Assessment of ICT integration into Special Education Schools in KPK, Province Pakistan

Dur-e-Najaf Zaibi

Assessment of ICT integration into Special Education Schools in KPK, Province Pakistan

Dur-e-Najaf Zaibi
School of Educational Studies University Sains Malaysia, Malaysia
Email: najaff.zabi@gmail.com

Abstract

Information and communication technology is considered as a catalyst of change and also appears as helping factor in the special education. ICT has been now widely used in the special education by developed and developing countries and they pay attention to practice ICT in the teaching and learning process. This paper investigates the use of ICT in the special educational system in KPK, Pakistan. In particular, the main focus is on ICT integration in special education and current level of usage. Interviews and documentary analysis were conducted in order to gain tendencies and reflections about ICT integration in KPK's special educational system. The research study ends with endorsements on future research to find the constraints in the implication of ICT in special education. This paper also proposes some significant solutions to the problem.

Keywords: Digital Age, Special Education, Digital Divide, Integration

Introduction

Over the last two decades, Information and Communication Technology usage in the field of education expanded immensely. ICT impacted all the dimensions of education and especially the use of ICT in special education also make a considerable place (Aksal and Gazi, 2015). At the advent of the 21st century, we see the unparalleled transformations how persons with disability with the help of ICT prove their disability as ability. We are now aware of the dramatic impact of ICT integration in education and specifically in the special education. Recent studies focus on the use of ICT and its practical implication in special needs education (Starčič, 2010, Alnahdi, 2014, Hong, 2015). In addition to this many international policies that touch up the emphasis on ICT in special education. In the UN, CRPD, 2006 (Convention on the Rights of Persons with Disability), Article 9 the key statement mentioned the need of ICT for persons with disabilities:

"In order to enable persons with disabilities it is necessary to take constructive measures to provide equality, accessibility of transportation and also provide access to information and communication technologies"

To elaborate, special need is a public issue rather than just a personal trouble, therefore it is compulsory to pay attention to the basic needs of person with disabilities and also create standard policies by societies in their system for bringing innovation, equality, quality and modern technologies in the special education (Bateman, Tankersley et al. 2015).

In special education use of traditional ways in the special education make people with disabilities fall behind. In this respect, ICT- based special education need to be highlighted and the role of ICT in special education should be discussed. This research study focuses on the ICT- assisted special education and provision of ICT tools in special education schools in KPK, Pakistan.

Transmission of knowledge is rapidly changing in the digital age. The researchers state… Information and communication technology has transformed the landscape of education reevaluate the teachers' responsibilities, expanding the space of learning for students, and opened new horizons of exchanging knowledge and information(Hoque and Alam 2010, Ali, Haolader et al. 2013, Pouezevara, Mekhael et al. 2014).The tremendous growth of ICT around the globe is a vibrant and ongoing progression that is linked with a range of diverse social, political, economic and cultural factors(Schrum, Davis et al. 2015). Even though impact and implication of ICT in teaching and learning is a core research area in education but the integration of technology in special education is still partial(Durkin, Boyle et al. 2015). Therefore this study aims to examine the ICT integration into special education and also analyze the facilities in special education school in KPK, Pakistan.

Special Education in Pakistan
The historical background of the Pakistan's special education is not very old. When Pakistan came into being there are only three schools of special education were exist at that time. For the special education in 1906 first school was established for visual impairment children and in 1920 second school for deaf children was established in Karachi. Some non- governmental organizations the same time played a constructive role in the rehabilitation and education of the person with disabilities. In the Commission on National education 1959, it was recognized that it is the responsibility of government to make policies and provide education to the handicapped pupils(Caceres, Awan et al. 2010). At the federal level in 1985, a separate directorate was formed by the government of that time in order to run model special educational institutes throughout the country(UNICEF 2003). National institute of Special Education was created for the training of in-service teachers of special schools. In (2000) national policy for Persons with disabilities noticeably indicates that inclusive educational system can improve the literacy and also enhance the quality of education. In order to give quality education to persons with disabilities there are three departments of special education in the major universities (Karachi University, Punjab University, Allama Iqbal University) and these universities also conducting the research studies about the problems and needs in the special education(Awais and Ameen, 2015).

Special Education in KPK Pakistan
Khyber Pakhtunkhwa is a province of Pakistan located in the northwestern region of the country and Khyber Pakhtunkhwa's population is11.9% of Pakistan's population. The educational policy of KPK can be implicit through its governance structure, development project and progression over the implementation and development of national educational policy. Special consideration

has given to special education in the national educational policy. According to the census of 1998, NWFP' population is 17.656 million. And the ratio of 4 categories of disability is shown below:

S.#	Name of Category	No. of disability (overall)	Below 18 years	%age
1.	Physically Handicapped	0.426 million	0.170 million	2.41 %
2.	Blind	0.213 million	0.085 million	1.21%
3.	Mentally Retarded	0.319 million	0.127 million	1.81%
4.	Deaf	0.106 million	0.042 million	0.60%
	Total	1.064 million	0.425 million	6.03%

But in KPK the special education is still neglected one. In the special education teachers are using the conventional methods and mostly education for disable person limited to vocational training and memorizing and copying. On the other hand, the countries in the world using new to new technologies in the education of the person with disabilities but Pakistan and including KPK still using old ways of teaching. For that reason, this study aims to make comprehensive analysis of ICT integration into special education schools and examine ICT integration and facilities in special education schools in KPK Pakistan.

Methodology
The Present study was qualitative which has the potential to understand the focus of the research. Therefore, research intends to examine the use of ICT in special education in KPK, Pakistan and study also examine the policies in the education system of KPK. Examining the special education system and policies provide a solid ground for further strategic plans and strategies for future.
In respect to research focus, qualitative research provides the patterns and meaning for in- depth examination which can reveal the perspective of problem or issue in a better way(Corbin and Strauss 2014). According to Green, Camilli et al. (2012) pointed out that qualitative research is an inductive procedure which can present all the patterns and meanings of the problem or issue in a detailed way.

Research Approach
This study will use case study method. The case study was employed, in order to examine the current situation of use of ICT in the special education system. As suggested by Yin (2013) researchers do case studies because they want to produce a detailed description of the phenomenon.

Participants
In this research process, volunteer headmistress and headmasters of special education schools of KPK took part. While two headmasters express their experience and thoughts on ICT-assisted education for persons with disabilities. The views of headmasters supported ICT-assisted education for people with special needs.

Context
The research was done in KPK which is the fourth province of Pakistan. ICT integration in KPK's education system somehow present but in special education it has been observing that ICT is not in use according to the documents and records. Two special education schools of KPK become part of this present research. The basic aim of this study is to examine the current situation of the ICT usage in special education.

Data Collection Techniques and Analysis
In this research study in-depth interviews and documents were employed. Documents related to ICT policy in special education system, world standard in ICT integration in special education and reports were used in order to investigate the present situation and set suggestions for policy of ICT integrated special education. In addition, in-depth interviews were taken from two headmasters to investigate the ICT practices, policies, curriculum and ICT assisted teaching in the special education schools. For in depth interviews thematic analysis was done and documentary analysis was use for documents (Yin, 2011).

Research Finding
This research study revealed that ICT policies, ICT practices, ICT curriculum and teacher education and training and resources are not present in the special education in KPK. There is a dire need to develop policies related to ICT integration in special education and also needs planning and management in order to integrate technology into special education.

Educational Perspective and ICT Policy
Information and communication technology can enhance the quality of teaching methods and learning process in schools. So, literature pays attention to the significance of ICT development in the education. Interviews and documents finding clearly show that ICT is not implemented in the special education.

Information and Communication Technology in Curriculum and Teacher Education
In the special education curriculum and teacher education in KPK, no benefit is taken from the integration of ICT. In this regard, there is a need of time to make policies and planning for ICT integrated special education. It is necessary to create awareness about the ICT usage in special education and need to be investigating the problems which create hindrance in the way of ICT integration in special education.

Digital Resources and ICT
Lack of digital resources is a most challenging situation in the ICT integrated special education in KPK. Technological resources in the special education field are not still in use as documents, interview, and critical analysis results show that there is no practice is done in the special education in KPK.

Evaluation
In-depth interviews and documents results clearly reveal that radical innovation is needed in special education. Therefore, ICT has the capability to transform the teaching and learning

practices in special education. In the special education teachers are less expertise in the technology. Moreover, there are no constructive steps are taken in the implication of ICT integration. Furthermore, it is essential to enable technology in the special education and also necessary to provide digital resources in order to enhance the learning of the special children because ICT is better suited to their needs and ICT is a beneficial tool that is helpful in analyzing and assessing those needs in a better way.

Conclusion

In this digital age information and communication technologies are considered as an effective tool for the enhancement of the learning and also a source of the diffusion of knowledge. However, adoption process and ICT integration in special education take time in KPK, Pakistan. It has been observed that literature clearly shows the evidence of ICT integration and its outcome that widely transform the teaching and learning practices. Therefore, this study aims to present critical analysis on the integration of ICT in special education. The analysis of documents and interview indicate that traditional ways of teaching practices, lack of resources and infrastructure are the constraints in the integration of ICT in special education for KPK province. In this respect, there is a dire need of ICT policy in the special education and also put emphasis on the training courses in order to enhance ICT competency of teachers. Information and communication technology management process should be considered within the framework to set needs and action plans in order to facilitate improvement. In this regard, a framework needs to consider ICT approach for a specialized curriculum, put accentuation on educational programs and teacher's training system and courses, computerized assets and to get accomplishment in the special education field. Technology management process requires key arranging process which this procedure proposes participatory basic leadership procedure of group of specialists. This examination gives a ground and opens a verbal confrontation on ICT in a special education curriculum. Present study provides new horizons for future research on ICT in special education and the finding of this study shows that ICT is still not being used in the KPK, special education system. Further, it is necessary to conduct longitudinal studies that revealed the process of technology management and strategic planning for the implication of ICT into special education in KPK, Pakistan.

Corresponding Author

Dur-e-Najaf Zaibi PhD Scholar
University Sains Malaysia
Najaff.zabi@gmail.com

References

Aksal, F. A., and Gazi, Z. A. (2015). "Examination on ICT integration into Special Education Schools for Developing Countries." Turkish Online Journal of Educational Technology 14(3).

Alnahdi, G. (2014). "Assistive Technology in Special Education and the Universal Design for Learning." Turkish Online Journal of Educational Technology-TOJET 13(2): 18-23.

Awais, S., and Ameen, K. (2015). "Information accessibility for students with disabilities: An exploratory study of Pakistan." Malaysian Journal of Library & Information science 20(2): 103-115.

Corbin, J., and Strauss, A. (2014). Basics of qualitative research: Techniques and procedures for developing grounded theory, Sage publications.

Hong, Y.-C. (2015). "Passey, D.(2014). Inclusive Technology Enhanced Learning: Overcoming Cognitive, Physical, Emotional and Geographic Challenges: New York, NY: Routledge. 240 pp." The Journal of Educational Research 108(1): 77-78.

Hoque, S. M., and Alam, S.(2010). "The role of information and communication technologies (ICTs) in delivering higher education–A case of Bangladesh." International Education Studies 3(2).

Starcic, I. A. (2010). "Educational technology for the inclusive classroom."

UNICEF, R. (2003). "Examples of inclusive education: Pakistan." Kathmandu, Nepal: Author.

Yin, R. K. (2011). Applications of case study research, Sage.

Yin, R. K. (2013). Case study research: Design and methods, Sage publications.