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PUNJABI TEACHERS' PERCEPTIONS: USING ICT IN OUR SCHOOLS



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Synopsis:

It is an interesting research because Punjab is well known for a land of farmers and fighters and I am exploring that how teachers appreciated technology in classrooms rather than their traditional methods. This is a qualitative study with interpretive theory and including case study of 12 teachers. Results indicates that teachers of Punjab are accepting ICT as a assistance in classrooms.

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Abstract

This paper examines Punjabi teachers' perceptions of the uses of Information and Communication Technology (ICT). Internationally ICT is increasingly used in education and is becoming a requirement in education settings. The aim of this research is to explore Punjabi teachers' perception of ICT as a teaching tool in senior secondary schools. It is a qualitative study with case study of 12 teachers and data had been collected through semi-structured interviews, observations of classrooms and document analysis (educational policies relating ICT). The analytic method is transcripts of all interviews in Punjabi and English for better understanding. Results indicate that teachers of Punjab perceived positively ICT as a tool in classrooms and use of ICT was influenced by training and school policies. Teachers are adopting smart boards and appreciate collaboration of ICT tools with blackboards.

Keywords: Information and Communication Technology (ICT), Teachers' Perceptions, Classroom Observations, Education Policies

Introduction

Situated within a qualitative research paradigm the study uses an interpretive theoretical framework to assist in the understandings Punjabi teachers' practices in ICT. This paper outlines the research and includes some initial analysis of interviews and observations.

Information and Communication Technology in India

It is well recognised globally that ICT has great potential to improve teaching and learning processes. The Indian government is focusing on teaching strategies that involve on smart classes and smart boards. This emphasis is highlighted in the National Curriculum Framework (NCF, 2005). In the Indian Education System, the government is promoting "The National Mission" Education, in which ICT has been introduced as a Centrally Sponsored Scheme to promote and provide high quality knowledge modules over the internet for all the learners in education institutions in any time anywhere mode.

National Curriculum Frameworks issued in 1986, 2000 and 2005 by NCERT (National Council of Educational Research and Training) in India. The NCF (National Curriculum Framework) gives the framework for preparing syllabi, textbooks and teaching practices for senior secondary school education programs in India.

In Punjab, Information Communication Technology (ICT) Education Project is managed by the 'Punjab ICT Education Society' (PICTES) especially constituted for the purpose. It has

been started with the aim to impart computer education to all students of senior secondary school. Use of ICT for quality improvement also figures in Government of India's flagship programme on education, Sarva Shiksha Abhiyan (SSA). Again, ICT has figured comprehensively in the education approach to schooling recommended by the Central Advisory Board of Education (CABE), in its report on Universal Secondary Education, in 2005. The initiative of ICT policy in School Education is inspired by the tremendous potential of ICT for enhancing outreach and improving quality of education.

Literature Review

At the local level of the Punjab, there is little research in ICT in classrooms. However, Singh (2008) reviews the efforts of Punjab government to address the importance of computer education in our day to day life. Over 2700 schools are covered in two phases of the project. Students enrolled in these schools come from lower strata of society. A study by Sahu and Pradhan (2014) find that ICT improved the standard of education and learning of students in Punjab and noted that there had been successful integration of ICT into teacher education in Sangrur District (reluctant district in education) of Punjab. . The researchers suggest that ICT can change the traditional concept of teaching and learning process and Punjab has the potential to develop digital technology based education.

Globally, the focus of van der Weide and Flipsen (2009) study was on an academic master course to create gender awareness in ICT development especially in developing countries. Firstly they analysed the impact of ICT on society and then derived the requirements to introduce new ICT applications. Cox, Cox and Preston (2000) research teachers' perceptions about the value and use of ICT in their teaching in United Kingdom and found a positive influence of ICT on teachers. Positive factors included: more interesting lessons, easier, more diversity and increased motivation, which all are very important in teaching learning process According to Galanouli, Murphy, and Gardner (2004) in U.K. teachers said that skills were really relevant to their practices and easy to use. The content and relevance of the training and the commitment of the head teacher were also significant importance in the successful training. Hew and Brush (2007) found in schools of United States America that lack of school leadership and lack of school planning for technology are the institutional factors that create barriers in teachers' integration of technology. They also found that teachers have lack of knowledge and skills regarding ICT tools.

Research Question

The research aims to answer the following research question: *What is the practice of teachers in using ICT in Senior Secondary Schools of Punjab?*

It also includes four sub-questions as the aim of this study is to explore teachers' point of view towards ICT tools in teaching and learning process.

- How do teachers of Punjabi schools use ICT to facilitate student learning?
- What aspects of ICT are parts of embedded curriculum of these schools?
- What ways the ICT processes and technologies facilitate learning across the curriculum?
- What ways does the use of ICT impact on teachers' motivation?

Theoretical Framework and Methodology

The project is a qualitative study which includes a case study of 12 teachers. I use interpretive theory to investigate and analyse senior secondary school teachers' practices of ICT as a teaching tool in teaching learning process. This paradigm was chosen as it is well suited for understanding how teachers perceive technology and how they construct their experience using technology in their classrooms. My methodology involved a combination of semi-structured interviews, observations, document analysis. The purpose of semi-structured interviews was to explore in depth the practices of using ICT tools in classrooms and teachers' understandings of both the benefits and the constraints. In addition I observed teachers during their lessons to know how they are using ICT as a tool in their lessons and ICT resources. In document analysis, I had overviewed the government and educational boards' policies for ICT in education.

Ethics Approval

Before the data collection I obtained my ethics approval from the Human Ethics Committee, University of Canterbury, Christchurch. The anonymity of data was ensured and participation of teachers and schools were voluntary.

Data Sample

I collected my data from Punjab with purposeful sampling because my purpose was to choose schools that are using ICT in their class rooms. Purposeful sampling is a technique widely used in qualitative research for the identification and selection of information-rich cases for the most effective use of limited resources.(Patton, 2002). I had chosen six schools from three different educational boards and two teachers from each school.

Pilot Study

I did my pilot study in Christchurch to test my research tools. During my pilot study, I had learnt to manage written notes and recordings of observations and after the pilot study, I made some minor changes in my data collection planning.

Data Analysis

I am on initial stage of my data analysis and all the interviews have been conducted in the regional language (Punjabi). I transcript all interviews then translated them to English. It was a long procedure but for best analysis of data, it is important to retain the fine detail of what participants have said.

Findings

Initial findings suggests that teachers' perceives technology as an assistance in teaching and learning process; however it appears that the teacher is still the centre of a classroom. Teachers suggested that the school's curriculum is encouraging them to use technology as well as they also motivate themselves to learn more about ICT skills.

Data suggests there are some blockades in the integration of ICT in education, such as: lack of confidence to use ICT tools during teaching and learning processes and the regular failure of power supply to the ICT tools during teaching sessions.

Observation finding indicates that teachers from different education boards have different perceptions regarding ICT tools in classrooms. Punjab School Education Board (P.S.E.B.) schools are not well resourced for ICT and teachers are moderately motivated in the use of ICT

tools for teaching and learning. Central Board of Secondary Education (C.B.S.E.) schools are fully furnished with ICT tools and giving proper training to teachers. Teachers in these schools feel motivated and supported in the use of ICT for teaching and learning. Finally schools who are affiliated to I.C.S.E. (Indian Certificate of Secondary Education) closely follow an international pattern and content based digital technology methods in their classrooms.

Conclusion

This research provides insight into Punjabi teachers' perceptions of ICT and their experiences of integrating ICT into the classroom. From the early findings, it is clear that technology was perceived as useful, although there were many barriers to its integration into teaching learning process. The role of school leader and management is significantly important in the promotion of ICT tools in classrooms.

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