

INTERGRATION OF INFORMATION AND COMMUNICATION TECHNOLOGY TECHNOLOGICAL APPROACHED TO CONCLUDE THE SINGIFICANT ENDEARMENT CONCEPT LEARNING OF THE STDENTS WITH SPECIAL NEEDS

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Abstract

The Government of India has created numerous policies around special education since the country's independence in 1947. Although the Government of India has attempted to create policies that are inclusive for students with special needs, their implementation efforts have not resulted in an inclusive system of education, nor have they reached their goal of "education for all" across the country. The Government of India needs to bridge gaps in their education system build a strong system of inclusive education in India. Most teachers who teach in an inclusive classroom modify their curricula to meet the special needs of the pupil. Curriculum modifications can include the provision of an emerging technological approaches like audio taped text, shortened assignments and summarized chapters of the textbook as well as tools such as graphic organizers and color-coded chapters to enhance a student's level of comprehension. Modern technology has performed a vital role for teaching pupil with special needs. There has been a significant affect on the learning of pupil with special needs with the use of modern technology. The integration of ICT-Information and Communications Technology, with teacher training programs has been fruitful for the comprehension of pupil with special needs. The research has been conducted on the emerging approaches of technology to conclude the significant affect on the concept learning of the students with special needs, which includes the individual requirements (as for education) of a person with a disadvantaged background like mental, emotional, physical disability or any other developing one. The nature of research is descriptive. The relevant documents were being analyzed to meet the objectives of the study. The study will be important for the researchers and academicians, fruitful for the curriculum developers, policy makers and the study will be significant for the teacher trainers also. Apart from all these benefits it also beneficial for the persons who involved in the managing of workshops and training program for pupil with special needs.

Key words: Approaches, Technology, Special Pupil, Needs and Aspiration



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Introduction

Educational technology is a term widely used in the field of education (and other areas), but it is often used with different meanings. The word ICT-Information and Communication Technology is used by some to mean hardware-the devices that deliver information and serve as tools to accomplish a task-but those working in the field use technology to refer to a systematic process of solving problems by scientific means. Hence, ICT properly refers to a particular approach to achieving the ends of education. ICT refers to the use of such technological processes specifically for teaching and learning.

ICT capability is about having the technical and cognitive proficiency to access appropriately, to use, develop, create and communicate information using technological tools. Learners demonstrate this capability by purposefully applying technology to solve problems, analyze and exchange information, develop ideas, create models and control devices. They are discriminating in their use of information and ICT tools and systematic in reviewing and evaluating the contribution ICT can make to their work as it progresses.

Learning barriers

According to report of IITE-Institute for Information Technologies in Education, UNESCO (2006), People with SEN-Special Education Needs, experience many difficulties in learning, which can be permanent, recently acquired, fluctuating, or circumstantial. The social, economic, and physical barriers to learning must be considered when developing education initiatives.

- 1). External social barriers are caused by the society's unwillingness and/or inability to meet the needs of pupil with disabilities and to allow them to take part in the life of community. Internal social barriers are caused by the perceptions of persons' disability influenced by cultural and ideological vision.
- 2). External economic barriers are caused by the inability of society and/or the state to accommodate the needs of persons with disabilities in order to allow them to exercise their abilities. Internal economic barriers are caused by impossibility for pupil with special needs to get access to education by the reason of their limited finances.
- 3). External physical barriers are caused by the inaccessible and unsafe design of environments. Internal physical barriers are caused by the physical, mental, sensory, and other impairments of a person.

Use of Information and Communications Technology

Most policy- and decision-makers agree that the access to appropriate ICTs can reduce inequalities in education, and ICTs can be a powerful tool in supporting educational inclusion. However, despite huge potential benefits of ICT usage in SEN, only occasionally it meets our expectations. Inappropriate or limited access to ICTs seems to reinforce inequalities in education unsatisfactory experiences of technology application bring teachers to conclusion that the disadvantages of new technologies far outweigh their advantages. Much of this dissatisfaction can be attributed to the

quality of the driving policy content and support, rising directly from the inflexibility of the underlying learning (technical) platforms, i.e. hardware, software, and Internet access, for all potential users. ICT infrastructure implies the telecommunication and information networks which transmit, store and deliver the information. The infrastructure in the special education context embraces a wide range of devices. Traditional corporate approaches to ICT management are too inflexible to satisfy the needs. It is vital that the infrastructure is designed from the user's viewpoint. In order to ensure that the ICT devices used in SEN are suitable and appropriate for the needs of individual students, it is very important to assess regularly the level of training and support provided for students and teachers (IITE, 2006).

Emerging technologies

"Trying to define motivation is a little like trying to define psychology itself" Gross (1992). According to Miller the study of motivation "the study of all those pushes and prods - biological, social and psychological - that defeat our laziness and move us, either eagerly or reluctantly, to action". Two aspects of psychological research are identified. Firstly, motivational factors from the review by Weiner of studies into motivation, and secondly, we have used the theory of Ajzen (1988) which applies to attitudes and behavior to examine factors leading to actions. It has been confirmed that these aspects which are more directly relevant to the uptake of ICT in education than the many other biological, social and psychological factors. The use of emerging technologies has a more significant affect on the concept learning of people with special needs. The emerging technology for teaching people with special needs include Chat Rooms, Discussion Boards, E-mails and Portfolios. Many educational institutions use chat rooms for people with special needs. Discussion boards are forums on the Internet where users including professor and students may post assignments, questions, case studies, or messages for class members to read and respond to asynchronously. The posted information is viewed by the entire class. Electronic mail is text sent through a computer network to a specified individual or group. E-mail messages can also carry attached files. E-mail may be utilized as one method of asynchronous distance communication between faculty and students and among classmates to facilitate learning. Many studies provide verifying evidence about the motivating effects of IT/ICT on students' learning. For example, Davis, Bagozzi and Warshaw (1989) developed a theory of 'action relating to reasons' (Technology acceptance model) based on the work of Fishbein and Ajzen (in Davis et al, 1989) to investigate the reasons why some people use computers and their attitudes towards them. Their model, shown in Figure, links the perceived usefulness and ease of use with attitude towards using ICT and actual use (system use).

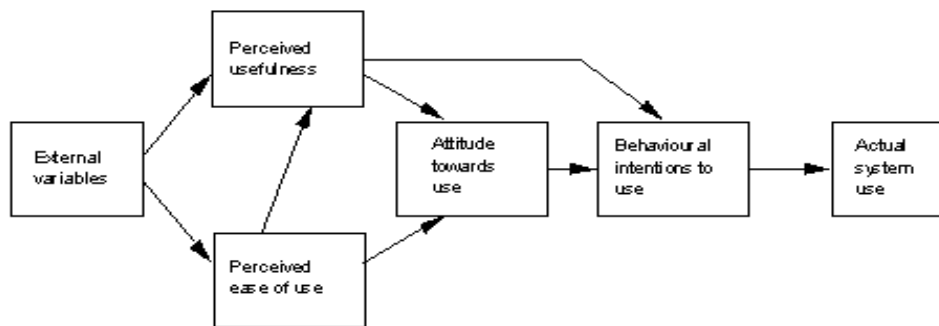


Figure - Technology acceptance model (Davis, Bagozzi and Warshaw, 1989)

Public Service Network with use of ICT

The Public Service Network (PSN) enables you to maintain high-quality services at a reduced cost. It means deliver more services in a way that satisfies the demands of the pupil in the field of education and has been affected by ICTs, for enhancing and affecting teaching, learning, and research for pupil with special needs (Ahmed, 2005). The use of ICTs have the potential to innovate, accelerate, enrich, and deepen skills, to motivate and engage students, to help relate school experience to work practices, create economic viability for tomorrow's workers, as well as strengthening teaching and helping schools change for pupil with special needs (Davis and Tearle, 1999; Lemke and Coughlin, 1998; cited by Yusuf, 2005).

Emerging Trends in Teaching

Teachers have been diverged in their acceptance of the new technologies for teaching pupil with special needs. Some have enthusiastically integrated computers, CMC-Computer Mediated Communication and the Internet into the classroom while other has been careful in their welcome, and some have simply rejected the technologies. There is a level of justifiable skepticism based on previous experience of computer based applications such as CAL-Computer Aided Learning. Ironically, some enthusiasts have inadvertently damaged the reputation of ICT by poor classroom practice - using the technology for the sake of its novelty value, or failing to think through the issues before implementing the technology (Littlejohn, et al, 1999).

Conclusion

The emerging technologies performed a vital role to enhance the concept learning of pupil with special needs. The integration of teaching strategies with the use of ICT may be significant in adopting the lesson for pupil with special needs. The relationship between the teacher and person with special needs is also based on the use of ICT in the classroom. The use of ICT in the teacher training programs for pupil with special needs is essential to promote the concept learning. In general teachers experienced in emerging technological approaches found to be a great benefit in allowing self-paced learning, providing resources to pupil with special needs who are struggling, obtaining and using student

achievement data, providing feedback to parents, and differentiating instruction. This instructional technique also was shown to be particularly beneficial in facilitating teacher-student communication, fostering students taking responsibility for their own learning and locating resources themselves, improving student behavior issues, the time students are on task, and student motivation. Finally, teachers indicated that the use of emerging technological approaches improved their ability to be innovative, assisted them in monitoring student learning, and allowed greater opportunity to provide 1-on-1 instruction. Strong correlations were found between allowing student self-paced learning, a teacher's ability to be innovative, providing resources to those who struggle, and students' ability to locate resources on their own and important educational outcomes such as student interest level, perseverance, motivation, time on task, excitement, attendance and a teacher's overall enjoyment of teaching to pupil with special needs. The adoption and use of ICTs in education have a positive impact on teaching, learning, and research. ICT can affect the delivery of education and enable wider access to the same. In addition, it will increase flexibility so that learners can access the education regardless of time and geographical barriers. It can influence the way students are taught and how they learn. It would provide the rich environment and motivation for teaching learning process which seems to have a profound impact on the process of learning in education by offering new possibilities for learners and teachers. These possibilities can have an impact on student performance and achievement. Similarly wider availability of best practices and best course material in education, which can be shared by means of ICT, can foster better teaching and improved academic achievement of students.

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