EDUCATION 5.0

PERSPECTIVES AND PREIVIEWS

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TECHNO-COPE STRATEGIES FOR AUTISM CHILDREN

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Abstract

Everyone is a genius. But if you judge a fish on its ability to climb a tree, it will live its whole life believing that it is a stupid – **Albert Einstein**.

The above uttered quote is highly applauded since each and every individual in this world is unique in their own way. Being matchless, the performance and the requirements of a person may differ. In the field of education, when a child fails to compete with the normal children, he or she is termed as a special kid. They have some difficulties in learning like dyslexia, dysgraphia, dyscalculia, ADP, Autism disorder etc. This article focuses on how technology tenders its assistance in educating the children with Autism.

Key words: *autism, technology, learning difficulties.*

Introduction:

Nobody is superior, nobody is unique but nobody is equal either. People are simply unique and incomparable. Special education is a type of education that pecularizes in catering the needs of the children with learning disabilities. First and foremost the disability of the individual is to be identified by the mentor and then nurture the individual according to his or her learning requirements. Depending upon the capability of the child, his or her need varies. The special education comprises of educational programs and practices designed for students who are physically challenged or gifted with mental, physical, or emotional disabilities requiring a special teaching resource, care within or outside a regular classroom (Michael Farrel, 2009). Nowadays, many institutions have sprouted to stretch their helping hand for the special children. As these children do not feel comfortable in a normal classroom, they require an atmosphere which makes them hospitable. The well monitored arrangement of teaching technique will quench the needs of the special children.

Autism:

Autism is one of the learning disabilities. It is not a disability, it is a different ability. Children with Autism are

Always
Unique
Totally
Intelligent
Sometimes
Mysterious

It is a developmental disorder characterized by troubles with social interaction and communication, and by restricted and repetitive behavior. It is caused by a combination of genetic and environmental factors. It is lifelong developmental disabilities that affects how a person communicates with, and relates to, other people (Panda, 2009). It also affects how they make sense of the world around them.

Integrating Technology for Autism Children in Special Education Classroom:

Technology had made significant contribution towards a better understanding of both the brain phenotype and the neural basis of the autism disorder.

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Assistive technology service is any service that directly assists an individual with a disability in the selection, acquisition, or use of an assistive technology device (Umadevi, M. R, 2010). Some supporting technology strategies are defined as follows:

***Visual Schedules*:** It gives the autism child on what is currently happening, what is coming up, and what has happened. Visual schedules take advantages of this strength by adding images (a type of AAC) to help children with ASD understand language more easily. As a result, the children can complete daily activities more successfully.

***Visual Calendars*:** Use of a weekly /monthly calendar at both school and home can provide the child with important information regarding up-coming events/activities, rather than relying on auditory information.

***Visual Representation of Direction and Rules*:** Help the child in understanding what sort of behavior is expected of him in a particular situation. It is often very effective in giving the child to engage in certain independent activity. This system is designed to teach the student to self monitor his or her own behaviour.

***Short Comic Strip, Social Stories Card, Turn Taking Cards, and Help Cards*:** Aid in teaching the children for appropriate and generalizing behavior in social setting.

Picture Exchange Communication System (PECS): Is a form of augmentative and alternative communication that utilizes pictures rather than words as a way to help individuals with autism communicate with others. Through PECS, individuals can initiate conversations and communicate their thoughts more easily. PECS is designed to build upon basic pictures so that one can communicate complete sentences, either simple or complex, through pictures.

System for Augmented Language (SAL): Is also one of the methods in VOACS that aid language development in autism. Voice Output Communication Aids can use to develop the following groups of skills for children with autism: Language Comprehension Skills, Expressive Communication Skills, Social Skills, Attending Skills, Organization Skills, and Academic Skills.

***Language Master*:** Is an electronic device about the size of an old tape recorder. The cards, which are approximately 3" by 8" with a recordable strip across the bottom, are played through the Language Master. A short verbal message can be recorded on each card.

***Tape Recorder*:** An easily operated tape recorder can be effective in addressing various skill areas in children with autism spectrum disorder.

***Video Taping*:** Children with autism are often highly interested, motivated and thus attentive to videos. Many children enjoy repetitive viewing of videos due to the predictability of the information given that knows what's coming up next.

Video Modeling (VM): Is a strategy that entails videotaping desired behaviour for the purpose of teaching that behaviour.

***Computer*:** Computer assisted learning can focus on numerous academic areas as well as provide an appropriate independent leisure time activity for people with autism. computers and other ICT devices such as electronic communication aid can be used to support children who have communication difficulties. The computer is an ideal way to work with symbols and pictures.

***iPods and Compatible Tablets*:** Are used to participate in group instruction differentiated to meet their specific instructional needs. The users can manipulate and respond to visual and audio content by means of simple finger gestures, such as touching or swiping.

***Touch Technology SMART Boards*:** Add a kinesthetic element to the visual and auditory components creating an amazing multisensory learning environment that plays to the strength and interests of students with ASD.

 ISBN 978-93-84192-12-9

***Smart Tables*:** Multi-touch, multi-user interactive learning centers that allow groups of students to work simultaneously on one surface. Children approach the Smart Table with natural curiosity and eagerness to incorporate it into their activities.

***Multi-Sensory Aids*:** Multi-sensory aids are designed to help people with autism deal with several sensory issues. It can also be used to improve other functions, such as attention and concentration.

***Mobility and Positioning Aids*:** Mobility aids are designed to help people with autism move within their environment and give them independence in personal transportation it helps to gain better control over their own balance and coordination. This may help them to improve their body stability, maintain a more upright posture.

***Video and Eye Toy Gaming*:** As an educational tool enhances the sensitivity and skills of typically developing children, enabling them to feel more at ease and competent with their atypical peers.

Impacts of Using Technology:

When the learners merge with technology they are able to manipulate objects. Technology has the skill to bring out other skills in children. They are delighted to play with the images on the screen. They experience and construct things rather than just sitting idle in a classroom. They become confident and overcome their anxieties.

Conclusion:

Nearly 40 lakhs people in India have autism and further researches state that male children are more prone to this disorder. The primary importance lies in bringing awareness relating to this, it is not a disease but a disorder and early the identification and intervention will help a lot in overcoming it. The varied modes of technology discussed in this paper will greatly enhance the autism child independent functioning skills and decreasing the amount of direct support needed from another person. But the pitiable condition in India is that these technologies are not used in the wider sense. Step should be taken to improve the autism children communication, socialization and behavior modification through latest technologies. Parents and teachers should provide a helping hand to aid the autism children. With love and proper care autism children can also lead a successful life.

References:

1. Premkumar., (2008). *Education of Exceptional children Challenges and Strategies*, New Delhi: Kanishka Publication.
2. Mangal, S.K., (2009), *Educating Exceptional Children an Introduction to Special Education*, New Delhi:, PHI Learning Press.
3. Michael Farrel, (2009). *Foundations of special education an Introduction*, U.K: A John Wiley &Sons Publication P 33,67-68,71-72,112-113,242.
4. Umadevi,M.R., (2010) . *Foundations of Special Education A Practical Approach To Educating Children with Special Needs,* Hyderabad: Neelkamal Publication, P 82.
5. Panda, K.C., (2009), *Education of Exceptional children*, New Delhi: Vikas Publishing House, P162.
6. Arul Jothi, Balaji, D.L., Meena Kumari, (2009). *Perspective in Special Education*, New Delhi: Centrum Press P176-186.
7. http://www.specialed.us/autism/assist/asst11.htm.
8. http://www.wati.org/content/support/free/pdf/ASDManual-1.pdf
9. http:www.cs.cmu.edu/~pmichel/publications/Autism Technology.pdf
10. http://kc.vanderbilt.edu/kennedy_files/ AACChildrenwithASD-April12.pdf.

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