, which have been difficult to address so far due to the size of the school system and the limited reach of conventional methods of training and support.

#### **1.3 ICT Literacy and Competency Enhancement**

The policy on ICT in school education defines ICT Literacy in terms of levels of competence. Based on the stage of schooling at which a student or teacher is introduced to ICT, they may progress to different levels. These levels are suggestive and adaptations must be made to suit local conditions. The enhancement in ICT competency has three stages- Basic, intermediate and advanced. The Basic level includes store, retrieve and manage data, use a computer to achieve basic word and data processing tasks; connect, disconnect and troubleshoot basic storage, input and output devices, Connect to the internet, use e-mail and web surfing, use search engines, keep the computer updated and secure etc. The intermediate stage includes- create and manage content using a variety of software applications and digital devices; using web sites and search engines to locate, retrieve and manage content, tools and resources; install, uninstall and troubleshoot simple software applications etc.

At the advance stage, the students/teachers are able to use

different software applications to enhance ones' own learning database applications, analysis of data and problem solving, computing, design, graphical and audio-visual communication; undertake research and carry out projects using web resources; use ICT for documentation and presentation; create and participate in web based networks for cooperative and collaborative learning; become aware of issues of cyber security, copyright and safe use of ICT and take necessary steps to protect oneself and ICT resources. The present study is an analysis of competencies of newly appointed lecturers in the school education department. As the policy emphasizes on Capacity building of In-service Teachers through in service training and refresher courses, imparted by the Regional Institutes of Education of the NCERT, State Councils of Educational Research and Training (SCERTs) or such other institutions of the Central and State Governments, DIET Gurugram has conducted a study with the objective to:

- Assess the ICT competency of newly appointed lecturers.
- To know about their computer skills.
- To know how much they use ICT in their personal and professional life.

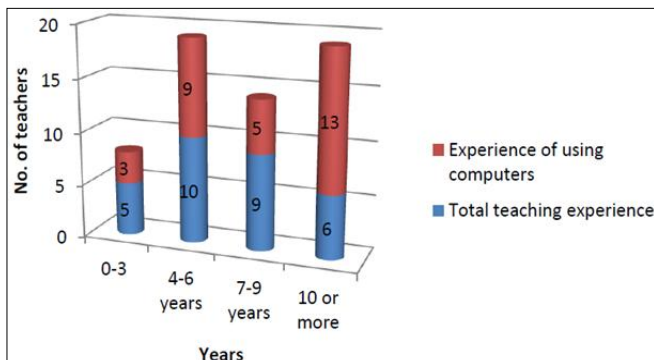
**2. Methodology**

For this study a sample of 30 newly appointed Economics lecturers in Gurugram district was selected and were assessed during the induction training programme. A questionnaire (Annexure – A) was prepared with the objectives to assess the ICT competency of newly appointed lecturers, and to know how much they use ICT in their personal and professional life. They were asked to rate their knowledge themselves in terms of computer literacy, use of word, excel power point, use of CDs, internet etc. The data was analysed to know the competency of teachers in terms of using technology.

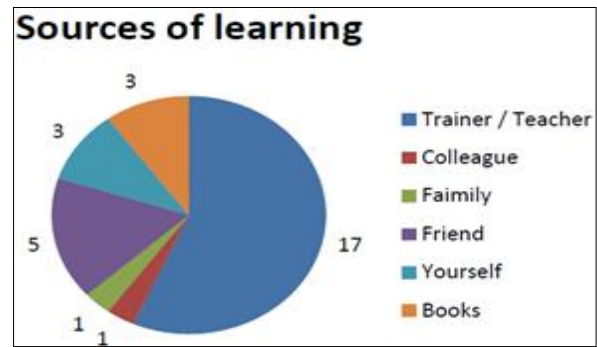
**3. Findings**

The major findings of the study are:

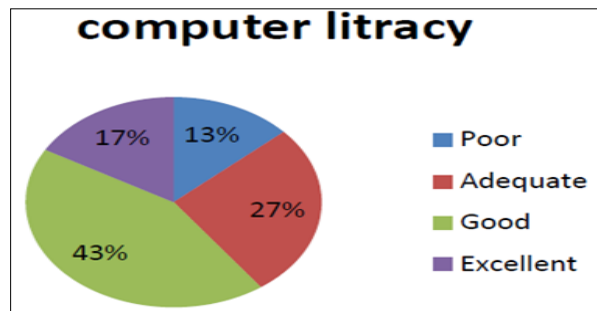
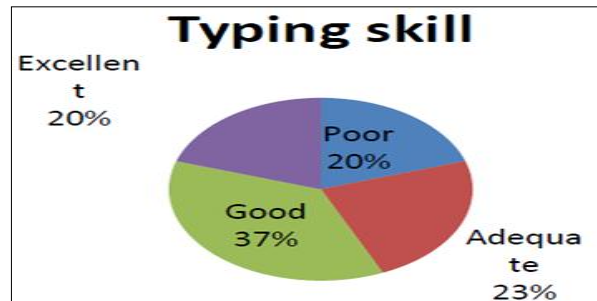
- All the teachers were familiar with the use of computer and were using it at least from last three years.



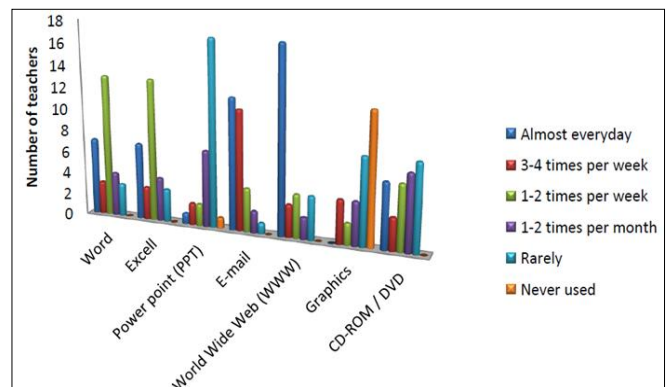
- 80% teachers had regular access to computers and 70% had internet connection.
- The sources of learning computer for the first time were teachers, colleagues, family, friends and books. Most of them learnt it from their teachers/trainers.



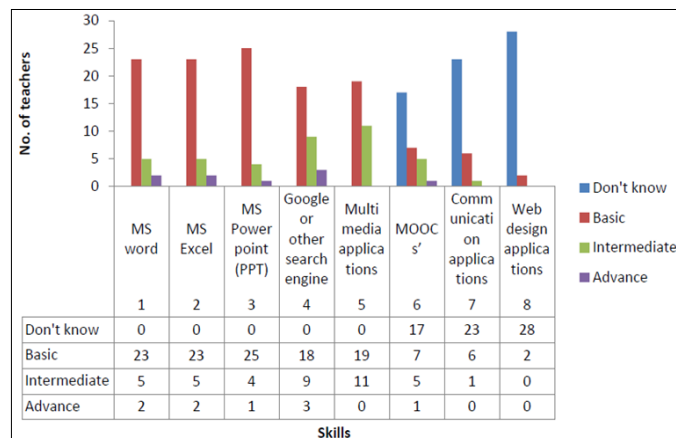
Most of them rated themselves at good typing skills. The teachers ranked themselves on computer literacy and 43% believe that they are good in terms of computer literacy.



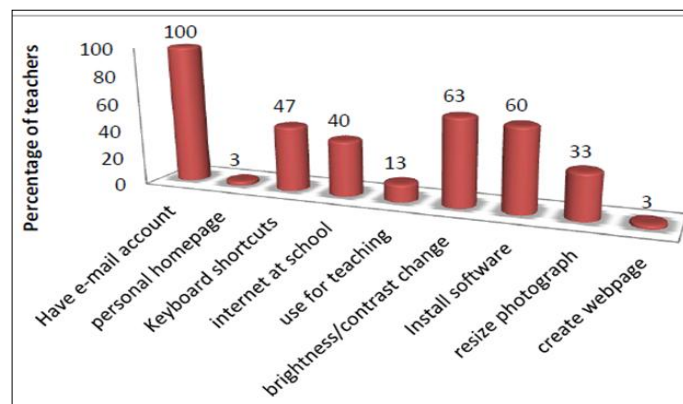
The frequency of using basic tools like word, excel power point, internet, graphics etc. were recorded. Most of them used word, excel power point on weekly basis.



The teachers rated themselves on their computer skills as:



The knowledge of teachers related to technology was assessed. It was seen that all of them had e-mail account, 40% had internet at school but only 13% used computer /internet etc. in their teaching.



**4. Conclusion**

Through this assessment it can be seen that all the newly appointed lecturers are able to use computer. 43% of teacher’s rate themselves as ‘Good’ in terms of computer literacy. All of them have e-mail account and 57% of them use internet every day. Most of them have basic knowledge of MS Office (word, excel power point). 60% of them have basic knowledge of Google and other search engines. 2220% of them have excellent typing skills. Most of them rarely use CDs and DVDs. This shows that though the teachers are familiar with computer, still most of them do not use it in their teaching. They are aware about the use of technology but lack behind in its application. This is due to the fact that their competency level is only basic. So there is a great need for capacity building trainings so that they can use their computer skills in their profession.

**5. Acknowledgement**

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