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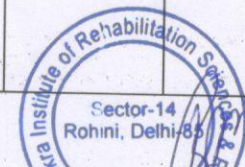
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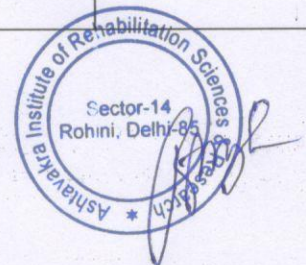
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S.No.	Faculty Members	Titles of the Papers	ISBN/ISSN No.	
1.	Mohd. Haseeb	1. Barriers to Inclusion in Education in India: A review Literature.	ISBN No.	978-93-94473-05-8
		2. Early Intervention Practices for Children with Autism: Description from Community Providers	ISBN No.	978-93-83837-93-9
		3. Assessments and certification of children with disabilities: Gaps in practices	ISBN No.	978-93-83837-29-8
2.	Mr. Pankaj Kumar Mrs. Geeta Bhutani	1. Skill based knowledge makes inclusive education successful.	ISBN No.	978-93-94473-05-8
3.	Ms. Ashfina Khanam	1. Impact of social attitude on children with special need in inclusive set up.	ISBN No.	978-93-94473-05-8
		2. Initiation and interactions in early childhood.	ISBN No	978-93-83837-93-9
4.	Ms. Mrinal Mudgal	1. Parental involvement- Success for inclusive.	ISBN No.	978-93-94473-05-8
5.	Ms. Radha Rani Rawat	1. Barriers hamper promotion of inclusive education.	ISBN No.	978-93-94473-05-8
6.	Ms. Anupama Gupta	1. Technology: An equalizer for teaching and training for person with disability during Covid-19 situation.	ISBN No.	978-93-83837-29-8
7.	Ms. Shilky Singhal	1. Provisions in national education policy 2020 for technology based learning inclusion.	ISBN No.	978-93-94473-05-8
8.	Ms. Mansa Verma	1. Manifestation problems faced by the people with low vision win mathematics.	ISBN No	978-93-83837-93-9
9.	Ms. Anoushka Sharma	1. Impact of outdoor games in improving social skills and self-advocacy among children with specific learning disabilities.	ISBN No.	978-93-94473-05-8
10.	Mr. Sandeep Upadhyay	1. ICT Based learning for children with special needs.	ISBN No.	978-93-94473-05-8
		2. Fundamental concepts of early intervention in visually impaired.	ISBN No	978-93-83837-93-9
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12	Dr. H.L.Nagaraja Murthy Ms. Sanjana Mittal	1. Strategies & challenges for promotion of inclusive.	ISBN No.	978-93-94473-05-8
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14	Ms. Saraswati Sharma	1. Importance of inclusive education (I.E.) for India	ISBN No.	978-93-94473-05-8
15	Ms. Yogesh Rajian	1. Impact of early intervention on early childhood. (6 th International Conference) 2. Special education in new education policy 2020	ISBN No. ISBN No.	978-93-83837-93-9 978-93-94473-05-8
16	Ms. Sanjana Mittal	1. Application of mindfulness practices in development of children with special needs	ISBN No	978-93-83837-41-0
17	Ms. Anupama Gupta	1. The role of assistive technology in special education.	ISBN No	978-93-83837-41-0
18	Dr. Shashi Bhushan Kumar Gupta	1. A Keep into the Society Through a Kitchen 2. JOJI: Macbeth in Covid Times 3. Long Covid Syndrome – How Long ? 4. JOJI- A Play of Authoritarian Parenting 5. Covid-19 related Psychological information : Finding from a Public online search engine 6. Left Behind: Surviving Suicide Loss	All journals published	Published in – Indian Journals Private Psychiatry
19	Dr. Jananmay Das	Comorbidities of Female Patients with Sexual Dysfunction in a Psychiatry Clinic: A Cross-Sectional Study. Journal of Psychosexual Health. May 22 2022; 4(3) page162–170, :	ISSN No.	26318318221089269
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**6th International Conference
on
“Impact of Early Intervention
on Early Childhood”**



30th & 31st January, 2022

Hybrid Mode

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REPORT

**7th National Conference
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“Application of Assistive Devices
in Education of CWSN”**

RCI CRE STATUS ACCREDITED

Friday, 29th November 2019



Venue:

Tecnia Auditorium

Madhuban Chowk, Rohini, Delhi- 110085



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**8th National Conference
on
“Application Technology in teaching and training of
Persons with Disabilities during
COVID-19 situations in India”**

18th & 19th January, 2022



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9th National Conference on “Strategies and Challenges for Promotion of Inclusion” 18th & 19th November 2022



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Delhi-110085

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Impact of Outdoor Games in Improving Social Skills and Self Advocacy Among Children with Specific Learning Disabilities



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ABSTRACT

National Education Policy (NEP) promotes true inclusion among children with special needs and especially children with Specific Learning Disabilities (CwSLD) through peer tutoring, academic excellence, modification, and various adaptations. According to National Education Policy (NEP) there will not be much separation in learning areas in terms of extra-curricular and co-curricular areas and all subjects including specific disciplines like, arts, music, crafts, sports, yoga, community service etc. will be curricular. In this regard outdoor games help to promote inclusion and learning simultaneously. Through outdoor games children learn new things, develop positive attitude, personality development etc. This conceptual research study aims to study the effectiveness of outdoor games in developing social skills and self-advocacy among CwSLD. In the present study a questionnaire was developed to assess the improvement in social skills and self-advocacy of children with SLD of both genders at primary level through use of outdoor games. The developed tool has 2 domains with 15 to 20 items each. The tool is equipped with 5 point rating scale for scoring purpose. The study was administered based on experimental design with sample size of 10 CwSLD subjects chosen from inclusive schools. A Pre-test was conducted with the students using the research tool. Intervention was done appropriately using play activities for a period of one month. Each session lasted for 30 minutes for 30 days. After intervention the post test data was collected with significant changes in the student's participation in group activities, fostering friendships and standing up for self as well as for others. Finding of this study indicates that there was significant improvement in social skills and self-advocacy among students. On this basis a positive conclusion was drawn with recommendation to give more opportunities to students to develop togetherness, regularity and to involve physical education activities coupled with physical activity which will enable students to be more physically active during school hours.

Key words: outdoor games, social skills, self-advocacy,

children with specific learning disability, fostering friendships, NEP2020.

INTRODUCTION

Outdoor games are the games that we play in the playgrounds in open air. When we play outside, it makes us active and gradually improves our health and fitness. By playing outdoor games we exercise our body and refresh our mind and soul. Therefore, it holds great value in everyone's life. Outdoor games are available in wide range and one of its kinds is Co-operative games. It does not require greater skills to play these games, as these games are full of opportunities. They help in physical, mental, and social development of children. Outdoor games are said to be the essential element for the holistic development of children as well as adults. Studies have shown recreational activities that are beneficial to all. It helps us to become healthy and happy.

SIGNIFICANCE OF OUTDOOR GAMES

- It gives us a chance to develop our personality.
- We learn team work while playing with our friends.
- Co-operation and unity is another important trait that we learn through playing.
- It helps to think faster and develop problem solving skills.
- It improves our memory and reasoning ability.
- It improves our internal as well as physical self.

BENEFITS OF OUTDOOR GAMES:

Games help us to learn many things:

- Makes us creative.
- Develop our social skills
- Learn to stand up for oneself
- Improves our personality.
- Helps us to obey instructions
- Learn to respect each other.
- Decrease our academic stress.
- Learn cooperation and unity.
- Learn to be disciplined and in order
- Learn to become generous and imbibe fellow-feeling.

OBJECTIVES OF THE STUDY

- To find out the effectiveness of outdoor games on the improvement of social skills among children with specific learning disability.
- To find out the effectiveness of outdoor games on the improvement of self-advocacy among children with specific learning disability.

REVIEW OF LITERATURE

- 1. The importance of outdoor play for young children's healthy development:** This study was done by Gabriela Bento and Gisela Dias. Aim of this study was to check the effects of outdoor games on the health of young children. Today's lifestyle is so digitalized that children spend very less time in playing outside and spend more time on their screens. Children don't feel a connect with the natural environment. To find out the positive impact of outdoor playing, children get indulged in the activities. The traditional indoor activities were replaced by the outdoor activities, so that children spend more time outside. This study also shows the role of professionals, community, parents and care givers in providing the outdoor learning environment for their children. This paper also highlights various opportunities that children get while playing, such as social interaction with peers and with the natural environment.
- 2 Self-Advocacy Instruction: Bridging the Research - to PracticeGap:** This study was done by Craig R. Fiedler and Jeanne E. Danneker. One of the crucial duties of a special educator is to imbibe good qualities in her children, teach them self-determination and make them self-dependent. Self-advocacy is another major component which needs to be taught. In this study authors explained the self-determination theory and also discussed about the need of self-advocacy. The key findings of this research were brief analysis of self - determination and self-advocacy. Authors highlighted the need of these aforesaid skills. And also identified what barriers we are facing in teaching them and how to overcome that. They outlined various strategies and techniques on how to include them in the course curriculum. One of the ways to teach them through activities of daily living (ADL), later their performance show that the difference in practicing these activities in their day to day activities and generalization.

RESEARCH DESIGN

Research Method:

Single Group Experimental Research Design.

Sample Size: 10

Inclusion Criteria

- Children with SLD.

- Primary level
- Age group 5 to 10 years.
- Inclusive schools

Exclusion Criteria

- Children with Intellectual disabilities, visual impairment and hearing impairment.
- Pre-primary, secondary level, higher education levels.
- Below 6 and above 10 years of age.

SELECTION OF QUESTIONNAIRE

- **Social Skills:** Checklist was prepared by the researcher. The developed checklist contains 20 questions and 5 point rating scale.
- **Self-Advocacy:** Checklist was prepared by the researcher. The developed checklist contains 15 questions and 5 point rating scale.
- **Dependent Variables:** Height, weight, running speed, body balance, eye-hand co-ordination, social skills etc.
- **Independent Variables:** outdoor games.

RESEARCH METHODOLOGY

Pre-Test Scores: Pre-test was conducted with the students using the research tool.

Intervention or break was given using cooperative learning and play activities for a period of 1 month; each session lasted for 30 minutes for 30 days.

CO-OPERATIVE GAMES:

A cooperative game emphasizes play, fun, and cooperation where every one works together to win.

- While playing a cooperative game team works together to overcome obstacles, instead of playing against each other.
- No one feels left out!
- It helps in building confidence and self-esteem as players have to participate, cooperate and communicate with each other.

LIST OF COOPERATIVE PLAY ACTIVITIES USED:

- Parachute Game
- Trust Games
- Balloon Bop Game
- Rope Game
- Big Floor Puzzles
- Feed the Woozle
- Group Story

BENEFITS OF CO-OPERATIVE GAMES

- **Communication:** These games help improve language development as it encouraged children to talk.
- **Conflict Management Skills:** These games motivate children to develop problem solving skills and resolve issues on their own.
- **Cognitive Skills:** They can develop critical thinking in a fun

way. Because children have time to try out new ideas as they don't need to worry about losing.

- Decision Making Skills: Children work together to make joint decisions. Knowing that their decisions will affect the whole team not just themselves.
- Co-operation: The games encourage children to cooperate among each other.

Post Test Scores:

After intervention the post test data was collected with significant changes in the student's participation in group activities, fostering friendship and standing up for self as well as for others.

Findings:

Findings of this study proved that there is significant improvement shown in the social skills and self-advocacy of the students. They were found to be more responsive, confident, and easily interact with their peers. Students are now able to form interpersonal relationship, able to make choices regarding the games to be played and speak for themselves.

CONCLUSION

On the basis of the findings of the study it is concluded that social skills and self-advocacy skills are the necessary skills for every child to acquire. Optimal functioning has been observed in academics as well as in recreational activities. And it is recommended that together, regular and quality physical education and physical activity enable students to be more physically active during school hours.

REFERENCES:

- Amini, S. <http://repo.unand.ac.id/355A/reposit> Retrieved July 2018
- Avanti Vera Risti Pramudyani, M. and Ragil Kurniawan, "Integrated Traditional Game Holistic Curriculum In PAUD Yogyakarta" Vol 10 No. 2 September (2017)
- Dian Wahyuningsih . "Implementation of Local Wisdom through Bcct Model for the Development of Early Childhood Social Skills " Vol 2 No. 1 March (2015)
- Fauzi., " Formation of Child Character Through Game Cim-ciman " Faculty of Tarbiyah IAIN Purwokerto. (2016)
- Hasan, M. (2009). Early childhood education programs. Yogyakarta: Diva Press.
- Latif, M., Zukhaira, Zubaidah, R., & Affandi, M. (2014). Oriented Education of Early Childhood Education. Theory and Applications (2 ed.). Jakarta: Kencana: Prenada Group.
- Setiadi, T. <http://berita.suamemerdeka.com/per> Retrieved July 2018 [8]
- Susilo. E. B , <http://permainan.tradisional.telah.dilupakan.ki.fi/data/> Retrieved July 2018 .
- Yucel Gelisli [1] and Elcin Yazicib: Procedia-Social and Behavioral Sciences , " A Study into Traditional Child Games Played In Konya Region In Terms Of Development Fields of Children 19

PARENTS AS EQUAL PARTNERS IN THE INTERVENTION PROCESS



Mrs. Anupama Gupta
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ABSTRACT

Early childhood intervention is a support and educational system for very young children (aged birth to six years) who are at high risk as well as children who have developmental delays or disabilities.

The mission of Early Childhood Intervention is to assure that families who have at-risk children in this age range receive resources and supports that assist them in maximizing their child's physical, cognitive, and social/emotional development while respecting the diversity of families and communities.

The Developmental Approaches for Autism:

- Floor time
- LEAP (Learning Experience Alternative Program)
- Early Start Denver Model
- JASPER (Joint Attention Symbolic Play Engagement Regulation)

Advice to a teacher & parents of children with Autism:

- Be patient
- Presume competence
- Meet them at their level
- Seek inclusion.
- Embrace the obsession
- Create a calm oasis
- Let them stim
- Encourage play and creativity.
- Treat challenges as opportunities
- Communicate, communicate, communicate

PAPER

DEVELOPMENTAL APPROACHES FOR AUTISM

1. Floor Time:

The Developmental, Individual-differences, Relationship-based (DIR) model is a developmental model for assessing and understanding any child's strengths and weaknesses. It has become particularly effective at identifying the unique developmental profiles and developing programs

for children experiencing developmental delays due to autism, autism spectrum disorders, or other developmental disorders. This Model was developed by Dr. Stanley Greenspan and first outlined in 1979 in his book Intelligence and Adaptation. The DIR model is based on the idea that due to individual processing differences children with ASD do not master the early developmental milestones that are the foundations of learning. DIR outlines six core developmental stages that children with ASD have often missed or not mastered:

- Stage One: Regulation and Interest in the World: Being calm and feeling well enough to attend to a caregiver and surroundings. Have shared attention.
- Stage Two: Engagement and Relating: Interest in another person and in the world, developing a special bond with preferred caregivers. Distinguishing inanimate objects from people.
- Stage Three: Two way intentional communication: Simple back and forth interactions between child and caregiver. Smiles, tickles, anticipatory play.
- Stage Four: Continuous Social Problem solving: Using gestures, interaction, babble to indicate needs, wants, pleasure, upset. Get a care giver to help with a problem. Using pre-language skills to show intention and become a creative and dynamic problem solver.
- Stage Five: Symbolic Play: Using words, pictures, symbols to communicate an intention, idea. Communicate ideas and thoughts, not just wants and needs.
- Stage Six: Bridging Ideas: This stage is the foundation of logic, reasoning, emotional thinking and a sense of reality.

Most typically developing children have mastered these stages by age 5 years. However, children with ASD struggle with or have missed some of these vital developmental stages. When these foundational abilities are strengthened through the child's lead and through meaningful play with a care-giver, children begin to climb up the developmental ladder.

2. LEAP (Learning Experience Alternative Program)

LEAP (an acronym for Learning Experiences - An Alternative Program for Preschoolers and Parents) is a comprehensive, multi-component, educational programme in which small groups of children on the autism spectrum are taught alongside a small number of typically developing children. It is based on the idea that children on the autism spectrum will learn better in integrated settings alongside their typically developing peers provided that those peers have been taught how to help them.

It aims to help children to reach their full potential so they are best able to benefit from mainstream education. The LEAP curriculum is designed to concentrate on the development of functional skills, independent play, social interaction, pre-academics, language skills and adaptive behaviour. Each child on the autism spectrum has an individually designed educational plan, which includes the mainstream curriculum, as well as specific, personalised objectives.

3. Early Start Denver Model

The Early Start Denver Model (ESDM) is a comprehensive behavioral early intervention approach for children with autism, ages 12 to 48 months. The program encompasses a developmental curriculum that defines the skills to be taught at any given time and a set of teaching procedures used to deliver this content. It is not tied to a specific delivery setting, but can be delivered by therapy teams and/or parents in group programs or individual therapy sessions in either a clinic setting or the child's home.

Psychologists Sally Rogers, Ph.D., and Geraldine Dawson, Ph.D., developed the Early Start Denver Model as an early-age extension of the Denver Model, which Rogers and colleagues developed and refined. This early intervention program integrates a relationship-focused developmental model with the well-validated teaching practices of Applied Behavior Analysis (ABA). Its core features include the following:

- Naturalistic applied behavioral analytic strategies
- Sensitive to normal developmental sequence
- Deep parental involvement
- Focus on interpersonal exchange and positive affect
- Shared engagement with joint activities
- Language and communication taught inside a positive, affect-based relationship

4. JASPER (Joint Attention, Symbolic Play, Engagement, and Regulation)

JASPER (Joint Attention, Symbolic Play, Engagement, and Regulation) is a treatment approach based on a combination of developmental and behavioral principles developed by Dr. Connie Kasari at UCLA. It targets the foundations of social communication (joint attention, imitation, play) and uses naturalistic strategies to increase the rate and complexity of social communication.

JA (Joint Attention)

Joint attention (JA) is the coordination of attention between objects and people for the purpose of sharing. Our studies show that children with ASD use more JA when these skills are modeled and taught directly.

SP (Symbolic Play)

We model appropriate play, facilitate joint attention within

play routines, and encourage greater diversity in types of play with the goal of helping children increase their diversity, flexibility, and level of play.

E (Engagement)

Increases in engagement are critical because they lead to more opportunities for social communication and learning. For this reason, we aim to help children with ASD reach higher states of joint engagement with others.

R (Regulation)

Our approach stresses the importance of emotion and behavior regulation. We offer a number of strategies to address lack of engagement, self-stimulatory behaviors, and regulation challenges in children with ASD.

REFERENCES:

- <http://www.kasari.org/treatments/jasper/>
- <https://www.autismspeaks.org/what-autism/treatment/early-start-denver-model-esdm>
- <http://researchautism.net/interventions/20/leap-and-autism>
- <https://en.wikipedia.org/wiki/Floortime>
- <http://blog.ed.ted.com/2016/04/30/a-parents-advice-to-a-teacher-of-autistic-kids/>

Parents Equal Partners in Intervention Process



Mrs. Anupama Gupta
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AIRSR

Introduction

What does the term 'partner' mean? According to Webster's dictionary, 'partner' implies "a joint interest, a companion, a person who shares, or a player on the same team." In addition, when we think of a partnership, we usually think of an agreement between two parties and active participation by both. In early intervention, developing a partnership between professionals and families is essential for good early intervention services. Developing a collaborative partnership, however, may not always be easy. Families and professionals need to be aware of three potential barriers to collaboration.

Parents Play many roles

Parents fulfil many roles in the intervention of their child. They are the ultimate decision makers about when to start intervention, where, and with what supports. Parents and education professionals collaborate to form a team that ensures that the child receives appropriate and individualized assessment, evaluation, intervention, program monitoring, and evaluation.

In recognition of these roles, families and professionals collaborate closely to provide individualized assessment and intervention and educational services for students with disabilities. Remember,

- 1) Parents know their child;
- 2) Parents know their child within the context of their family;
- 3) Parents know their child within the context of their community and culture. Parents can share how the child organizes and solves problems; what he fears; and what her temperament, coping strategies, and emotional hot spots are.

Parents have traditionally played a somewhat passive role and have primarily been the recipients of the services professionals could provide. With recent legislation and changing national attitudes, parents are expected to play an active role in their child's evaluation and intervention. To this end, parents need to have knowledge of available services and the system. They also need to have effective

communication skills, and in general, be a contributing member of an interdisciplinary team. Most parents have not been prepared in any way to fulfill these expectations. It may be difficult, therefore, for some family members to participate as an active member of an interdisciplinary team.

Personal qualities necessary for effective partnerships

- mutual respect
- honesty
- trust
- openness
- listening skills
- sensitivity
- communication skills

Prepare for Intervention

When you know that your child will be moving to a new classroom, school, or teacher, take time to meet with the teacher to plan for these moves. Together with the other team members, Parents can welcome this new member and share successes, challenges, and strategies. It is also important to talk with your child about these transitions so that he or she can be better prepared and feel more comfortable. Parents may want to attend open houses or take advantage of other opportunities to get to know the new teacher or school. These are often a first chance to form a new partnership and begin a new collaborative relationship

REFERENCES

- Dunst, C.J. & Paget, K.D. (1991). Parent-professional partnerships and family empowerment. In M. Fine (Ed.) Collaboration with parents of exceptional children. Clinical Psychology Publishing Company, Inc., Brandon, VT. Early Childhood Assistance Center, Connie Hawkins, Director. Davidson, NC. 704-892-1321.
- Exceptional Parent Magazine. Orders: 1-800-247-8080. Guidelines and Recommended Practices for the Individualized Family Service Plan (April, 1991). Association for the Care of Children's Health, Bethesda, MD.
- Heward, W. L. (2000). Exceptional children: An introduction to special education (6th ed.). Upper Saddle River, NJ: Merrill.

The Role of Assistive Technology in Special Education



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The Individuals with Disabilities Education Act (IDEA) stipulates that schools must provide children with disabilities the appropriate services and accommodations. After evaluations by health professionals and educators, an Individualized Education Plan (IEP) will be drawn up where educators, parents, and health professionals will outline the child's unique needs and the appropriate response. Assistive technology often falls into this category of services accommodations.

What is Assistive Technology?

Simply put, assistive technology is a device or tool that helps someone with a disability function better. Assistive technology improves function in children with both learning and physical disabilities. And, despite the name, these devices are not always hi-tech. Assistive technology has been in the classroom for decades, and sometimes even the simplest things can make a huge difference.

What are the Different Types of Assistive Technology?

Tablets, Computers, and Software

When we think of the word "technology," these devices are likely the first thing to come to mind. The benefits of computers and tablets are extensive. They are customizable to accommodate the unique needs of each special education student. Adjustable settings help with reading (for example, enlarging text size), play audio and video, record sound and video, have text-to-speech software, can come with touch-screen options, and even have gesture recognition technology for hands-free commands and typing make tablets and computers as strong assistive technology devices.

Assistive Technology: Facilitators of Special Education

Students suffering from disability of any kind find it hard to manage everything in class and attend lectures on a daily basis. These students have trouble keeping up with everything that is taught in school. They are also unable to work at the same level as their classmates who do not have any developmental or physical impairments. They need extra assistance to perform well academically. In today's digital age, assistive technology has become one of the best forms of assistance for people with disabilities.

Assistive Technology Act:

Assistive technology or what we commonly know as AT, was not only recognized as a necessity across the United States, but it was also written into the law when Assistive Technology Act was passed in 1998. Former President Bill Clinton was behind

the revision of the Rehabilitation Act of 1973 which required the Federal agencies to make their electronic and information technology easily accessible to individuals with disabilities.

According to law, Assistive Technology is "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities."

Under Section 508 of the law, agencies should provide employees with disabilities and public citizens with access to information similar to that which is available to others.

Assistive technology has broken down the various barriers that hindered and created difficulties for disabled students to perform to their full academic potential. The AT has significantly contributed to the cause of studying in an inclusive classroom instead of a segregated one.

How assistive technology has helped students with special needs

The main challenge students with disabilities have to deal with accurate identification of the disabilities before moving towards conventional teaching settings.

AT addresses a variety of learning complications. Students suffering from cognitive, physical, psychological, and learning deficiencies on various levels can benefit from assistive technology. For example, a student who has trouble writing could use special software and compose a school report by dictating it and getting it converted to text. A teen with dyslexia could use AT which would read aloud text for him. Or a child who has difficulty with math could take help from a hand-held calculator to keep score while playing games.

There are special AT tools and gadgets that assist disabled people with:

Reading: There are numerous tools that help people who struggle with reading. All of these tools might vary from each other a little bit but, all of them help the reader by converting the text as speech. Few types of AT reading tools are text-to-speech (TTS), audio books, digital TTS books, and graphic organizers. These tools help the reader with decoding, reading, comprehension, and fluency. Nowadays, mobile devices and tablets come with in-built AT.

Writing: Like reading, there is quite a range of assistive technology available for those who struggle with the task of writing. For those who have issues with holding a pencil pen,

can benefit from handwriting tools that help with the task of writing. Some other forms of writing AT tools are touch screens and keyboards, word prediction, dictation (speech-to-text), grammar check, and spell check.

Like reading, there is a built-in AT for writing on mobile devices. Also, you can add chrome apps and extensions in Chrome browsers or use Chrome books.

Listening: Those people who have issues in processing and remembering the spoken word suffer from auditory processing disorder. Listening devices can be integrated into a class or a meeting having multiple speakers. Some examples of listening to tools are noise-canceling headphones, audio recorders, and personal listening devices (PLD) sound field systems.

Math: There are special tools for those which help people who struggle with calculating, computing, aligning and copying down math problems on paper. With the help of AT tools such as visual and audio support, users can solve basic math problems more easily and efficiently.

Memory & Organization: Using AT tools allows a person with disabilities plan, organize and keep a track of things such as task list, contacts, and other notes. These tools help them in managing, storing, and recovering that information while using specific hand-held devices and software.

Tracking and Monitoring: Technology has not only helped students but parents as well. Parents or guardians with speaking difficulties or those who have trouble in mobility can make use of monitoring apps and software which they can install on their children's phones. For example, a child monitoring app can help parents with disabilities keep an eye on their children remotely. The app lets them monitor their real-life and digital activities along with their web browsing history, locations, text messages, call logs and a lot more while sitting in the comfort of their home.

The Impact of Assistive Technology:

Dr. Richard Nyankori, who works as a deputy chancellor for special education at District of Columbia Public schools says that with the help of assistive technology, students now have access to educational opportunities across America. AT shatters the barriers in the way of academic success and opportunities in the future. According to an article on the DCPS website in 2011, students reported that AT tools and devices made a huge difference in their academic performance.

Apart from education, AT also helps students in developing their social skills as well which tends to get negatively impacted due to their impairments. Usually, students find it difficult to connect with their classmates that makes it difficult to make friends. AT devices helps them in engaging with others so that they do not feel isolated.

Empowering students with AT tools that assist them with speech, mobility, calculation, and understanding prepares a path of a brighter future for them. AT has the power to change the lives of people with special needs if integrated into classrooms and routine life from an early age.

A few types of assistive technology software include:

Games: Educational games of all types are an excellent tool for learning. Aside from breaking up the monotony of the traditional lecture-based classroom, games have the added

benefit of catering to different learning styles. They also create an interactive world, allowing tactile learners to navigate lessons using touch, sound and sight.

Word processing software: Writing software has come a long way. The inclusions of word-prediction and grammar-checks are particularly helpful for those students with speech or language disorders.

Text-to-speech (TTS): TTS is a technology that reads digital text out loud. TTS is helpful for students who struggle with reading and those with learning disabilities or speech-language disorders.

Importantly, digital devices and software accommodate collaborative learning and instantaneous communication. Files can easily be shared between students during group projects, or students can navigate a virtual lesson alongside their peers. Students can turn in their assignments "online" or work through educational software at home. For special education students, these devices are of particular importance because they are customizable to accommodate the unique needs of each student.

Devices for Physical Disabilities and Impairments

While this category may seem less sophisticated, it is sometimes the simplest accommodations that provide the greatest assistance. Children with visual impairments benefit from braille materials, notebooks with raised margins and lines, large-text books, and audio options for books and instructions. Hearing aids and closed captioning help those who are deaf or hard of hearing. For students with motor coordination difficulties, pencil grips and book holders improve writing and reading abilities.

5 Examples of Assistive Technology in the Classroom

Assistive technology is designed to help students who have learning disabilities. Whether students have physical impairments, dyslexia or cognitive problems, assistive technology can help them to function within the classroom. These tools include any type of equipment or device that helps students to compensate for their learning disabilities. While they are unable to eliminate learning problems entirely, they can help students to capitalize on their strengths and minimize their weaknesses. Among the most innovative technologies available today, the following five are the most popular.

1. Electronic Worksheets

Students with learning disabilities like dyslexia can use electronic worksheets to complete their assignments. These worksheets help students to line up words, equations and numbers on their assignments. On some of the worksheets, text-to-speech or speech synthesizing technology is even available.

2. Phonetic Spelling Software

For many children with learning disabilities, reading and writing can be a challenge. Phonetic spelling software is designed to automatically convert the student's typing into the word that they intended to write. For alternative reading options, students can always check out audio books. With the audio book, students can follow along in their text and overcome reading difficulties.

3. Talking Calculators

Students who have dyscalculia can benefit greatly from a talking calculator. The gadget makes it easier to check assignments, read numbers and perform calculations. While the talking calculator is a fairly simple tool, it offers an exceptional benefit for students who would otherwise struggle in math classes. Other than talking calculators, students can also check out text-to-voice devices. They function on the same concept of converting written words into an audible track. Students can use these devices to check their spelling or to improve their reading comprehension skills.

4. Variable Speed Recorders

Everyone has a different learning style, and many students struggle with understanding auditory lectures. For these students, a variable speed recorder is an ideal solution. In essence, the student just has to hit record while they are in class. Afterward, the recording can be slowed down or sped up for the student to listen to it again and again. If the pitch of the recording is hard to understand, students can modify the pitch up or down to make their lectures more accessible.

5. Videotaped Social Skills

Autistic children and other children with learning disabilities may struggle to figure out normal social interactions. In the past, the most common way to learn social interactions was to practice them. Unfortunately, many children inadvertently behaved inappropriately as they tried to learn what defined "normal" social interactions. With videotaped social interactions, students can learn important life skills and social behavior without accidentally offending someone. In addition to interpersonal skills, these videos can work for self-help, linguistic, academic and emotional problems as well.

Learning disabilities can manifest in a variety of different ways. From mild disabilities to debilitating problems, these disabilities affect the student's ability to learn and take part in a classroom. Unfairly stigmatized in popular culture, it is now possible to use technology to overcome many learning disabilities. From offering students ways to slow down the lecture to providing talking calculators, these technological devices are able to meet the student's unique needs. With help, students can become the competent, exceptional individuals that they already have the potential to be.

Reference:

- <https://otsimo.com/en-tag/special-education/>
- https://www.researchgate.net/publication/270346954_Assistive_technology_in_special_education_and_the_universal_design_for_learning
- <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0152707>
- <https://www.understood.org/en/school-learning/assistive-technology/assistive-technologies-basics/assistive-technology-what-it-is-and-how-it-works>

The effectiveness of assistive technologies for children with special needs: A review of research-based studies:



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Assistive technologies are often promoted to schools, parents and educators as tools to assist students with special needs by providing a compensatory value, to remediate learning problems and to promote personal independence. These technologies range from simple spell checkers to more complex speech recognition systems and educational software. Many research projects have examined the effectiveness of these assistive technologies primarily in terms of their remediation and assistive functions. This paper describes the results of a systematic search of research-based studies published in the last six years that examined the effectiveness of assistive technologies that have reading, writing, spelling and speech as their focus. After a rigorous process, 15 empirical research articles were selected based on the following criteria: empirical studies involved students who identified as having special needs; the assistive technologies had a literacy and speech focus; participants were in years K12; and a clear skill or academic improvement was shown. Findings revealed that while some programs saw no improvement in spelling, reading or writing as a result of using the assistive technology, the majority of studies found consistently.

Introduction

The heightened interest in the use of assistive technologies for students with special needs can be traced to legislation introduced in European and North American countries in the 1980s and 1990s. For example, the Technology-Related Assistance for Individuals with Disabilities Act of 1988 in the United States (US) brought increased attention to the role of assistive technology (AT) to improve the performance in education, work and social life of persons with disabilities. In the United Kingdom (UK), the Disabled Student Allowance (DSA) of 1993 sparked research on the types of technology that could improve the performance of disabled students in a variety of tasks. The 1997 US Act, Individuals with Disabilities Education Act (IDEA), mandated that AT be considered for each student with a disability when developing an individualised education plan. Alper and Raharinirina (2006) contend that despite the legislation in place, little is known about the specific issues associated with AT, its uses and for whom it is appropriate. This paper will review literature from 2004 to 2009 in an attempt to determine if more recent research

has illuminated the best use of AT and for whom it is appropriate. Focusing only on research studies on spelling, reading, speech and writing, this paper describes the results of a systematic search of empirical studies that appeared in international, refereed journals from 2004 to mid-2009. When examining the literature of the last six years, 15 articles were found that met our criteria. Ten studies were located in the US and the remaining five were in Canada, Ireland, Israel, Sweden and Norway. Most of the articles were in one journal, *Journal of Special Education Technology*, because it attracts researchers in the area of special education and the use of technology. The term AT is generic and used to describe assistive, adaptive and rehabilitative devices for people with varying degrees of disability. Essentially, these technologies are aimed at assisting or expanding human function or capabilities (Lane and Mann 1995). ATs can range in complexity from sophisticated computerized communication systems and software programs to a simple handle on a telephone. This review adopts as its focus software-based technology and seeks to examine how these are used to aid children, with varying special educational needs, in primary or secondary educational environments. There are many questions a review could try to answer; however, because of the wide variety of studies found in these journals, we decided to focus on two basic questions. What types of technologies were used in these studies and what has been their impact on students with learning difficulties? The description of the technology is found in Table 1, along with the geographic location and the participants in the studies and the type of research design. Our review looks at the purpose of the study or the research question asked and the outcomes. It organises this information based on the technology utilized so that we can answer our two basic questions.

Review of meta-analysis studies

In reviewing the research on ATs, we identified five articles that synthesized the literature in an attempt to identify its benefits and the obstacles to its use. Edyburn's (2000) review was one of the first to examine the literature that was contributing to this emerging knowledge base on special education technology. He found that most of the relevant literature appeared in 12 journals and a core set of four journals contained 60% of the relevant articles. He surveyed the

literature from 26 journals in 1999 and found 788 articles of which 114 contributed to the knowledge base. In another comprehensive review of articles published in English between 1988 and 2003 that provided an assessment of skill acquisition using AT, Alper and Raharinirina (2006) found 60 articles that met their criteria. Using a content analysis, they summarised their findings in 12 categories. Most of the studies were conducted to investigate the effectiveness of the use of AT in improving participants' skills. A variety of AT devices were utilised. The difficulty of synthesising the findings was evident based on the different types of AT devices, different age groups, different settings and different types of skill acquisition and differing special needs (including learning and physical disabilities). In a synthesis of studies that examined spelling and reading interventions and their effects on the spelling outcomes of students with learning disabilities, Wanzek.

Assistive technology and students with special needs

According to the Individuals with Disability Education Act (IDEA) in the US, any equipment that is used to improve functional capabilities of individuals with disabilities is considered AT. In the US, the approach to AT is inclusive. It includes not only the technological devices or software that assists the learner with disability, but also all the raft of services and professionals, teachers and family members who support the student to ensure greater outcomes. Furthermore, according to the IDEA, the selection, acquisition and or use of AT is dependent on the evaluation of the needs of the child. With the importance of the appropriate use of AT, there is a clear need for an adequate level of expertise of at least one of the team members who is working with the students with learning difficulties (Bausch et al. 2008). For the purpose of this review, we have chosen to only include technologies that assist children in primary or secondary educational environments. We were concerned with examining how these technologies assisted children who experienced a range of special needs and were having difficulties with reading, speech, spelling and/or writing. 290 D. Maor et al. Downloaded by [Murdoch University Library] at 23:39 06 October 2013 The majority of the studies focus on children with mild learning disabilities defined by Edyburn (2006) as: a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or to do mathematical calculations, including conditions such as brain injury, dyslexia and developmental aphasia. (18) One study falls within Edyburn's (2006) category of emotional/behavioural disorders. This was a study on children with autism and falls under the category 'An inability to build or maintain satisfactory interpersonal relationships with peers and teachers' (18). Another study falls within his category of 'mental retardation', meaning 'subaverage general intellectual functions' (19). Specifically, this is a clinical term and refers to individuals who score below 70 on intelligence tests and have limited intellectual abilities (Medicine.Net 2010). Hereafter

this group of individuals will be categorised as 'intellectually impaired'. Two studies were with children with physical disabilities and would fall under the category of severe disability. They included cerebral palsy and spinal bifida. Edyburn (2006) identified that most of the students in the US receiving special education services have mild disabilities (approximately 69% of the students with disabilities aged 621 fall into this category)

Method

The purpose of this paper is to provide an updated literature search on empirical research studies that provided some type of AT intervention with students who had special needs. The search process can be illustrated as follows:

Analysis of the reviewed studies

The main purpose of these studies was to assess the efficacy of interventions as a means of improving the reading, spelling, writing and speech ability of primary or secondary school students. Most studies used some type of intervention with students who either had physical or cognitive disabilities and used pre and post tests to determine the effectiveness of their programs. For example, one study analysed the results of using particular software, such as Co:Writer, and compared this with handwriting. Most had control groups so that they could make comparisons with the experimental group; however, there were also studies based on a small number of students using case studies or interviews. Table 1 lists the 15 studies alphabetically and gives the date and journal of the refereed article. It then gives the country where the study was located and the age or grade of the students and the number of participants in the study. It briefly describes the AT used, the design of the study, the type of disability of the students and the outcomes. The studies analysed will be referred to by their number as it appears in Table 1. In an attempt to compare study outcomes to give a sense of whether the field has moved forward in identifying which AT is the most effective, we have grouped the studies under the type of skill they are trying to improve. It is difficult to group these studies under just one heading as most try to tackle at least two different skills simultaneously. We begin with ones that looked at spelling and writing, then European Journal of Special Needs Education 291 Downloaded by [Murdoch University Library] at 23:39 06 October 2013 look at those that combined spelling and reading. We next look at one that combined spelling, reading and writing, and finally chose one that looked at an isolated skill such as writing or speech. Within these categories, we group those that used the same software although there were very few. The next section gives a fuller description of the research question and outcomes of these 15 studies, grouped under the skills tested.

Spelling and writing

At least three of the studies used Co:Writer, sometimes in conjunction with other software. Co:Writer is a software program designed to provide spelling and writing assistance, and its primary feature is word prediction. It also has 'flexible spelling', whereby words are predicted from phonetic spelling

and the option of creating topic dictionaries of specialised words (Mirenda, Turoldo and McAvoy 2006). The students in two of these studies (13, 15) had physical disabilities and the students in the other study (2) had learning disabilities and mild intellectual impairment. Using multiple software programs (Write: Outloud and Co:Writer), study (2) asked: How well do seven students with special needs perform in writing with a talking word processor with spellchecker software (Write:Outloud) when it is used independent of and in conjunction with word prediction software (Co:Writer)? They found that the group mean for number of misspellings decreased and their accuracy percentage, number of words and rubric scores, all increased. However, the effects on writing when using a talking word processor with or without word prediction did not appear to yield uniform outcomes or experiences across students. Using Co:Writer, study (13) examined two questions: What are the perceptions of students with physical disabilities and their adult supporters about the benefits of using a word prediction program such as Co:Writer? Are there significant differences in the rate of text entry, the properties of legible words, correctly spelled words, correct word sequences and/or the mean lengths of consecutive correct word sequences produced by students with physical disabilities using handwriting, word processing and word processing + word prediction software? Co:Writer enhanced spelling accuracy, both word processing and Co:Writer resulted in significantly more legible writing samples than handwriting, and word processing use (with or without Co:Writer) helped to improve legibility. In sum, Co:Writer had a positive impact on writing quality in comparison with both handwriting and word processing, as measured by the percentage and mean length of consecutive correct word sequences. Study (15) examined the use of Co:Writer to increase typing speed (included as a form of writing) and to decrease spelling errors for four students who had physical disabilities that affected hand use. Student attitudes about the effectiveness of word prediction were examined as well as their typing rates and spelling accuracy. Co:Writer had a small positive effect on overall typing rate and decreased spelling errors for two out of four students. However, two other students did not show an improved typing speed. Improvement in spelling occurred with two students who had the most severe disabilities.

Spelling and reading

Four articles used software interventions to improve reading and spelling. The first one (5) was with a group of 52 young Norwegian below-average readers and spell292 D. Maor et al. Downloaded by [Murdoch University Library] at 23:39 06 October 2013 ers using MultiFunk, a computer program designed to assist reading. The software is based on individual adaptation of text appearance on screen and auditory-visual reading support. The main research question was: does MultiFunk with a synthetic speech component show positive effects on reading and spelling development with this group and allow them to keep up with their classmates? In an experimental pre-test-intervention-post-test design, the authors found that the MultiFunk experimental group

increased their reading and spelling skills significantly more than the control group. More specifically, they found that MultiFunk enhanced word reading rate, reading comprehension and spelling. The second study (7) assessed the effectiveness of two programs developed by the Frostig Centre Research Department in California: a computer speech recognition-based program (SRBP) and a computer and text-based automaticity program (AP) with 28 students with reading and spelling learning difficulties (aged 8 to 18). The SRBP program had a bimodal presentation of text. The child hears the word he or she has just spoken and sees it immediately on the computer monitor. When an error is made, the child must then find the correct word among a list of similar words and choose it, requiring the child to discriminate and compare words that look and sound very much alike. In this program, children are allowed to write on topics of their own choosing and proceed at their own pace. AP was developed to improve rapid naming and sight-word reading efficiency. After adjusting for age and IQ, both SRBP and AP groups (28 students) showed significant differences over the control group (16 students) in improving word recognition and reading comprehension. Neither program showed significant differences over contrasts in spelling. The next two studies (9 and 10) were written by researchers in the US and Northern Ireland. Starting with study (10), they assessed four software tools: speech synthesis, spellchecker, homophone detection using Read & Write Gold (Version 6) and SpeakOUT, and an electronic dictionary. The two homophone tools, Read & Write Gold and SpeakOUT, highlight same-sounding words in a document and show options with their definitions. The user may then choose an option that matches the context. The electronic dictionary allows users to find meanings for unknown words by highlighting the word and clicking on a dictionary icon. They matched their sample of 31 students using the AT with a group of 39 students using MS Word control and another group of 23 who were a control group with no assistance. Groups were matched on IQ, reading ability, spelling ability, computer exposure and socio-economic status. The study demonstrated several advantages of using Read & Write Gold for those with reading difficulties. It improved reading comprehension and homophone error detection and correction. Using the dictionary tool assisted the two groups over the full control group in finding more meanings for difficult words. Study (9) intervened using the homophone tool in Read & Write Gold (Version 7.1) in conjunction with Microsoft Word with 56 UK students to proofread passages. They were able to extend their previous study to discover how the software functioned to improve results. This study found that highlighting homophones helps improve performance and that offering the homophonic options adds a significant additional benefit.

Spelling, reading and writing Study

(8) investigated the use of a word processor for enhancing the academic outcomes of three junior high school students with writing disabilities in Israel. They European Journal of Special Needs Education 293 Downloaded by [Murdoch University Library] at 23:39 06 October 2013 found that the use of word

processing meant that they made fewer spelling mistakes, used more organisation and structure and made fewer reading errors when reading their own written exercises.

Reading only

Study (12) used a more robust research design than study (8). Its 6th and 7th grader participants were a group of 27 students who received a treatment program and a control group of 15. They used phonics-based computer assisted instruction (CAI). The treatment group showed greater reading gains than the control students on word attack, a measure of decoding skills, and a trend toward greater gains on real word reading (Letter-Word Identification). Both groups showed strong gains on passage comprehension. Study (6) took place in Sweden with 80 children in grades 2 and 3. These children were identified as having a reading disability that was the result of either phonological or orthographic word decoding problems. The children took part in computerised training programs to address their phonological (COMPHOT) or orthographic (DOT) issues. The COMPHOT program had rhymes, addition, position and segmentation and included exercises with pictures that participants could click on and get the word sounded. The DOT program provided explicit links between letters, written words and sounds and was based on word reading, text reading, word parts and building words. A child could typically click on a word and have it sounded out by the computer. The children who had the phonological and orthographic training programs were compared with 20 children who received ordinary special instruction and 34 normal readers. Children with phonological problems improved their general word decoding skills more than did children with orthographic problems.

Writing only

Two articles came from Michigan State University researchers (3 and 4) in the US. Study (3) used Technology-Enhanced Learning Environments on the Web (TELEWeb), a program that provided customisable activities and tools that could be individualised to meet diverse student and curricular goals. The findings showed the potential for strategically supported web-based environments to offer cognitive resources to very young students. The TELE-Web scaffolds seemed to influence three writing outcomes: the quantity that students wrote, the ability to elaborate with topically related details and generate more textual ideas that happened to be better organised. Study (4) investigated the effects of scaffolding students' writing performance through the employment of two different conditions that were exactly similar with the exception of the online scaffolding of students' writing performance. Speech only Study

(1) investigated video modeling to increase variation in the conversation of two boys with autism in California. The study systematically assessed the effects of video modeling on increasing responses in conventional speech and measured any changes in the children's social behaviours and their amount of question-asking in unstructured free play sessions. The results suggest that video modeling can be an effective technology for

teaching children with autism to vary their conversational speech in order to speak with several people on a variety of topics

Discussion

Several limitations of this review should be considered. The articles chosen for analysis were only in English and were restricted to papers published in referred journals between the years 2004 and 2009. Only studies that showed some skill or academic improvement were included and the study took as its focus a diverse range of special needs. This diverse ability sample was the consequence of the limited explicit identification of disability in many of the studies. As Edyburn (2000) has noted, the explicit identification of a specific disability is less common in research of this nature as much of the AT is generic and therefore useful for individuals with a range of abilities. Even in this restricted area of research on reading, spelling, writing and speech, these 15 articles used quite a range of different types of technology. This makes it difficult to determine which technology is the most efficacious because there are few studies that utilised the same technology with students in the same age groups. In addition, the AT was used with students who had different types of disabilities. Some studies used small samples, lacked adequate control groups or did not have any control groups. Nevertheless, the majority of these studies indicated that AT was beneficial in increasing the literacy and speech abilities of these students. In almost all of the studies, whether experimental or case studies, the students increased their skills in the areas tested. None of these studies followed students over several years to see if the benefits of AT were maintained after the intervention program ceased. In the future, it may be important to develop longitudinal studies to track students over a period of time to see if they can maintain the literacy and speech skills that they have learned. As was found in the literature review, Wehmeyer et al. (2008) emphasised that most of the research they analysed was done with basic assistive technology software and not with 'cutting edge' technology that may have an impact on students' learning. Several studies used a combination of AT that provided more information about the effectiveness of different software in providing feedback to children with special needs. European Journal of Special Needs Education 295 Downloaded by [Murdoch University Library] at 23:39 06 October 2013 Some studies noted the need for the ATs to have special attributes to work well with students having learning disabilities. The technology needs to have screen readability for students to embrace the program. Speech feedback also increases the communicative aspect of reading and enhances a sense of mastery. Contextual reading with short summaries may also increase motivation. These ideas led to the design of one of the software programs mentioned above, MultiFunk (multimedia and multi functionality), which is based on individual adaptation and auditory-visual reading support (Fasting and Lyster 2005). This concept of universal design for learning emphasises that students have individual differences and instruction should embrace the differences. Thus, another design attribute that AT should incorporate is the accommodation of individual students' needs. Only two of the

studies (Charlop, Gilmore and Chang 2008; Tam et al. 2005) in this review considered the support of family members in using ATs. Alper and Raharinirina (2006) noted that the lack of family support is a main reason for the abandonment of the ATs over the longer term. All of the following contribute to this problem: a lack of consideration of the child's and family's needs; no consultation with the family before choosing an AT; complicated design; prohibitive cost; and lack of technical support.

Conclusion

With the rapidity that technology changes, it is difficult for researchers to keep up with new technology that could assist students in the areas of reading, spelling, writing and speech. For example, there are likely to be new developments using Web 2.0 technology, but no studies were found using this latest technology. Continued research in the area of ATs is essential with the explosion of new technologies. The research should focus on specific research questions and be more systematic in trying to answer these questions, ensuring that the research uses an empirical design with enough participants that can enable it to produce valid and reliable results or qualitative studies which are theoretically sound and have rigor and authenticity. Considering the high level of investment that educational authorities around the world are making in ATs, the small number of studies that had adequate research design features was quite surprising

References

- Alper, S., and S. Raharinirina. 2006. Assistive technology for individuals with disabilities: A review and synthesis of the literature. *Journal of Special Education Technology* 21, no. 2: 4764.
- Bausch, M.E., M.J. Ault, A.S. Evmenova, and M.M. Behrman. 2008. Going beyond AT devices: Are AT services being considered? *Journal of Special Education Technology* 23, no. 2: 116.
- Bouck, E.C., and S. Flanagan. 2009. Assistive technology and mathematics: What is there and where can we go in special education. *Journal of Special Education Technology* 24, no. 2: 1730.
- Charlop, M.H., L. Gilmore, and G.T. Chang. 2008. Using video modeling to increase variation in the conversation of children with autism. *Journal of Special Education Technology* 23, no. 3: 4767. 296
- D. Maor et al. Downloaded by [Murdoch University Library] at 23:39 06 October 2013 Co:Writer 4000, 2000. [Computer software]. Volo, IL: Don Johnston, Inc. Cullen, J., S.B. Richards, and C.L. Frank. 2008. Using software to enhance the writing skills of students with special needs. *Journal of Special Education Technology* 23, no. 2: 3344.
- Edyburn, D.L. 2000. 1999 in review: a synthesis of the special education technology literature. *Journal of Special Education Technology* 15, no. 1: 731.
- Edyburn, D.L. 2006. Assistive technologies and mild disabilities. *Special Education Technology Practice* 8, no. 4: 1828.
- Edyburn, D.L. 2007. Technology-enhanced reading performance: Defining a research agenda. *Reading Research Quarterly* 42, no. 1: 14652.
- Englert, C.S., M. Manalo, and Y. Zhao. 2004. I can do it better on the computer: the effects of technology-enabled scaffolding on young writers' composition. *Journal of Special Education Technology* 19, no. 1: 521.
- Englert, C.S., Y. Zhao, K. Dunsmore, N.Y. Collings, and K. Wolbers. 2007. Scaffolding the writing of students with disabilities through procedural facilitation: Using an internetbased technology to improve performance. *Learning Disability Quarterly* 30, no. 1: 929



Barriers to Inclusion in Education in India: A review Literature



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Abstract

Purpose

To identify successful interventions supporting teachers and school leaders to achieve inclusive education in India, including clarifying the underpinning causal logic and identifying research gaps. Indian and Australian researchers collaborated to complete a scoping review that drew together the full range of evidence of successful educational interventions related to school leadership and teaching functions, including from grey literature sources. The scoping review protocol from the Joanna Briggs Institute was followed which involved an initial statement of the search strategy, multiple rounds of processing, and thematic analysis of results. Interventions contributing to a) engaging and mobilizing school leaders and teachers, b) training, resourcing and supporting them, and c) monitoring and evaluating them were tabled and analyzed, allowing for an analysis of which interventions had been shown to be effective. Findings underlined the central stepping stone in the causal logic of effective school leadership and classroom teaching and, additionally, the importance of adopting an appreciative, asset-based and collaborative approach to all work with teachers and school leaders. These findings have direct implications for all capacity-building with school leadership and teaching staff, including initial teacher training, continuing professional development, and establishing optimal network and collaborative arrangements.

Introduction

According to Article 24 of the Convention on the Rights of Persons with Disabilities, inclusion is "a process of systemic reform embodying changes and modifications in content, teaching methods, approaches, structures and strategies in education to overcome barriers, with a vision to providing all students of the relevant age range with an equitable and participatory learning experience and the environment that best corresponds to their requirements and preferences" (UN General Assembly, 2007). Thus, inclusion in education refers to processes that increase the participation of all students vulnerable to exclusionary pressures with the curricula,

cultures and communities of local schools (Ainscow et al., 2006). An important focus of this work is redressing disability-related exclusion and, in countries with well-developed inclusive education systems, many effective strategies for improving participation and learning for children with disabilities have been implemented and evaluated (Finkelstein et al., 2019). However, strategies for disability-inclusive education in well-resourced Western education systems are not necessarily appropriate or achievable in less-resourced settings with different reasons for discrimination, while policies based on international conventions are difficult to enact and unrealistic without regard for local context (Forlin, 2013). This is the case in India, where a disability-only focus does not adequately address school disadvantage arising from the close relationship that exists between poverty, caste and special educational need rather than from disability alone (Forlin, 2013). Extensive educational disadvantage also exists in India because of socioeconomic, culture, caste, language, and gender factors apart from disability (Bawane, 2019). For example, between 2012 and 2014 in Karnataka, children of the Dalit class, over 90 percent of whom live below the poverty line [5], made up half the number of those without a completed primary education [6] and in the same state, girls from scheduled tribes and scheduled castes (ST/SC) disproportionately failed to complete their education due to the intersection of gender with other forms of disadvantage (Bhagavatheeswaran et al., 2016).

Hence, research focused on solving India's particular inclusive education challenges is needed (Sharma et al., 2013a) and, given the central place of the country's nine million teachers in providing educational opportunities to all children (Pit-ten Cate et al., 2018; Rose, 2017) and school leaders in facilitating inclusive school culture and practice (Ainscow and Sandill, 2010), investigation is needed into how best to support and utilise teachers' and school leaders' efforts (Kumar and Azad, 2016; Sahni, 2020). This is the focus of the current paper.

1.1. Current approach to improving school inclusion and learning outcomes in India

In India, the 2009 Right to Education Act (RTE) mandated that

all children between 6 and 14 years of age have access to a free and quality elementary education in their local community (Parliament of India, 2009). This included an allocation of 25% of seats in every classroom to children from economically weaker sections (EWS) and children with disabilities (Chaturvedi and Kuldeep, 2015) and equal access for girls and children of cultural backgrounds with non-dominant languages and religions. It also required that all education be acceptable (free of discrimination, relevant, and culturally appropriate), and adaptable (flexible and adjustable to student requirements, societal changes and community needs).

In support of this goal, the Indian government allocated grant funding to schools for infrastructure improvements and material provisions. This funding was based on a causal argument that by these means, student attendance would increase, which would, in turn, improve learning.

A causal argument has also been called a logic model a theory of how inputs and outputs relate and bring about desired outcomes (Alter and Murty, 1997). It makes explicit the key assumptions of program processes and so can help identify faults in causal arguments underlying failures (Stegemann and Jaciw, 2018; World Bank, 2000). Programming based on misguided logic reflects a problem in conceptualising causal arguments reliably (Rowan, 2000). It is important to go beyond policy statements to clearly express the intended goals and mechanisms for achieving them (Goertzen et al., 2003).

In India, a 2013 report for Accountability India on the government's failure to achieve the requirements of the RTE Act (Abogan et al., 2013) identified a source of misguided program logic (Rose and Doveston, 2015). Multiple datasets were accessed to determine statistically significant relationships between what the government supplied and the outcomes. The report found that while school enrolment had increased, funding overall had a negative impact on instructional quality and learning outcomes because of a tendency to focus on and supply aspects easy to measure but too remote to the classroom to benefit learning.

2. Materials and method

A scoping review was selected in line with the exploratory research question that sought to investigate successful interventions involving teachers and school leaders across the spectrum of types of school exclusion in India, with a focus on local grassroots solutions. Scoping reviews broadly map published evidence in relation to exploratory research questions and thus can also help to identify areas where research is still needed (Munn et al., 2018). They aim to report on the range of evidence available on a topic without concern for methodological quality, hence they include grey literature. The exclusion of grey literature can be due to requirements for peer-reviewed material containing findings of statistical significance but can also mean important work reported locally

is missed because of publication bias (Connolly et al., 2018). In the case of grassroots interventions developed to solve local inclusion challenges, it is likely that successful outcomes will be recorded in local publications or perhaps in book chapters or dissertations and theses all grey literature sources.

3. Results

Having established the research question and objectives and the scoping review protocol (step 1), a specialist librarian from the University of Melbourne was consulted to develop the search strategy. This aimed to be as comprehensive as possible within time and resource constraints.

3.1. Target databases and other sources of information

The scoping review conventions were followed in relation to determining appropriate information to search (step 2) (Connolly et al., 2018). This was published and published papers from three main sources: bibliographic databases (setting in advance the number of pages to be screened to three), hand searching of key journals, and literature snowballing. Databases were selected to ensure inclusion of the major journals relating to international inclusive education. In all, 12 bibliographic databases, seven grey literature sites, 11 websites and 15 journals were identified to search. In addition, two local experts were asked for their direct opinions.

3.2. Key terms, search strategies, and conventions

Initially, in February 2020, a search was conducted of Google and two online databases appropriate to the topic Google Scholar and ERIC to locate relevant documents and identify important keywords (Sandieson, 2007) (step 3). The search strategy followed the scoping review recommendation to include a participant, concept, and context (PCC) term in the search string (Aromataris and Munn, 2017). For this initial search, the following terms were used: 'caste' AND 'special educational need' (participant terms), 'includi*' AND 'education' (concept terms), and 'India' (context term). From the results, a concept table was developed, where further identified terms were placed in the respective categories group-type and educator terms under participants, inclusion and educational terms under concept, and country and school-type terms under context. The result was a comprehensive list of relevant keywords developed through an iterative process as familiarity with the evidence base grew.

4. Discussion

Each of themes and sub-themes have important implications for successful inclusive education in India. It is important that school leaders, teachers and researchers reflect on the identified considerations, and recognise the important role of local knowledge in successful support and intervention.

4.1. Improving attitudes, commitments, beliefs and mindsets

In summary of the above tables, in relation to Category A,

Theme 1: Improving attitudes, commitments, beliefs and mindsets, successful interventions suggested three important tasks and some strategies for achieving them. Firstly, school leader trust and commitment must be strengthened. This is a critical task, as the school leader plays a critical role in all aspects of the creation of inclusive schools. Means for engaging and motivating school leaders included reassuring them of the benefits of teacher capacity building in relation to school standing and teacher retention and building on their interests and concerns rather than demanding an inclusion mindset in the first place.

References

- Abogan et al., 2013 A. Abogan, A. Achakzai, V. Bersudskaya, S. Chaskel, M. Corrarino, E. Garin, J. Hammer, et al.
- Lessons in learning: An analysis of outcomes in India's implementation of the Right to Education Act Woodrow Wilson school of public & international affairs, Princeton University (2013) Google Scholar Action, 2014 Indus Action
- Project Eklavya: Making social inclusion possible within private unaided non-minority schools under Section 12 Indus Action, India (2014) (1)(e) of RTE Google Scholar Ahmad, 2015 F.K. Ahmad Challenging exclusion: Issues and concerns in inclusive education in India Researchpaedia, 2 (1) (2015), pp. 15-32 View Record in ScopusGoogle Scholar
- Ainscow et al., 2006 M. Ainscow, T. Booth, A. Alan Dyson Improving schools, developing inclusion Routledge, London (2006) Google Scholar
- Ainscow and Sandill, 2010 M. Ainscow, A. Sandill Developing inclusive education systems: The role of organisational cultures and leadership International Journal of Inclusive Education, 14 (4) (2010), pp. 401-416 View PDF
- Cross Ref View Record in Scopus Google Scholar Alter and Murty, 1997 C. Alter, S. Murty
- Logie modelling: A tool for teaching practice evaluation Journal of Social Work Education, 33 (1) (1997), pp. 103-117 View PDF Cross Ref View Record in Scopus Google Scholar Amor et al., 2021 A.M. Amor, M. Fernández, M.Á. Verdugo, A. Aza, M.I. Calvo
- Towards the fulfillment of the right to inclusive education for students with intellectual and developmental disabilities: Framework for action Education Sciences & Society-Open Access, 12 (1) (2021) Google Scholar Andrabai et al., 2017 T. Andrabai, J. Das, A.I. Khaja
- Report cars: The impact of providing school and child test scores on educational markets The American Economic Review, 107 (6) (2017), pp. 1535-1563 Google Scholar
- Aromataris and Munn, 2017 E. Aromataris, Z. Munn (Eds.), Joanna Briggs Institute reviewer's manual, The Joanna Briggs Institute (2017) <https://reviewersmanual.joannabriggs.org> Google Scholar Bagaria et al., 2014 R. Bagaria, H. Otani, S. Rosenthal
- Case study of madrasa early childhood development centers: Curriculum, teacher training, community engagement and 21st century skills Harvard Graduate School of Education (2014) Google Scholar Bawane, 2019 J. Bawane Paradoxes in teacher education: Voices from the Indian context R. Setty, et al. (Eds.), Teaching and teacher education, 49ff. South asian education policy, research and practice (2019) Google Scholar
- The barriers and enablers to education among scheduled caste and scheduled tribe adolescent girls in northern Karnataka, South India: A qualitative study International Journal of Educational Development, 49 (2016), pp. 262-270



Early Intervention Practices for Children With Autism: Descriptions From Community Providers



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Abstract

Across the country, states are reporting increases in the number of children with autism enrolled in the education system. Although a few specific treatment methods have been established as efficacious for some children with autism in controlled settings, research examining the translation of these treatments into early intervention programs has been minimal. The current study examined provider self-reports of the use of interventions in community settings through focus groups. Providers report the use of both evidence-based and non-evidence-based techniques and indicate that they often combine and modify these techniques based on child, personal, and external factors. Few providers had a clear understanding of evidence-based practice, and all providers reported concerns about adequate training. Implications for early intervention research are discussed.

Autistic spectrum disorder (ASD) is characterized by impairments in social interaction and communication, along with restricted, repetitive, and stereotyped patterns of behavior (American Psychiatric Association, 2000). Autism is an enigmatic disorder of unknown etiology that affects almost all areas of development and is present from birth. Across the country, states are reporting increases in the number of children with this disorder being served each year in the education system, with an average increase of more than 800% since 1992 (Individuals with Disabilities Education Act [IDEA],).

This increase in children with autism, along with treatment studies suggesting substantial gains when treatment is provided at a very early age (Lovaas, 1987; McGee, Daly, & Jacobs, 1994; McGee, Morrier, & Daly, 2000; Strain & Cordisco, 1994), has led to an increased emphasis on early intervention (EI). Although no specific treatment has emerged as the established standard for all children with autism, several methods have demonstrated efficaciousness in research settings and are now considered best practice.

Recently two movements have dealt with the proliferation of multiple treatment methods for children with autism. The first involves the development of best practice guidelines, which either list common practices used with children with autism or include a critical assessment of available practices. The best practices guidelines for California (California Department of Education, 1997) currently include a list of many treatments available for children with autism, without regard for empirical support. In contrast, the New York EI program developed a set of recommendations for children with autism ages 0 to 3 years (New York State Department of Health, EI Program, 1999), which did consider experimental evidence for treatment efficacy. They reported strong evidence for intensive behavioral and educational programming but still offered no recommendations for specific strategies. This method has resulted in a list of preferred treatments to be considered when designing EI programs for children with autism.

Although one specific treatment has not emerged as the established standard for all children with autism, research reviews have described several methods that have been demonstrated to be efficacious with some children with autism in research settings. The most well-researched programs are treatments based on the principles of applied behavior analysis (e.g., Dunlap, 1999; Merlin & Simpson, 1998; National Research Council, 2001; Odom et al. 2003; Rogers, 1998), which represents a wide range of EI strategies for children with autism.

For example, one-to-one Discrete Trial Training has been shown to be very effective for some children. Lovaas and colleagues (Lovaas, 1987; McEachin, Smith, & Lovaas, 1993) have reported that as many as 47% of children enrolled in their in-home, structured program will mainstream into general education and do well academically. Other researchers teaching children in the home using similar formats report positive, yet less dramatic, results (Anderson, Avery, DiPietro, Edwards, & Christian, 1987). More naturalistic behavioral programming, such as Pivotal Response Training (PRT) and Incidental

Teaching, has been successfully used to increase symbolic and socio-dramatic play skills in children with autism (McGee et al., 1994, 2000; Stahmer, 1995; Thorp, Stahmer, & Schreibman, 1995). Of those children under age 5 without functional communication who entered a parent training program using PRT, 50% learned to use speech to communicate (Schreibman & Koegel, 1996). Studies of inclusion models using behavioral techniques such as incidental teaching have also reported positive results for children with autism. Like in-home programs, inclusion projects have reported that as many as 50% of children are later mainstreamed into general education programs and maintain program gains (McGee et al., 1994, 2000; Strain & Cordisco, 1994). The use of positive behavior support to deal with specific behavioral issues in autism has also been shown to be effective (e.g., Carr et al., 1999; Horner, Carr, Strain, Todd, & Reed, 2002). Research examining the Picture Exchange Communication System has indicated positive increases in communication skills (Bondy & Frost, 1994).

A few techniques that are not behavioral in nature are beginning to demonstrate effectiveness as well. A functional, comprehensive technique in North Carolina called Treatment and Education of Autistic and related Communication handicapped CHildren (TEACCH) uses a structured environment, visual cueing, and other strategies to assist children with autism and their families. Case studies and studies of components of the technique support this method (e.g., Marcus et al., 2000; Ozonoff & Cathcart, 1998; Schopler, Mesibov, & Baker, 1982). A developmental model, Floor Time, has also shown some promising results (Greenspan & Wieder, 1997), although these results have been demonstrated primarily through record review.

A second method of determining appropriate practices has involved researchers looking for common elements across various treatments, regardless of method or theoretical orientation. Several researchers have reviewed programs and techniques with both published descriptions and intake and outcome data (Dawson & Osterling, 1997; Hurth et al., 1999; National Research Council, 2001; Powers, 1992; Rogers, 1998). Iovannone, Dunlap, Huber and Kinkaid (2003) examined those reviews and identified six common elements of effective programs: (a) individualized support and services for students and families, (b) systematic instruction, (c) understandable and structured environment, (d) specialized curriculum content focusing on symptoms of autism, (e) a functional approach to problem behaviors, and (f) family involvement. These critical elements may be more important to child outcome than the use of individual techniques.

Although a few specific treatment methods have been established as efficacious for some children with autism in research settings, research examining the translation of

behavioral and educational research into community EI programs (i.e., IDEA, Part C, providers for children 0-3 years of age and school districts for children 3-5 years of age served by Part B of IDEA) is limited. Few have attempted to apply these strategies to public programs (Rogers, Lewis, & Reis, 1987), and no effectiveness trials for EI treatments in autism have been conducted (Lord et al., in press). Based on the experience of limited dissemination of evidence-based practices in other service settings (Weisz et al., 1995; Weisz et al., 1992), it is hypothesized that community EI programs use a variety of interventions, which vary greatly in quality and intensity and are not often based on research findings. Due to increasing numbers of young children with autism, public agencies, such as school districts and EI providers, are struggling to find ways to appropriately serve these children within the current system. New research is needed to examine whether empirically supported treatments are being used in community settings, how they are being adapted, and what barriers exist to their translation into EI programs. The first step in this process may be to simply describe EI-providers' perceptions of the types of techniques they are using in their programs.

To determine what types of intervention techniques are being used in community settings (including those with and without an evidence base), we conducted a qualitative study of the practices of EI providers working with children with autism under the age of 5. Providers in two southern California countries participated in a series of focus groups to help answer the following questions: (a) What methods are providers using in their publicly funded EI programs? (b) Do providers have an understanding of which intervention techniques have a research base? (c) How are providers adapting research-based practices to fit community settings? and (d) Do EI programs have any of the "common elements" of successful programs defined in the literature?

METHOD

Study Design

Qualitative methods via focus groups were used to investigate the techniques employed by EI service providers working with children who have ASD. A focus group approach was chosen to obtain an unbiased, comprehensive understanding of the ways in which different service providers in various EI settings discuss, modify, and apply the techniques they use with children with ASD. Focus groups are defined by the use of participants who have a specific experience with or opinion about the topic under investigation, the use of an explicit interview guide, and the exploration of subjective experiences of participants in relation to predetermined research questions (Gibbs, 1997; Merton & Kendall, 1946). This approach is ideally suited for conducting exploratory investigations, such as the one reported in this article (Morgan, 1988).

Setting and Sample

Focus groups were conducted in San Diego County (consisting of 42 school districts) and Riverside County (27 school districts) in southern California. These counties were selected based on their representation of urban areas expected to have sizeable populations of children with autism (populations = 2,906,660 and 1,635,888, respectively; see Notes 1 and 2) and willingness to participate. The California Department of Education (2002) reported 152 children and 401 children ages 0 to 5 with autism in Riverside and San Diego counties, respectively.

Four focus groups were conducted with 22 early-intervention service providers working in both in-home and center-based settings. Introductory letters explaining the study were sent to special education directors and infant program providers (funded through California Early Start) serving children with ASD in both counties. Programs that expressed interest in participation and were currently serving children 0 to 5 years of age with ASD were asked to provide the names of one to two individuals for participation. Individual providers were then mailed an introductory letter describing the study and inviting them to participate. Groups were limited to a maximum of eight participants each.

To participate, a provider needed to be the primary service provider or supervisor in an educational/EI program and have at least one child with autism in his or her program. To assess services for children ages 0 to 3, agencies that contracted with the local regional center were contacted for participation. Many of these contracted agencies provide in-home services for children with autism. In-home agencies typically consist of a psychologist or other licensed professional who oversees the agency, program supervisors who develop individual programs for children with autism under the supervision of the psychologist, and therapists who provide the day-to-day service under the guidance of the program supervisor. Individuals at the level of program supervisor were asked to participate in the focus groups. The qualifications for these individuals vary by agency; however, they typically have a bachelor's or master's level degree, as well as experience in the field of autism. In group programs for children 0 to 3, the lead "teacher" in the classroom was asked to participate. The type of lead teachers in these programs varies by agency and may include early childhood educators or special educators, but these service providers are not usually required to have a teaching credential or specific degree. Once children turn 3, they are transitioned to school district services. For these programs, the classroom teacher was recruited for participation. These individuals had to conform to district policies in terms of education and licensure. Service providers were invited to participate in the focus groups based on their role in the development of programming for children with autism in their care and their role in supervision of para

professionals implementing interventions with these children. Because the term "teacher" carries connotations of licensure, the term "service provider" will be used to refer to the focus group participants.

Service providers in each county were contacted until approximately six to eight possible candidates were available for each group. A time was specified for the focus group meeting based on service provider preferences. Participants were divided into four focus groups based on (a) provider's county of employment and (b) age range of children with whom the provider worked (either under 3 years of age or 3–5 years of age). Groups were divided this way to facilitate within-group interaction and to minimize any across-group differences (Morgan, 1988). These particular groups were chosen based on program differences in organization and federal funding categories for children within each of these age groups.

All participants were women; this was not due to sample bias but, rather, was an artifact of the target population. Originally, 25 participants were enrolled; however, 3 of the participants did not attend due to difficulties that arose unexpectedly when the group was to meet. Of the 22 service providers who participated, 19 (86%) were White, 1 was African American, 1 was Asian/Pacific Islander, and 1 was American Indian. Participants ranged in age from their 20s to their 50s, with the majority being in their 20s and 40s [$M = 37.22$; $SD = 9.66$]. In terms of education level, 3 participants reported having below a bachelor's degree, 11 had a bachelor's degree, and 8 had a master's degree. Eight participants reported having a Special Education Credential, 1 had a General Teaching Credential, 2 had an Emergency Credential, and 11 had no credentials. Years of experience working with children with ASD ranged from 1 to 30, with a mean of 9.86 ($SD = 8.18$) years.

Data Collection

An interview guide was developed to examine participants' use of various techniques in their EI programs (see Appendix A). Questions for the guide were generated based on the study goals and the pilot discussion with several providers about their program procedures. The interview guide was piloted with six EI providers (who did not later participate in the focus groups); minor revisions were made for clarification.

The discussion began with basic questions (see Appendix A), then moved toward more sensitive issues regarding specific methodologies. During the initial questions, the service providers gave descriptions of their programs, which typically included the intensity of programming, the number of children served, details about the setting, parent participation, and some description of specific techniques.

Consistent with a well-established tradition in focus group methodology (Merton, 1987; Schensul, 1999), the next phase of

the discussion used two vignettes, presented one at a time, to facilitate discussion among the providers through exposure to uniform stimuli and provide a basis for the quantification and comparison of responses within and across focus groups (see Appendix B). Using a vignette describing an actual child similar to those served by the service providers generated a clearer picture of methods used and how those methods were chosen. Each vignette described a hypothetical case history of a child with ASD. All participants received the same two vignettes, with the ages of the children altered to fit the group. The first child presented had significant delays in cognitive and adaptive areas and a lack of communication skills. The second vignette described a child with some language skills, moderate behavioral issues, and mild delays. Participants were asked to read over each vignette and then decide what type of program they would recommend if such a child came to their program. Participants responded in an open-forum type of discussion. To reduce experimenter bias the definitions of an intervention were intentionally open-ended. Participants were asked to use their own words to describe the program, including any techniques strategies, or methods they would choose to use. As participants responded, the co-moderator recorded the various interventions mentioned onto a flip chart displayed before the group. All methods mentioned were written down, regardless of whether they were a research-based comprehensive service, a specific strategy, or a general technique. The number of service providers who would use the specific technique with the child was recorded.

To ensure that all participants had input, the moderator asked different participants to begin each discussion and to provide input throughout. After all the participants had an opportunity to contribute to the discussion, the moderator asked participants to rate each intervention or technique according to whether they thought it was evidenced based (defined loosely for the participants as a technique or strategy with scientific research to support effectiveness with children who have autism) or not evidenced based. These responses were recorded for each participant. Participants were also asked if each technique was autism specific (designed for children with a variety of disabilities or specifically designed for children with autism) and about the utility, validity, and feasibility of using the technique. Participants were also asked whether (and if so, how) they altered the techniques. Finally, participants were asked to suggest one improvement to the E1 system.

Procedure

Focus groups lasted no more than 2 hours each, including a short break. Participants were given an informed consent form and a background questionnaire. Background questions included information about age, district/agency, education, race, gender, classroom/program type, and teaching experience. The moderator, who was the same for each group, began each session by welcoming the participants and providing them with

the agenda. After introductions, the moderator asked participants to provide an overview of their programs. Next, the moderator distributed the first of two written vignettes to each of the participants. Participants read over the vignette and discussed the type of program they would recommend if such a child came to their program. Additional questions were asked, as previously described (also see Appendix A). At the end of each group, participants were thanked and given a \$10 gift certificate to an educational supply store.

Data Analysis

Data analysis was guided by grounded theory (i.e., theory derived from data and then illustrated by characteristic examples of data; Glaser & Strauss, 1967). First, audiotapes of focus group discussions were systematically transcribed and then reviewed by the research team. The transcripts were then independently coded by the project investigators at a very general level to condense the data into analyzable units. Segments of transcripts ranging from a phrase to several paragraphs were assigned codes based on a priori (i.e., based on questions in the interview guide) or emergent themes. Each transcript was independently coded by all three investigators. Disagreements in assignment or description of codes were resolved through discussion among investigators and enhanced definition of codes. The final list of codes, constructed through a consensus, consisted of a list of themes and issues, accounts of behaviors, and responses to the presentations of vignettes. The transcripts were then assessed for agreement among the authors on the coding, based on a procedure used in other qualitative studies (Boyatzis, 1998; Bradley et al., 2002). Inter rater reliability was assessed for a subset of one third of each focus group transcript. For all coded text statements, the coders agreed on the codes 95% (range = 93%–98%) of the time, indicating good reliability in qualitative research (Boyatzis, 1998).

The constant comparative method (Glaser & Strauss, 1967) was then used to identify five primary themes and three secondary themes. Themes were constructed on the basis of comparison of codes assigned to segments of text to identify characteristics they shared and characteristics that distinguished them from other codes. Primary themes were defined as (a) using research-based practices, (b) understanding which practices were evidence based, (c) determining which intervention to use, (d) adapting specific interventions, and (e) specific training. Secondary themes were defined as child characteristics, participant characteristics, and external factors that influenced choices within the major themes. Additionally, comments were coded according to the six elements common to excellent autism programs (Iovannone et al., 2003). Themes were compared across groups to look for trends. Representative quotes from various categories were selected and presented in italics to exemplify the descriptive summary of the qualitative data.

In addition to the qualitative data derived from transcripts, quantifiable results in the form of tallies were available for some variables. Participants' reports of technique use were written down so the number of participants using each technique could be quantified. Program description information was transcribed by participant to quantify the specific elements of each program. This was critical to our overall study, because it allowed for a thorough and relatively quantifiable content analysis of the locus group sessions. This technique of using both qualitative and quantitative data collection in focus group analysis has been well-established in the literature (e.g., Krueger, 1994; Nassar-McMillan & Borders, 2002; Vaughn et al., 1996).

Results

Methods Used in EI Programs

When asked to describe their teaching strategies, participants listed more than 40 different strategies or interventions important to their EI programs. These ranged from intervention techniques (those methods that consist of a set of strategies for treatment delivery and have a specified protocol) such as DTT (Lovaas, 1987) or TEACCH (Schopler, Mesibov, & Hearshey, 1995) to very specific strategies such as modeling and data collection, which are typically used as one part of a larger intervention. Service providers mentioned 30 intervention techniques and 21 specific strategies in the course of the focus groups. Approximately 17 of the specific strategies were part of the intervention techniques mentioned. Of the 30 intervention techniques, 13 were described in more than one focus group, indicating some permeation into the system rather than an idiosyncratic preference of one participant or program. Six specific intervention techniques were used by participants in all four focus groups: applied behavior analysis (ABA), Floor Time, occupational therapy (OT), PECS, sign language, and Social Stories. At least three of the four groups also endorsed DTT, music therapy, PRT and the TEACCH methodology. The most widely used intervention was PECS, with almost all of the participants mentioning it, even those who did not use any other intervention in their programs (see Table 1). Applied behavior analysis—defined broadly by our participants to mean the use of behavioral strategies but not including specific techniques such as DTT or PRT—was used by 72% (n = 16) of participants, followed by OT (including sensory integration), Floor Time, DTT, TEACCH, and sign language. Only 18% (n = 4) of participants did not use any specific interventions regularly, although all but one of these did use a “modified” PECS at times. Three of the four participants who did not use intervention techniques regularly were from rural areas of each county.

TABLE 1
Use of Intervention Programs in Community Early Intervention Settings

Intervention program % (n)	Percentage of participants using methodology		
	0-3 Programs 45	3-5 Programs 55	Total 100
	(10)	(12)	(22)
Applied behavior analysis	60 (6)	83 (10)	73 (16)
Discrete trial training	50 (5)	75 (9)	64 (14)
Floor time	70 (7)	67 (8)	68 (15)
Occupational therapy (SI)	50 (5)	100 (12)	77 (17)
Music therapy	20 (2)	25 (3)	23 (5)
Picture exchange communication	90 (9)	100 (12)	95 (21)
Pivotal response training	30 (3)	33 (4)	32 (7)
Sign language	50 (5)	50 (6)	50 (11)
Social stories	30 (3)	17 (2)	23 (5)
TEACCH	30 (3)	75 (9)	55 (12)
Minimal use of intervention programs ^a	10 (1)	25 (3)	18 (4)

Note.

SI = sensory integration; TEACCH = Treatment and Education of Autistic and related Communication handicapped Children. Three of these participants said they used a modified picture exchange communication system with some students, but they were not specifically trained in the intervention: one participant did not use any autism-specific intervention methods.

Those four participants who stated they did not use any specific intervention techniques indicated that they were using the same strategies as some of the intervention techniques but did not describe the strategy by the technical name (e.g., “I call it ‘teaching the kids’”). For instance, one participant stated that she did not use a specific strategy or intervention technique for teaching play skills: “That’s one of the centers we have, it’s like, you know, the play area. Just basically teaching him how to play with different toys. With the adult, and then a bit later on with another child... playing.”

The participants who did not use any autism-specific intervention programs served children with a variety of disabilities in their programs and used general teaching strategies with all the children. They typically described their center-based programs as pretty much like a preschool class that you might see in the community someplace We start the day with a circle activity, name identification, numbers and calendar, and we count how many are here and how many are absent and those sorts of things We stress communication at all times. That’s our biggest focus. The [children with autism] do pretty much what all the other kids in my class do, and most of the kids in my class are just language delayed ...

A participant who worked in a home setting said, “What we do is go to the homes one time a week, usually, sometimes two times a week and it’s usually an hour-long visit Our philosophy is to sit down with the family ... and work with the children. We work on developmental skills. All of our

children have many disabilities. Depending on the disability, we work on those skills.

This subgroup of participants worked in districts that served fewer children with autism and had lower population densities in general. There did not seem to be a difference across age groups.

All of the participants who mentioned specific intervention techniques used more than one method. For example, one participant stated, "I've done everything. I've been trained in DT ... we have some sensory, a lot of kids are on a sensory diet ... and we have Speech and OT ... some of my kids have PECS systems, and some of them are verbal. We have Discrete Trial behaviorists that come in as well. I don't have anybody on TEACCH baskets right now, but I have had and we'll use that. We do a little PRT kind of a Floor Time sort of approach and some of my staff have been trained in that ..."

Understanding Which Intervention Techniques Are Evidence Based

Participants tended to endorse any intervention they were using as being evidence based. They indicated that ABA, DTT, music therapy, OT and sensory integration training, PECS, PRT, and TEACCH all had a solid evidence base. They could not agree on Floor Time, parent education, sign language, Social Stories, or vision therapy. It appeared that if a participant had attended a workshop or lecture on a method, she felt that there was sufficient research to support it. Often the participants did admit they did not know or began a debate that indicated a lack of knowledge in the area. None of the participants mentioned reading any specific research papers or reviews, nor did they mention using the California Best Practice Guidelines.

Of the 30 interventions participants listed, approximately one third ($n = 9$) were evidence based or had at least some evidence of efficacy for children with ASD, if only from record review (National Research Council, 2001). However, participants endorsed (by coming to consensus as a group) more than 50% ($n = 15$) of the methods as being research based. They were unsure about or could not agree on another 20% ($n = 6$) of methods. They claimed that there was no research or poor research for about 30% ($n = 9$) of the techniques mentioned in the groups.

Research-Based Practices That Fit Community Settings

The participants reported making a variety of adaptations in their research-based practices. The most prominent adaptation was using multiple techniques in a single program, as well as with individual children. Their specific technique adaptations seemed to depend on a variety of factors, but three areas of focus became clear: (a) the characteristics of the individual child; (b) the preference of the particular participant; and (c) external factors, such as funding and support. When

participants discussed a particular technique, their reasons for choosing the technique and reasons for adapting the technique from the version they read about or learned were coded according to these factors.

The majority of participants (72%; $n = 16$) chose specific interventions based on characteristics related to each individual child's strengths and weaknesses. One participant explained, "Depends on the child. You know, so much of the therapist is not responding to the way that the book says to do it." Some examples of child characteristics that would lead a participant to alter a program include using creative methods to motivate a child based on the child's own likes and dislikes, using one-on-one techniques with a group of children, and shortening or lengthening sessions based on a child's attention level.

Participants tended to choose more structured intervention programs that involved one-on-one teaching or discrete trial techniques when a child had more severe cognitive delays, needed to learn compliance, or did not imitate or attend in less structured settings. At least one participant indicated that DTT was not appropriate for a child under 3 or 4 years of age, but this was not a typical response. Naturalistic techniques such as Floor Time and PRT were typically used to increase generalization of skills (often skills that were first taught in a DTT format), increase motivation, increase turn taking, and improve social interaction. Nonverbal communication techniques, such as sign language and PECS, were typically used for children who did not have verbal language. Participants described using PECS when sign language did not work, for older children who were able to recognize pictures, and to increase word-finding skills. Sign language was used with non-verbal children, if it worked for the child, or if the child was using gestures.

Participants mentioned they used TEACCH techniques for children who needed to learn to do independent work or task completion. They had some concern about using this technique with very young children, although there was some disagreement about this. Visual schedules were used for transition difficulties, or if the child needed to feel more independent. Participants felt that inclusion was important once a child "was ready." The definition of "ready" varied, but consensus was that children needed some language and needed to be higher functioning. Occupational therapy and sensory integration training were seen as essential for children who had sensory sensitivities, were overstimulated, engaged in self-stimulatory behavior, or had motor or feeding difficulties.

Participants also discussed choosing (or not choosing) a specific technique based on personal reasons (45%; $n = 22$): "You're not gonna do Discrete Trial if it's something that you don't feel comfortable with, so you change it to adapt ... It's the same thing that we do with Links [Links to Language Program], or a sensory program, or anything else."

Participants were quite varied about whether they enjoyed the highly structured DTT. One participant stated, "I don't like it, but it is useful and we need to do it It is a pain in the neck." Other participants thought it was boring to implement or made the children seem robotic. Some stated DTT was their favorite technique due to the success they had seen with their programs. Some felt DTT was necessary for compliance and language training. Most participants using this technique reported that they also used other programs to increase generalization and social skills.

Participants who enjoyed using Floor Time emphasized the importance of building relationships with the children: "I am a big fan of it; it is important for the relationship level with the family." Participants who used PRT often felt it was intuitive for them, that it allowed for more social and turn-taking opportunities, and was fun to implement. Most of the participants enjoyed using sensory integration, although some did not enjoy specific techniques, such as brushing. Participants reported modifying all techniques they had learned to fit their own style:

I always tell the girls [classroom aides] when they come in to work for me, that it doesn't matter so much that they have to mimic me, but they have to take their personality and fit it to how it'd work for them. You don't want to put a square peg in a round hole, because our personalities aren't the same, and then I also try to match up children with the same type.

Finally, use of a technique was sometimes based on external factors (55%; $n = 12$). For example, the use of inclusion as a treatment technique was highly dependent on the availability of typically developing peers. Programs co-located with state preschool were more likely to include typical peers. Additionally, participants felt that sufficient staffing to support a child in an inclusion environment was essential but not always available. Several participants had children in inclusion programs simply because the school district demanded it. Participants in classrooms often felt the need to modify one-to-one strategies for use in a group setting.

They [children with autism] don't need to learn how to do it in an isolated setting in an isolated way. They need to learn how to do it with a peer, with a friend, in a social manner, together, playfully. So I've always done Discrete Trial in a group of one or two, on the floor, with toys in a natural setting. My program's always been a full-inclusion setting, always, no matter how autistic the child was. So it's always been, I mean, we call it Discrete Trial because some people wanted to hear that word, Discrete Trial, but it's never really been Discrete Trial.

Participants thought that the programs they had learned were geared toward one-to-one teaching and that was not typically possible in a classroom environment.

The participants who enjoyed the naturalistic programming were frustrated by the difficulty they had collecting data on children's progress when using those programs. Districts and agencies often required specific data on skill acquisition, which participants thought was most easily obtained using structured techniques. For some programs, this need for data drove the choice of technique, rather than the child's need or provider preference.

Training in Intervention Programs Used in EI

Although we did not specifically ask about training, at each focus group, participants talked about needing more training, both for themselves and for para professionals. Training ranged from attending a brief workshop on a method to ongoing training and supervision. Participants with ongoing supervision reported feeling the most supported and confident in their use of the technique. All of the participants stated that paraprofessionals provided an extensive amount of service but did not receive the same level of training as the participants:

We had a staff development day that was mandatory for our teachers and then we didn't make it mandatory for our [aides] I know my two aides never worked with children with autism. They just had, you know, regular kids, so it's been really hard telling them five different directions. It's the little things that they do. I mean if they didn't go to it, you have to tell them all the information.

Many participants thought they could train their paraprofessionals but did not have the time to do so. A few programs, however, did allocate time for training: I am so reliant on my aide. I have the time built into my week that I do staff training once a week, but you know, a lot of programs and districts don't give that, and I think that your program is dependent on that.... Everybody needs to be highly trained, if not for any other reason than from a legal perspective.

The need for ongoing training for all staff was echoed through each of the groups, as well as an understanding that to adapt these methods to work with various children in different environments, a good understanding of the original technique was needed.

Common Elements of Successful Programs

We asked participants if EI programs had the "common elements" of successful programs defined in the literature. We examined the participants' comments and responses based on the six effective practices outlined by Iovannone et al. (2003). Iovannone et al. were chosen for several reasons: (a) The authors summarized and integrated several other strong reviews of the literature (including Dawson & Osterling, 1997; Hurth et al., 1999; National Research Council [NRC], 2001; Powers, 1992); (b) Iovannone and her colleagues included the

components of the NRC review, except intensity of engagement and early entry, which we could not measure through our focus group methodology; and (c) these authors provided clearer operational definitions of each category than any other reviews. These definitions allowed us to assess whether EI providers were using effective practices or whether they used evidence-based techniques. The four groups were relatively similar in their descriptions of program elements. However, the 0-to-3 programs tended to use systematic instruction and a structured environment less often than the preschool programs (see Table 2).

TABLE 2
Use of Common Effective Educational Practices in Community Early Intervention Settings

Effective practice % (n)	Participants using practice		
	0-3 Programs 45 (10)	3-5 Programs 55 (12)	Total 100 (22)
Individualized support	70 (7)	67 (8)	68 (15)
Systematic instruction	50 (5)	83 (10)	68 (15)
Structured environment	50 (5)	75 (9)	64 (14)
Specialized curriculum	80 (8)	75 (9)	77 (17)
Functional approach to behavior problems	70 (7)	67 (8)	68 (15)
Family involvement	80 (8)	75 (9)	77 (17)

Individualized Support and Services for Students and Families. Most providers mentioned the importance of individualizing programs based on specific child characteristics (68%; $n = 15$). Smaller programs were not able to offer flexible placements based on child need but typically individualized within the single placement. Larger programs offered more placement options due to more classrooms. Some of the variation in placement included home programs, a range of center-based programs (e.g., severely or non-severely handicapped; autism-specific), opportunities for inclusion, as well as intensity of speech and occupational therapy. None of the participants mentioned high engagement as an important element of programming.

Systematic Instruction. A majority of the providers used autism-specific intervention programs with systematic teaching procedures (68%; $n = 15$). However, participants did not mention how the quality of this instruction was monitored. Only a rare few had supervision in any of the specific intervention methods. Some participants in the San Diego groups mentioned data collection on the children's progress as one method of assessing effectiveness. No participant mentioned how the effectiveness of the overall procedures was evaluated.

Comprehensible and/or Structured Environment. Participants in center-based programs mentioned structuring the classroom to increase children's ability to predict their environment (64%;

$n = 14$). They mentioned strategies such as picture schedules, transition songs, verbal warnings, or transition objects, as well as using a daily routine with scheduled, predictable activities. Several participants mentioned using more naturalistic techniques to help generalize skills learned in structured settings. A few participants mentioned generalization of skills to the home environment. Participants in home programs only rarely mentioned structuring the environment in a systematic way.

Specialized Curriculum Content Focusing on Symptoms of Autism. Participants in each focus group mentioned specific curriculum elements relating to social, communication, leisure, and functional skills (77%; $n = 17$). Other areas of curriculum were described, such as joint attention skills, symbolic play, motor, and self-help skills.

A Functional Approach to Problem Behaviors. The providers were specifically asked what they would do if the child in the vignette had severe tantrum behavior. Participants typically described the use of behavioral methods such as time functional analysis and teaching alternative behaviors (68%; $n = 15$). They gave examples of modifying the environment to reduce problem behaviors. Although many participants did not use behavioral terms, their approach to dealing with the tantrums involved assessing the causes of the behavior and altering the antecedents and consequences. The participants were concerned with building rapport and providing a positive experience for the child without compromising learning.

Family Involvement. Participants discussed parent education or participation as an essential aspect of their programs (77%; $n = 17$). However, there were mixed feelings about how to involve parents. Some programs included parent involvement for all children through classroom participation, communication notebooks or phone calls, structured parent education opportunities (workshops, support groups), or training. In the 0-to-3 programs, participants were more likely to report that parent education was a main focus of the program:

Our philosophy is to sit down with the family, the primary care givers, and work with the children. We, as the support, the participants, pulling back and really trying to get the parent[s] to interact with that child so that they know that they can work with that child.

Concerns participants raised about parent involvement included difficulty with follow-through for some some families: I mean, I have the time in my schedule, it's built in ... I can either go to their house and have a parent conference; I call them at work; I can call them at home; they can come to me, but the student that has the most autistic things going on in his life has the parent who, I think, does the least, except ask me to do it all, and so, it's really difficult to make sure that it's being carried over.

Some programs reported that they did not have time built in to meet with families but that they would do so on their lunch break or after school; other participants said they had 1 to 8 contact hours per month devoted to parent education. Although 77% of the programs said families were involved in programming, the 0-to-3 programs, especially those conducted in the home, had a greater emphasis on family functioning and education, as well as more positive feelings toward family involvement.

Discussion

The present investigation provides a preliminary examination of service providers' reports of their use of specific treatment practices in EI programs for children with autism. Because little is known about community EI services for children with autism, this study is seen as a first step toward understanding how service providers implement programs. Frontline workers charged with designing, implementing, and tracking EI programming described the interventions they use with children with autism. Although many of the participants may have had only superficial knowledge of specific intervention techniques and the adequacy of their implementation of these techniques is unclear—we thought that beginning with their own descriptions of programming would provide an initial understanding of what community providers thought they were giving young children with autism. Additionally, the statements of these participants would provide some understanding of the permeation of various intervention techniques into the public EI system.

The types of intervention techniques reported as used most often by community providers included those with and without some research base. Although no autism treatments currently meet criteria for well-established or probably efficacious, empirically supported treatment (Lonigan, Elbert, & Johnson, 1998; Rogers, 1998), most researchers would agree that of the techniques mentioned by the participants most often, ABA, DTT, PECS, and PRT have a relatively strong evidence base (National Research Council, 2001; Rogers, 1998). Floor Time, TEACCH, and sign Language have ease report and record review evidence of success with children who have autism (Greenspan & Wieder, 1997; Lord & Schopler, 1994; National Research Council, 2001), but OT, music therapy, and Social Stories have minimal, if any, research-based evidence of success (e.g., National Research Council, 2001; Smith, 1996). It seems, then, that a few evidence-based interventions for children with autism have been translated into public EI systems, as have other programs that do not have a research base.

Although participants expressed a desire to use methods that have been shown to be effective, they had not analyzed the research base for the programs they used. This lack of

examination of the evidence speaks to the need to improve training for service providers in the area of evaluation of research and treatment effectiveness. It appears that program marketing, availability of training, provider preference, and external factors such as parent requests influence the use of specific practices more than whether the practice has any evidence of efficacy. Therefore it is critical that the research community examine the methods used to reach EI agencies and families to make research-based practices available and to increase understanding of the difference between a research-based technique and other techniques.

Although service providers are reporting the use of evidence-based practices, they report using these practices in a highly modified form. First, service providers in this study reported combining several methodologies to develop individualized programs based on each child's specific characteristics. Second, all of the participants reported adapting the program from the training protocol to fit their own program or teaching preferences, as well as the needs of individual children within their program. Finally, the majority of participants felt that adequate training for themselves and the paraprofessionals in their programs had not been provided. All of these factors raise significant issues for the use of evidence-based practices for young children with autism.

First, the idea of combining techniques is controversial and underresearched. The specific treatment methods described by the service providers as evidence based were studied using the specific program in isolation. Little research has been conducted that examines the use of these methods in combination. McGee et al. (1999) advocated the use of one treatment strategy because of the possibility that multiple treatments will confuse the children. They "take the position that the 'more is better' tenet applies to hours of intervention and not to various methods of intervention" (McGee et al., 1999, p. 144). Other researchers have suggested that an individual child may respond better to one treatment than another (Anderson, 2002; Anderson & Schreibman, 1999; Ingersoll, Schreibman, & Stahmer, 2001; Rogers, 1996; Sherer, 2002; Sherer & Schreibman, in press). A recent study examining a toddler program that combines research-based methods reported results similar to those found in single-technique programs (Stahmer & Ingersoll, 2004). However, this research is in its infancy, and there has been no documentation of the types of adaptations needed to combine programs or which adaptations may reduce the efficacy of any individual technique.

Second, no examination of the types of adaptations being made, or whether these adaptations alter a technique significantly, has been conducted. Researchers often call for individualization of treatment for young children with autism; however, very little research has suggested exact methods of adaptation based on

specific child characteristics (Schreibman & Anderson, 2001). Finally, no fidelity of implementation research has been conducted in community environments to examine whether community service providers are implementing these methods effectively after what they describe as only minimal training. If a provider does not understand the philosophy behind the intervention or cannot conduct the treatment with precision, it is highly unlikely that adaptations of the method will be effective.

The majority of participants said they used the most common effective elements reported by researchers as essential to good educational programming (Iovannone et al., 2003). This finding is important, in that even if the participants are not using specific evidence-based interventions, they may be getting at the common important elements that bridge many of the methodologies. These service providers gave rich examples of how these common elements are used in their programs. Of course, it is impossible to know if these elements are being implemented appropriately, but it is an important first step that the service providers in the community recognize that these are important factors in their programs. As researchers examine fidelity of implementation of specific intervention programs, it will be equally important to study the appropriate implementation of these common elective elements. Currently, there are no standardized methods for measuring these common elements in community programs, nor is it clear if these elements are necessary or sufficient for providing good services to young children with autism.

Limitations

Providers who participated in the focus groups were those willing to come and talk about their programs. Despite this apparent limitation, we had a good mix of highly evolved programs and those new to serving children with autism. Many of those agencies and districts that did not participate did so passively by not responding to repeated calls. The extent to which the participants' programs are representative of all service providers in southern California or in other locales is not known. However, anecdotally, the service providers spanned a range of programs similar to those seen in other districts in San Diego and Riverside counties.

Another concern was the extent to which the discussion influenced the participants' answers. That is, did the service providers come to consensus on a specific program or state that they used intervention techniques because other participants were doing so or because it was what they would rather do? Although this is a valid concern and certainly a limitation to this study, anecdotally, the participants appeared to be honest in their descriptions. Participants in all of the groups were kind to one another and accepting of all responses. Participants using limited research-based interventions were eager to learn from other programs and made plans to exchange information after

the focus groups. Research asking service providers individually about interventions is currently being conducted to address these concerns.

Another limitation is that these data are composed completely of self-reported program information. There is no way to know whether the service providers are actually conducting their programs in the way they described and no way to estimate the quality of programming, as no fidelity of implementation data are available. This makes it difficult to understand the adaptations of the programs and the providers' understanding of how techniques can be adapted. Additionally, there is no way to know whether providers are actually combining techniques or simply using terminology that they think best describes what they are doing. Future research steps will examine concordance between provider report and what actually happens in treatment settings.

Implications for Autism EI Services

Legislators and researchers are currently emphasizing the delivery of research-based practices in many areas, including autism services. Therefore, it is critically important to examine the attitudes and experiences of service providers in community-based settings. Although many service providers reported being supportive of the use of evidence-based techniques, most did not have a good understanding of what the research was saying in the area of autism. Most of the providers reported using at least one evidence-based technique; however, these same providers were just as likely to report using poorly researched techniques as well.

These findings provide insight into recommendations for successful translation of research-based practices into EI programs for children with autism. Pragmatic issues regarding the use of the techniques in classroom settings must be addressed. Validity concerns when techniques are combined or modified should also be examined. In addition, adoption of any new intervention is likely to be facilitated by increased marketing to both community agencies and family members, access to low-cost training, and methods for use in group teaching situations.

Additional research is required to provide a more detailed description of EI programming for young children with autism. It will be imperative to survey a wide range of service providers to get a broader picture of methods used in EI settings. A survey will allow for analysis of the use of evidence-based programming, as well as the common elements seen in superior programming, while taking into account provider education and experience, number of children with autism in the area, and other program components. Finally, researchers will need to validate the self-report measures to determine whether providers are using these techniques in the ways they describe.

how they are modifying programs, and the amount of training needed to ensure quality programming.

APPENDIX A Focus Group Discussion Questions: Introduction

The purpose of the group today is to get a sense of what teachers are doing in different early intervention programs that serve children with autism. We have asked teachers with a variety of backgrounds, years of experience, and so on to get a well-rounded view of what is happening. There are no right answers; we just want to know what the classrooms/programs are like. We don't have a notion of what they should be like. All of your different perspectives will be helpful.

Opening Question:

Tell us who you are and what you most enjoy doing when you are not at work.

Introductory Question:

What brought you to special education and, specifically, to working with children who have autism?

Transition Question:

You are here because you work with children who have autism spectrum disorders. Give a brief overview of your program for those children.

Key Questions:

Provide first vignette and read aloud.

1. What type of program would you set up for this child if he came to your program today?
 - a. What specific techniques might you use (if any)?
 - b. Are any of these techniques autism specific?
2. Would you need to adapt any of the strategies or techniques you listed for this child? That is, how might your use of the technique be different from what the "manual" says?
3. Tell us which techniques you listed that you think have some research supporting their effectiveness.
4. Are there any techniques you might use in your program that we did not discuss today?
5. Tell us about any techniques you don't like. Why don't you like them? Why do you still use them?
6. Tell me about the things you have tried and discontinued. What prompted you to discontinue the technique(s)?

Ending Question:

If you could choose one thing to change about the current early intervention system for children with autism, what would it be?

APPENDIX B

SAMPLE VIGNETTE : ALEXANDER CHRONOLOGICAL AGE : 2 YEARS 11 months

Diagnostic Impression:

1. Autistic Disorder
2. Borderline Developmental Delay, provisional

On the Bayley Scales of Infant Development (Bayley, 1993), Alexander is scoring in the borderline range (78) with a communication age equivalent of 22 months and a nonverbal age equivalent of 26 to 30 months. He is using words and pointing to communicate his needs. He asks for bubbles and a variety of other items. Alexander does have some difficulty with word finding and is engaging in some echolalic behavior, repeating what he has just heard. He is using the pronoun "I" very appropriately. He is repeating words he hears within 2- to 3-word sentences and has a speaking vocabulary of at least 20 words; however, he usually uses 1- to 2-word phrases when he speaks spontaneously. Alexander is able to follow simple commands without cues, such as "sit down." He can point to a variety of pictures and can identify body parts via pointing. Alexander has difficulty with relating to people in his environment. He is a very cautious, shy little boy who has difficulty separating from his parents. He does engage in some reciprocal interaction using eye contact, and he engages in some joint attention, such as showing and clapping with his parents. His parents report that he has more difficulty relating to other children, although he is beginning to observe other children and to attempt some interaction at this time.

Alexander's play is somewhat immature for his age. He enjoys simple toys, such as busy boxes and puzzles and a spinning train. He is not yet engaging in symbolic play on his own but will feed a doll when asked to do so. His preferred activities are somewhat stereotypical in nature. He will drive his toy trains around the track and likes to carry them around with him. Alexander has been observed engaging in some hand-flapping, especially when very excited. He enjoys watching fans and will talk about fans he has seen. He has motor planning difficulties as evidenced by his poor ability figuring out how to get on and off toys, such as a sit-n-spin. He also exhibited low muscle tone throughout his body. Alexander has difficulty with transitions and changes in plans. He is also somewhat distractible but can complete a task when redirected. He is able to tolerate structured sitting with minimal cues for redirection. He is also able to persist in an activity despite being challenged. Alexander has some delays in his daily living skills. He is beginning to use utensils but prefers to use his fingers when possible. He is cooperating with dressing and is able to remove his shoes. He is letting his parents know when his diaper is dirty.

Footnotes

- 1 This research was supported by Child and Adolescent Services Research Grant 1 K01 MH65325-01 from the National Institute of Mental Health.
- 2 The authors would like to thank the service providers for their participation in this research.

Notes

1. Based on July 1, 2002, estimated population by U.S. Census Bureau.
2. Based on July 1, 2001, estimated population by U.S. Census Bureau.

References

1. American Psychiatric Association, (2000). Diagnostic and statistical manual of mental disorders (4th ed., text revision). Washington, DC: Author.
2. Anderson, A. E. (2002). Augmentative communication and autism: A comparison of sign language and the picture exchange communication system. Unpublished doctoral dissertation, University of California, San Diego.
3. Anderson, A. E., & Schreibman, L. (1999, May). Augmentative communication in autism: An exploration of characteristics that contribute to success. Paper presented at the annual meeting of the Association for Behavior Analysis, Chicago, IL.
4. Anderson SR, Avery DL, DiPietro EK, Edwards GL, Christian WP. Intensive home based early intervention with autistic children. *Education & Treatment of Children*. 1987;10:352–366. [Google Scholar]
5. Bayley, N. (1993). Bayley scales of infant development –Second edition San Antonio, TX: Psychological Corp.
6. Bondy AS, Frost LA. The picture exchange communication system. *Focus on Autistic Behavior*. 1994;9:1–19. [Google Scholar]
7. Boyatzis, R. (1988), *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks, CA: Sage.
8. Bradley EH, McGraw SA, Curry L, Buckser A, King KL, Kasl SV, et al. Expanding the Andersen model: The role of psychosocial factors in long-term care use. *Health Services Research*. 2002;37:1221–1242. [PMC free article][PubMed][Google Scholar]
9. California Department of Education. (1997). *Best practices for designing and delivering effective programs for individuals with autism spectrum disorders: Recommendations of the collaborative workgroup an autism spectrum disorders*. Sacramento, CA: Author.
10. California Department of Education. (2002, December). DataQuest database. Retrieved June 12, 2004, from <http://data1.cde.ca.gov/dataquest/>
11. Carr, E. G., Horner, R. H., Turnbull, A. P., Marquis, J. G., Magito-McLaughlin, D., McAtee, M. L., et al. (1999). *Positive behavior support for people with developmental disabilities*. Washington, DC: American Association on Mental Retardation Monograph Series.
12. Dawson, G., & Osterling, J. (1997), Early intervention in autism: Effectiveness and common elements of current approaches. In M. J. Guralnick (Ed.), *The Effectiveness of early intervention: Second generation research* (pp. 307–326). Baltimore: Brookes.
13. Dunlap G. Consensus, engagement and family involvement for young children with autism. *The Journal of the Association for Persons with Severe Handicaps*. 1999;24:222–226. [Google Scholar]
14. Gibbs, A. (1997, Winter), Focus groups. *Social Research Update*, 19 Retrieved October 21, 2004, from <http://www.soc.surrey.ac.uk/sru/SRU19.html>
15. Glaser, B. G., & Strauss, A. L., (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine de Gruyter.
16. Greenspan SI, Wieder S. Developmental patterns and outcomes in infants and children with disorders in relating and communicating: A chart review of 200 cases of children with autistic spectrum diagnoses. *The Journal of Developmental and Learning Disorders*. 1997;1:87–141. [Google Scholar]
17. Greenspan, S. I., & Wieder, S. (1998). *The child with special needs: Encouraging intellectual and emotional growth* Reading, MA: Addison-Wesley.
18. Heflin LJ, Simpson I. Interventions for children and youth with autism: Prudent choices in a world of exaggerated claims and empty promises. Part 1: Intervention and treatment option review. *Focus on Autism and Other Developmental Disabilities*. 1998;13:194–211. [Google Scholar]
19. Horner RH, Carr EG, Strain PS, Todd AW, Reed HK. Problem behavior intervention for young children with autism: A research synthesis. *Journal of Autism and Developmental Disorders*. 2002;32:423–446. [PubMed][Google Scholar]
20. Hurth J, Shaw E, Izeman S, Whaley K, Rogers S. Areas of agreement about effective practices among programs serving young children with autism spectrum disorders. *Infants and Young Children*. 1999;12:17–26. [Google Scholar]
21. Individuals with Disabilities Education Act of 1990. 20 U.S.C. § 1400 et seq. (1990)(amended 1997)
22. Ingersoll B, Schreibman L, Stahmer AC. Differential treatment outcomes for children with autistic spectrum disorder based on level of peer social avoidance. *Journal of Autism and Developmental Disorders*. 2001;31:343–349. [PubMed][Google Scholar]

23. Iovannone R, Dunlap G, Huber H, Kinkaid D. Effective educational practices for students with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities*. 2003;18:150–165. [Google Scholar]
24. Krueger, R. A. (1994) *Focus groups: A practical guide for applied research*. Thousand Oaks, CA: Sage.
25. Lonigan CJ, Elbert JC, Johnson SB. Empirically supported psychosocial interventions for children: An overview. *Journal of Clinical Child Psychology*. Special Issue: Empirically supported psychosocial interventions for children. 1998;27:138–145. [PubMed] [Google Scholar]
26. Lovaas OI. Behavioral treatment and normal educational and intellectual functioning in young autistic children. *Journal of Clinical and Consulting Psychology*. 1987;55:3–9. [PubMed] [Google Scholar]
27. Lord, C., & Schopler, E. (1994). TEACCH services for preschool children. In S. Harris & J. Handleman (Eds.), *Preschool education programs for children with autism* (pp. 87–106). Austin, TX: PRO-ED.
28. Lord, C., Wagner, A., Rogers, S., Szatmari, P., Aman, M., Charman, T., et al. (in press). Challenges in evaluating psychosocial interventions for autistic spectrum disorders. *Journal of Autism and Developmental Disorders*. [PubMed]
29. Marcus, L, Schopler, E., & Lord, C. (2000). TEACCH services for preschool children. In J. S. Handleman & S. L. Harris (Eds.), *Preschool education programs for children with autism* (2nd ed., pp. 215–232). Austin, TX: PRO-ED.
30. McEachin JJ, Smith T, Lovaas OI. Long-term outcome for children with autism who received early intensive behavioral treatment. *Journal of Applied Behavior Analysis*. 1993;97:359–372. [PubMed] [Google Scholar]
31. McGee, G., Daly, T., & Jacobs, H. (1994). The Walden preschool. In S. L. Harris & J. S. Handleman (Eds.), *Preschool education programs for children with autism* (pp. 127–162). Austin, TX: PRO-ED.
32. McGee GG, Morrier MJ, Daly T. An incidental teaching approach to early intervention for toddlers with autism. *The Journal of the Association for Persons with Severe Handicaps*. 1999;24:133–146. [Google Scholar]
33. McGee, G. G., Morrier, M., & Daly, T. (2000). The Walden preschool. In J. S. Handleman & S. L. Harris (Eds.), *Preschool education programs for children with autism* (2nd ed., pp. 157–190). Austin TX: PRO-ED.
34. Merton RK. The focused interview and focus groups. *Public Opinion Quarterly*. 1987;51:550–566. [Google Scholar]
35. Merton RK, Kendall PL. The focused interview. *American Journal of Sociology*. 1946;51:541–557. [Google Scholar]
36. Morgan, D. L., (1988). *Focus groups as qualitative research*. Qualitative research methods (Vol. 16). Thousand Oaks, CA: Sage.
37. Nassar-McMillan, S. C., & Borders, L. D. (2002, March). Use of focus groups in survey item development. *The Qualitative Report*, 7, Retrieved October 21, 2004, from <http://www.nova.edu/ssss/QR/QR7-1/nassar.html>
38. National Research Council. (2001). *Educating children with autism*. Washington, Dc: National Academy Press.
39. New York State Department of Health, Early Intervention Program. (1999). *Clinical practice guidelines: Report of the recommendations for autism/pervasive developmental disorder, assessment and intervention for young children (Age 0–3 Years)* Albany, NY: Author.
40. Odom SL, Brown WH, Frey T, Karasu N, Smith-Canter LL, Strain PS. Evidence-based practice for young children with autism: Contributions of single subject design research. *Focus on Autism and Other Developmental Disabilities*. 2003;18:166–175. [Google Scholar]
41. Ozonoff S, Cathcart K. Effectiveness of a home program for young children with autism. *Journal of Autism and Developmental Disorders*. 1998;28:25–32. [PubMed] [Google Scholar]
42. Powers, M. D. (1992). Early intervention for children with autism. In D. E. Berkell (Ed.), *Autism: Identification, education, and treatment* (pp. 225–252). Hillsdale, NJ: Erlbaum.
43. Rogers SJ. Brief report: Early intervention in autism. *Journal of Autism and Developmental Disorders*. 1996;26:243–246. [PubMed] [Google Scholar]

The effectiveness of assistive technologies for children with special needs: A review of research-based studies:



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Assistive technologies are often promoted to schools, parents and educators as tools to assist students with special needs by providing a compensatory value, to remediate learning problems and to promote personal independence. These technologies range from simple spell checkers to more complex speech recognition systems and educational software. Many research projects have examined the effectiveness of these assistive technologies primarily in terms of their remediation and assistive functions. This paper describes the results of a systematic search of research-based studies published in the last six years that examined the effectiveness of assistive technologies that have reading, writing, spelling and speech as their focus. After a rigorous process, 15 empirical research articles were selected based on the following criteria: empirical studies involved students who identified as having special needs, the assistive technologies had a literacy and speech focus; participants were in years K12; and a clear skill or academic improvement was shown. Findings revealed that while some programs saw no improvement in spelling, reading or writing as a result of using the assistive technology, the majority of studies found consistently

Introduction

The heightened interest in the use of assistive technologies for students with special needs can be traced to legislation introduced in European and North American countries in the 1980s and 1990s. For example, the Technology-Related Assistance for Individuals with Disabilities Act of 1988 in the United States (US) brought increased attention to the role of assistive technology (AT) to improve the performance in education, work and social life of persons with disabilities. In the United Kingdom (UK), the Disabled Student Allowance (DSA) of 1993 sparked research on the types of technology that could improve the performance of disabled students in a variety of tasks. The 1997 US Act, Individuals with Disabilities Education Act (IDEA), mandated that AT be considered for each student with a disability when developing an individualised education plan. Alper and Raharirina (2006) contend that despite the legislation in place, little is known about the specific issues associated with AT, its uses and for whom it is appropriate. This paper will review literature from 2004 to 2009 in an attempt to determine if more recent research

has illuminated the best use of AT and for whom it is appropriate. Focusing only on research studies on spelling, reading, speech and writing, this paper describes the results of a systematic search of empirical studies that appeared in international, refereed journals from 2004 to mid-2009. When examining the literature of the last six years, 15 articles were found that met our criteria. Ten studies were located in the US and the remaining five were in Canada, Ireland, Israel, Sweden and Norway. Most of the articles were in one journal, *Journal of Special Education Technology*, because it attracts researchers in the area of special education and the use of technology. The term AT is generic and used to describe assistive, adaptive and rehabilitative devices for people with varying degrees of disability. Essentially, these technologies are aimed at assisting or expanding human function or capabilities (Lane and Mann 1995). ATs can range in complexity from sophisticated computerized communication systems and software programs to a simple handle on a telephone. This review adopts as its focus software-based technology and seeks to examine how these are used to aid children, with varying special educational needs, in primary or secondary educational environments. There are many questions a review could try to answer; however, because of the wide variety of studies found in these journals, we decided to focus on two basic questions: What types of technologies were used in these studies and what has been their impact on students with learning difficulties? The description of the technology is found in Table 1, along with the geographic location and the participants in the studies and the type of research design. Our review looks at the purpose of the study or the research question asked and the outcomes. It organises this information based on the technology utilized so that we can answer our two basic questions.

Review of meta-analysis studies

In reviewing the research on ATs, we identified five articles that synthesized the literature in an attempt to identify its benefits and the obstacles to its use. Edyburn's (2000) review was one of the first to examine the literature that was contributing to this emerging knowledge base on special education technology. He found that most of the relevant literature appeared in 12 journals and a core set of four journals contained 60% of the relevant articles. He surveyed the

literature from 26 journals in 1999 and found 788 articles of which 114 contributed to the knowledge base. In another comprehensive review of articles published in English between 1988 and 2003 that provided an assessment of skill acquisition using AT, Alper and Raharirina (2006) found 60 articles that met their criteria. Using a content analysis, they summarised their findings in 12 categories. Most of the studies were conducted to investigate the effectiveness of the use of AT in improving participants' skills. A variety of AT devices were utilised. The difficulty of synthesising the findings was evident based on the different types of AT devices, different age groups, different settings and different types of skill acquisition and differing special needs (including learning and physical disabilities). In a synthesis of studies that examined spelling and reading interventions and their effects on the spelling outcomes of students with learning disabilities, Wanzek

Assistive technology and students with special needs

According to the Individuals with Disability Education Act (IDEA) in the US, any equipment that is used to improve functional capabilities of individuals with disabilities is considered AT. In the US, the approach to AT is inclusive. It includes not only the technological devices or software that assists the learner with disability, but also all the raft of services and professionals, teachers and family members who support the student to ensure greater outcomes. Furthermore, according to the IDEA, the selection, acquisition and or use of AT is dependent on the evaluation of the needs of the child. With the importance of the appropriate use of AT, there is a clear need for an adequate level of expertise of at least one of the team members who is working with the students with learning difficulties (Bausch et al. 2008). For the purpose of this review, we have chosen to only include technologies that assist children in primary or secondary educational environments. We were concerned with examining how these technologies assisted children who experienced a range of special needs and were having difficulties with reading, speech, spelling and/or writing. 290 D. Maor et al. Downloaded by [Murdoch University Library] at 23:39 06 October 2013 The majority of the studies focus on children with mild learning disabilities defined by Edyburn (2006) as: a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or to do mathematical calculations, including conditions such as brain injury, dyslexia and developmental aphasia. (18) One study falls within Edyburn's (2006) category of emotional/behavioural disorders. This was a study on children with autism and falls under the category 'An inability to build or maintain satisfactory interpersonal relationships with peers and teachers' (18). Another study falls within his category of 'mental retardation', meaning 'subaverage general intellectual functions' (19). Specifically, this is a clinical term and refers to individuals who score below 70 on intelligence tests and have limited intellectual abilities (Medicine.Net 2010). Hereafter

this group of individuals will be categorised as 'intellectually impaired'. Two studies were with children with physical disabilities and would fall under the category of severe disability. They included cerebral palsy and spinal bifida. Edyburn (2006) identified that most of the students in the US receiving special education services have mild disabilities (approximately 69% of the students with disabilities aged 6-21 fall into this category)

Method

The purpose of this paper is to provide an updated literature search on empirical research studies that provided some type of AT intervention with students who had special needs. The search process can be illustrated as follows:

Analysis of the reviewed studies

The main purpose of these studies was to assess the efficacy of interventions as a means of improving the reading, spelling, writing and speech ability of primary or secondary school students. Most studies used some type of intervention with students who either had physical or cognitive disabilities and used pre and post tests to determine the effectiveness of their programs. For example, one study analysed the results of using particular software, such as Co:Writer, and compared this with handwriting. Most had control groups so that they could make comparisons with the experimental group; however, there were also studies based on a small number of students using case studies or interviews. Table 1 lists the 15 studies alphabetically and gives the date and journal of the refereed article. It then gives the country where the study was located and the age or grade of the students and the number of participants in the study. It briefly describes the AT used, the design of the study, the type of disability of the students and the outcomes. The studies analysed will be referred to by their number as it appears in Table 1. In an attempt to compare study outcomes to give a sense of whether the field has moved forward in identifying which AT is the most effective, we have grouped the studies under the type of skill they are trying to improve. It is difficult to group these studies under just one heading as most try to tackle at least two different skills simultaneously. We begin with ones that looked at spelling and writing, then European Journal of Special Needs Education 291 Downloaded by [Murdoch University Library] at 23:39 06 October 2013 look at those that combined spelling and reading. We next look at one that combined spelling, reading and writing, and finally chose one that looked at an isolated skill such as writing or speech. Within these categories, we group those that used the same software although there were very few. The next section gives a fuller description of the research question and outcomes of these 15 studies, grouped under the skills tested.

Spelling and writing

At least three of the studies used Co:Writer, sometimes in conjunction with other software. Co:Writer is a software program designed to provide spelling and writing assistance, and its primary feature is word prediction. It also has 'flexible spelling', whereby words are predicted from phonetic spelling

and the option of creating topic dictionaries of specialised words (Mirenda, Turolfo and McAvoy 2006). The students in two of these studies (13, 15) had physical disabilities and the students in the other study (2) had learning disabilities and mild intellectual impairment. Using multiple software programs (Write: Outloud and Co:Writer), study (2) asked: How well do seven students with special needs perform in writing with a talking word processor with spellchecker software (Write:Outloud) when it is used independent of and in conjunction with word prediction software (Co:Writer)? They found that the group mean for number of misspellings decreased and their accuracy percentage, number of words and rubric scores, all increased. However, the effects on writing when using a talking word processor with or without word prediction did not appear to yield uniform outcomes or experiences across students. Using Co:Writer, study (13) examined two questions: What are the perceptions of students with physical disabilities and their adult supporters about the benefits of using a word prediction program such as Co:Writer? Are there significant differences in the rate of text entry, the properties of legible words, correctly spelled words, correct word sequences and/or the mean lengths of consecutive correct word sequences produced by students with physical disabilities using handwriting, word processing and word processing + word prediction software? Co:Writer enhanced spelling accuracy, both word processing and Co:Writer resulted in significantly more legible writing samples than handwriting, and word processing use (with or without Co:Writer) helped to improve legibility. In sum, Co:Writer had a positive impact on writing quality in comparison with both handwriting and word processing, as measured by the percentage and mean length of consecutive correct word sequences. Study (15) examined the use of Co:Writer to increase typing speed (included as a form of writing) and to decrease spelling errors for four students who had physical disabilities that affected hand use. Student attitudes about the effectiveness of word prediction were examined as well as their typing rates and spelling accuracy. Co:Writer had a small positive effect on overall typing rate and decreased spelling errors for two out of four students. However, two other students did not show an improved typing speed. Improvement in spelling occurred with two students who had the most severe disabilities.

Spelling and reading

Four articles used software interventions to improve reading and spelling. The first one (5) was with a group of 52 young Norwegian below-average readers and spell292 D. Maor et al. Downloaded by [Murdoch University Library] at 23:39 06 October 2013 ers using MultiFunk, a computer program designed to assist reading. The software is based on individual adaptation of text appearance on screen and auditory-visual reading support. The main research question was: does MultiFunk with a synthetic speech component show positive effects on reading and spelling development with this group and allow them to keep up with their classmates? In an experimental pre-test-intervention-post-test design, the authors found that the MultiFunk experimental group

increased their reading and spelling skills significantly more than the control group. More specifically, they found that MultiFunk enhanced word reading rate, reading comprehension and spelling. The second study (7) assessed the effectiveness of two programs developed by the Frostig Centre Research Department in California: a computer speech recognition-based program (SRBP) and a computer and text-based automaticity program (AP) with 28 students with reading and spelling learning difficulties (aged 8 to 18). The SRBP program had a bimodal presentation of text. The child hears the word he or she has just spoken and sees it immediately on the computer monitor. When an error is made, the child must then find the correct word among a list of similar words and choose it, requiring the child to discriminate and compare words that look and sound very much alike. In this program, children are allowed to write on topics of their own choosing and proceed at their own pace. AP was developed to improve rapid naming and sight-word reading efficiency. After adjusting for age and IQ, both SRBP and AP groups (28 students) showed significant differences over the control group (16 students) in improving word recognition and reading comprehension. Neither program showed significant differences over contrasts in spelling. The next two studies (9 and 10) were written by researchers in the US and Northern Ireland. Starting with study (10), they assessed four software tools: speech synthesis, spellchecker, homophone detection using Read & Write Gold (Version 6) and SpeakOUT, and an electronic dictionary. The two homophone tools, Read & Write Gold and SpeakOUT, highlight same-sounding words in a document and show options with their definitions. The user may then choose an option that matches the context. The electronic dictionary allows users to find meanings for unknown words by highlighting the word and clicking on a dictionary icon. They matched their sample of 31 students using the AT with a group of 39 students using MS Word control and another group of 23 who were a control group with no assistance. Groups were matched on IQ, reading ability, spelling ability, computer exposure and socio-economic status. The study demonstrated several advantages of using Read & Write Gold for those with reading difficulties. It improved reading comprehension and homophone error detection and correction. Using the dictionary tool assisted the two groups over the full control group in finding more meanings for difficult words. Study (9) intervened using the homophone tool in Read & Write Gold (Version 7.1) in conjunction with Microsoft Word with 56 UK students to proofread passages. They were able to extend their previous study to discover how the software functioned to improve results. This study found that highlighting homophones helps improve performance and that offering the homophonic options adds a significant additional benefit.

Spelling, reading and writing Study

(8) investigated the use of a word processor for enhancing the academic outcomes of three junior high school students with writing disabilities in Israel. They European Journal of Special Needs Education 293 Downloaded by [Murdoch University Library] at 23:39 06 October 2013 found that the use of word

processing meant that they made fewer spelling mistakes, used more organisation and structure and made fewer reading errors when reading their own written exercises.

Reading only

Study (12) used a more robust research design than study (8). Its 6th and 7th grader participants were a group of 27 students who received a treatment program and a control group of 15. They used phonics-based computer assisted instruction (CAI). The treatment group showed greater reading gains than the control students on word attack, a measure of decoding skills, and a trend toward greater gains on real word reading (Letter-Word Identification). Both groups showed strong gains on passage comprehension. Study (6) took place in Sweden with 80 children in grades 2 and 3. These children were identified as having a reading disability that was the result of either phonological or orthographic word decoding problems. The children took part in computerised training programs to address their phonological (COMPHOT) or orthographic (DOT) issues. The COMPHOT program had rhymes, addition, position and segmentation and included exercises with pictures that participants could click on and get the word sounded. The DOT program provided explicit links between letters, written words and sounds and was based on word reading, text reading, word parts and building words. A child could typically click on a word and have it sounded out by the computer. The children who had the phonological and orthographic training programs were compared with 20 children who received ordinary special instruction and 34 normal readers. Children with phonological problems improved their general word decoding skills more than did children with orthographic problems.

Writing only

Two articles came from Michigan State University researchers (3 and 4) in the US. Study (3) used Technology-Enhanced Learning Environments on the Web (TELEWeb), a program that provided customisable activities and tools that could be individualised to meet diverse student and curricular goals. The findings showed the potential for strategically supported web-based environments to offer cognitive resources to very young students. The TELE-Web scaffolds seemed to influence three writing outcomes: the quantity that students wrote, the ability to elaborate with topically related details and generate more textual ideas that happened to be better organised. Study (4) investigated the effects of scaffolding students' writing performance through the employment of two different conditions that were exactly similar with the exception of the online scaffolding of students' writing performance. Speech only Study

(1) investigated video modeling to increase variation in the conversation of two boys with autism in California. The study systematically assessed the effects of video modeling on increasing responses in conventional speech and measured any changes in the children's social behaviours and their amount of question-asking in unstructured free play sessions. The results suggest that video modeling can be an effective technology for

teaching children with autism to vary their conversational speech in order to speak with several people on a variety of topics

Discussion

Several limitations of this review should be considered. The articles chosen for analysis were only in English and were restricted to papers published in referred journals between the years 2004 and 2009. Only studies that showed some skill or academic improvement were included and the study took as its focus a diverse range of special needs. This diverse ability sample was the consequence of the limited explicit identification of disability in many of the studies. As Edyburn (2000) has noted, the explicit identification of a specific disability is less common in research of this nature as much of the AT is generic and therefore useful for individuals with a range of abilities. Even in this restricted area of research on reading, spelling, writing and speech, these 15 articles used quite a range of different types of technology. This makes it difficult to determine which technology is the most efficacious because there are few studies that utilised the same technology with students in the same age groups. In addition, the AT was used with students who had different types of disabilities. Some studies used small samples, lacked adequate control groups or did not have any control groups. Nevertheless, the majority of these studies indicated that AT was beneficial in increasing the literacy and speech abilities of these students. In almost all of the studies, whether experimental or case studies, the students increased their skills in the areas tested. None of these studies followed students over several years to see if the benefits of AT were maintained after the intervention program ceased. In the future, it may be important to develop longitudinal studies to track students over a period of time to see if they can maintain the literacy and speech skills that they have learned. As was found in the literature review, Wehmeyer et al. (2008) emphasised that most of the research they analysed was done with basic assistive technology software and not with 'cutting edge' technology that may have an impact on students' learning. Several studies used a combination of AT that provided more information about the effectiveness of different software in providing feedback to children with special needs. European Journal of Special Needs Education 295 Downloaded by [Murdoch University Library] at 23:39 06 October 2013 Some studies noted the need for the ATs to have special attributes to work well with students having learning disabilities. The technology needs to have screen readability for students to embrace the program. Speech feedback also increases the communicative aspect of reading and enhances a sense of mastery. Contextual reading with short summaries may also increase motivation. These ideas led to the design of one of the software programs mentioned above, MultiFunk (multimedia and multi functionality), which is based on individual adaptation and auditory-visual reading support (Fasting and Lyster 2005). This concept of universal design for learning emphasises that students have individual differences and instruction should embrace the differences. Thus, another design attribute that AT should incorporate is the accommodation of individual students' needs. Only two of the

studies (Charlop, Gilmore and Chang 2008, Tam et al. 2005) in this review considered the support of family members in using ATs. Alper and Raharinirina (2006) noted that the lack of family support is a main reason for the abandonment of the ATs over the longer term. All of the following contribute to this problem: a lack of consideration of the child's and family's needs; no consultation with the family before choosing an AT; complicated design; prohibitive cost; and lack of technical support.

Conclusion

With the rapidity that technology changes, it is difficult for researchers to keep up with new technology that could assist students in the areas of reading, spelling, writing and speech. For example, there are likely to be new developments using Web 2.0 technology, but no studies were found using this latest technology. Continued research in the area of ATs is essential with the explosion of new technologies. The research should focus on specific research questions and be more systematic in trying to answer these questions, ensuring that the research uses an empirical design with enough participants that can enable it to produce valid and reliable results or qualitative studies which are theoretically sound and have rigor and authenticity. Considering the high level of investment that educational authorities around the world are making in ATs, the small number of studies that had adequate research design features was quite surprising

References

- Alper, S., and S. Raharinirina. 2006. Assistive technology for individuals with disabilities: A review and synthesis of the literature. *Journal of Special Education Technology* 21, no. 2: 4764.
- Bausch, M.E., M.J. Ault, A.S. Evmenova, and M.M. Behrman. 2008. Going beyond AT devices: Are AT services being considered? *Journal of Special Education Technology* 23, no. 2: 116.
- Bouck, E.C., and S. Flanagan. 2009. Assistive technology and mathematics: What is there and where can we go in special education. *Journal of Special Education Technology* 24, no. 2: 1730.
- Charlop, M.H., L. Gilmore, and G.T. Chang. 2008. Using video modeling to increase variation in the conversation of children with autism. *Journal of Special Education Technology* 23, no. 3: 4767-296
- D. Maor et al. Downloaded by [Murdoch University Library] at 23:39 06 October 2013 Co:Writer 4000. 2000. [Computer software]. Volo, IL: Don Johnston, Inc. Cullen, J., S.B. Richards, and C.L. Frank. 2008. Using software to enhance the writing skills of students with special needs. *Journal of Special Education Technology* 23, no. 2: 3344.
- Edyburn, D.L. 2000. 1999 in review: a synthesis of the special education technology literature. *Journal of Special Education Technology* 15, no. 1: 731.
- Edyburn, D.L. 2006. Assistive technologies and mild disabilities. *Special Education Technology Practice* 8, no. 4: 1828.
- Edyburn, D.L. 2007. Technology-enhanced reading performance: Defining a research agenda. *Reading Research Quarterly* 42, no. 1: 14652.
- Englert, C.S., M. Manalo, and Y. Zhao. 2004. I can do it better on the computer: the effects of technology-enabled scaffolding on young writers' composition. *Journal of Special Education Technology* 19, no. 1: 521.
- Englert, C.S., Y. Zhao, K. Dunsmore, N.Y. Collings, and K. Wolbers. 2007. Scaffolding the writing of students with disabilities through procedural facilitation: Using an internetbased technology to improve performance. *Learning Disability Quarterly* 30, no. 1: 929



Impact of Social Attitude on Children with Special Need in Inclusive set up



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ABSTRACT

Inclusive education is at the heart of educational policy worldwide. Teachers' attitude toward inclusive education, which is often associated with success of the policy, have been studied extensively. Various factors related to teachers, students with special educational needs (SEN) and different specific contexts have been identified. In the current study, we explored the influence of social support on teachers' attitude towards inclusive education. In a pilot study implying teachers, we replicated, in the French context, previous results showing a correlational link between social support and attitude towards inclusion. Specifically, we showed that the more social support they perceived with regard to their attempt to include students with SEN, the more positive the teachers' attitude toward inclusive education. In an experiment involving 314 teachers we then explored the causal link between these variables. Results showed that highlighting the support the teachers receive to improve their attitude in comparison with highlighting a lack of support in control condition in which support is not mentioned. These studies show the importance of supporting inclusive education in the schools. This support can be provided in different ways (emotional, informational, instrumental, etc.) and by different actors (colleagues, supervisors).

The pedagogy of inclusion is the current trend for the education of persons with disabilities. The impact of social attitude may be positive, negative, or mixed evaluation of an object that is expressed at some level of intensity. Individual with special needs have relatively expressed more difficulty in participating in social activities in their regular education session. The aim of the study is to assess the impact of social attitude of non-disabled students towards children with disability in inclusive set-up.

Key words: Inclusive Education, Students, Disability, social attitude. Special Education needs.

INTRODUCTION

Social inclusion is an important concept advocated by the

United Nations Convention on the Rights of Persons with Disabilities and Convention on the Rights of the Child. Since social inclusion is defined as a development goal for children with special needs, a lot of studies have turned their attention to how to put in place an effective support system for the social inclusion of children with special needs. Social inclusion support for children with special needs involves various dimensions. For one thing, they include particular and personal activities that require the time and energy of individuals, such as interpersonal interactions and acceptance. For another, they also include more general and public practices, namely support and assistance from the government and society as a whole, such as government policy support, funding, charitable donations, and other actions at government and social levels. Public support and private support, the two types of support for social inclusion, hold key to promoting the social inclusion of children with special needs and are also important metrics for measuring the degree of social inclusion.

The Salamanca Statement on Principles, Policy, and Practice in Special Needs Education (UNESCO, 1994) has given rise to a range of changes regarding the schooling of students with disability. All over the world, many laws and decrees have been adopted in recent years to promote and implement inclusive education (Schwab, 2020). To this end, in France for example, the Ministry of Education has recently proposed a law ensuring that all pre-service and in-service teachers in the French school system would receive specific training regarding the inclusion of students with special educational needs (SEN).

Despite a growing support (e.g., a 7.6% increase within the inclusive education budget last year in France), many obstacles to a fully inclusive education remain over the world (see for example Westwood and Graham, 2003) and in particular in the French system (Berzin et al., 2020). Numerous studies have been conducted to identify these barriers, particularly among teachers. One of the most studied variables is teachers' attitude toward inclusive education. It has been hypothesized that the more reserved the teachers are regarding the overall inclusive

education policy, the less they will personally endorse inclusive pedagogical procedures (MacFarlane and Woolfson, 2013; Sharma and Sokal, 2016). Among the factors known to influence these attitude (for reviews, see Avramidis and Norwich, 2002; de Boer et al., 2011), their perceived social support has been of particular interest. For example, Hind et al. (2019) recently showed that teachers do not always feel support in their attempts to implement the inclusion policy and that this perceived lack of support is associated with negative attitudes. The purpose of the present study was to go beyond the correlational nature of these findings and experimentally investigate how teachers' perception of the support they receive could influence their attitude in order to draw causal conclusion.

REVIEW OF LITERATURE

The Salamanca Statement (UNESCO, 1994) attempted to meet the 'education for all' demand, which can only be satisfied through the inclusion of all students in general school.

Attitude was defined as "psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Eagly and Chaiken, 1993, p. 1)

Ajuwon (2008) opined that for the child with a disability to benefit optimally from inclusion, it is imperative for general education teachers to be able to teach a wider array of children, including those with varying disabilities and to collaborate and plan effectively with special education.

The previous research findings show that the student teachers report significantly more positive contact with people with disability than negative ones. At the same time, student teachers who are in contact with people with disabilities report a significantly more positive attitude toward inclusion at the beginning of the term, and a higher self-efficacy in dealing with disruptive behavior and interdisciplinary cooperation, as well as an individualizing teaching structure.

Few other previous studies also report fewer concerns and negative attitude than student teachers without such contact. Contact with people with disabilities was significantly related to an anticipated willingness to take an inclusive class. However, no moderating effect of contact over the term was found. Additionally, we identify a considerable heterogeneity on positive attitude toward inclusion within the respective group (i.e., more positive or negative contact) via multigroup latent profile analysis. In particular, higher levels on self-efficacy in dealing with disruptive behavior and individualizing teaching structure were central indicators for positive attitude toward inclusion; this held for both contact groups.

DISCUSSION

It is interesting to note that the meta-analysis of Nowicki and Sandies on (2002) also found gender, age and experience as relating variables, but did not describe an effect of knowledge about disabilities on students attitude. This study shows that students become more accepting when their knowledge and understanding about peers with disabilities increase. Attitudes toward people with intellectual disabilities were investigated among students, disability services professionals, and the general population on Australian population. Students and disability services professionals exhibit similar attitude, with both groups reporting significantly more positive attitude than members of the general population. More positive attitude were evident among younger people, people with higher educational attainment, and individuals with a prior knowledge of regular contact with people with intellectual disabilities.

Inclusive schooling has been a key issue in special need education for the last 20 years. In this context, teacher's attitude toward inclusion is an essential factor in professional competence. It is therefore in the interest of an inclusive school system that inclusion-related beliefs and attitudes are cultivated in basic teacher education. Although some studies report positive effects of basic teacher education on successful inclusion processes and outcomes at school, the findings on attitude changes in teacher education are inconsistent. Multiple factors influence inclusion-related attitudes and beliefs. Among them, personal contact with people with disabilities is important. The present study at the University of Teacher Education in Zurich, Switzerland, examines the influence of previous contact with people with disabilities on attitude towards inclusion after initial teacher training modules. An online survey (N = 443) was conducted before (T0) and after (T1) a training module on inclusive education/inclusive teaching. Validated scales on attitude toward inclusion were used.

CONCLUSION

From the above we come to the conclusion that the vision of "Education for All" in an inclusive setting needs a bit more helpful nature from the teachers. In this regard neither the teachers nor the students can be identified as the only responsible member for the unsuccessful status of the inclusiveness. If teacher as well as peer students show the readiness to accept them with their disability. It will be very easy for SEN children to adjust in the inclusive school. By cross checking the view of teachers and students with each other. Many aspects the statement of one (teachers) are not verified the other (SEN children). It is the time for the teachers and students to change their attitude a bit to make the SEN children apart of our mainstream educational system.

References

- Abdi, H., and Williams, L. J. (2010). Contrast analysis, in Encyclopedia of Research Design, ed N. Salkind (Thousand Oaks, CA: Sage), 243251.
- Gartner A, Lipsky D (1987). Beyond special education toward a quality system for all students. Harvard Educ. Rev., 75(4): 367-395.
- Stainback S, Stainback W (1996). Inclusive Schooling. In W. Stainback, & S. Stainback (Eds.), Supportive Networks for Inclusive Schooling. Baltimore: Brookes.
- Ismail R (2004). Welcoming Schools: A Lebanese Model. Unpublished master's thesis, American University of Beirut, Lebanon.
- UNESCO. 1994. The Salamanca statement and framework for action on special needs education. Paris: UNESCO.
- Alghazo, E. M., and E. E. Gaad. 2004. General education teachers in the United Arab Emirates and their acceptance of the inclusion of students with disabilities. *British Journal of Special Education*, 31(2): 94-99. doi:10.1111/j.0952-3383.2004.00335.
- Antonak, R.F., and B. Larrivee. 1995. Psychometric analysis and revision of the opinions relative to mainstreaming scale. *Exceptional Children*, 62 (2): 139-49.

Information on early Intervention



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Information on early Intervention

"Early intervention" program for infants and toddlers, aged birth through two years. The purpose of early intervention:

- (1) To enhance the development of infants and toddlers with disabilities and to minimize their potential for developmental delay;
- (2) To reduce educational costs by minimizing the need for special education and related services after infants and toddlers with disabilities reach school age;
- (3) To minimize institutionalization of individuals with disabilities and maximize their potential for independent living;
- (4) To enhance the ability of families to meet their infants and toddlers' special needs; and
- (5) To enhance the capacity of public agencies and service providers to identify, evaluate, and meet the needs of "historically under represented populations" (especially minority, low-income, inner-city and rural).

The definition of an infant or toddler with disabilities

The term "infants and toddlers with disabilities" means children younger than three years old who need early intervention services because they are experiencing developmental delays in the areas of cognitive development, physical development, language and speech development, social or emotional development, Information on Early Intervention Services 12 - 4 or self-help skills. In addition, the term also includes infants and toddlers who have a diagnosed mental or physical condition that typically results in a developmental delay. The state may also decide the term includes children younger than three who are at risk of having substantial developmental delays."

The eligibility criteria for early intervention services

- (1) Infants and toddlers with a developmental delay in one or more of the following five areas: cognitive development; physical and motor development, including vision and hearing; communication development; social or emotional development; or adaptive development.

- (2) Developmentally delayed children are those who are determined to have a significant difference between the expected level of development for their age and their current level of functioning. This determination shall be made by qualified personnel who are recognized by (or part of) a multidisciplinary team, including the parents. "Significant difference" means a 33% delay in one developmental area before two years of age. For a child 2-3 years of age, a delay of 50% in one developmental area or a 33% delay in two or more areas is required. The age for making this eligibility determination is the age of the infant or toddler on the date of his initial referral to the program.
- (3) Infants and toddlers with established risk conditions are children under 3 with conditions of "known etiology" (cause) or conditions with established harmful developmental consequences. The conditions shall be diagnosed by qualified personnel recognized by (or part of) a multidisciplinary team, including the parents. The condition shall be certified as having a high probability of leading to developmental delay if the delay is not evident at the time of diagnosis.

What services are included under early intervention for children from birth up until age three?

Services under early intervention are provided by the regional center or a school district to families under public supervision, and almost always at no cost, and must be designed to meet the infant or toddler's developmental needs.

These may include:

- (1) Assistive technology devices and services;
- (2) Audiology;
- (3) Family training, counseling and home visits;
- (4) Health services (includes catheterization, tracheotomy care, tube feeding, changing of dressings and colostomy bags and physician consultation);
- (5) Medical services only for diagnostic or evaluation purposes;
- (6) Nursing services;
- (7) Nutrition services;
- (8) Occupational and physical therapy;
- (9) Physical therapy;
- (10) Psychological services;
- (11) Service coordination services;
- (12) Sign language and cued language services;
- (13) Social work services;
- (14) Special instruction;
- (15) Speech and language services;
- (16) Transportation and related costs;
- (17) Vision services; and
- (18) Respite and other family support services.

Who may provide early intervention services to infants and toddlers?

Early intervention services are to be provided by qualified personnel including:

- (1) Special educators, including teachers of children with hearing impairments, deafness, visual impairments and blindness;
- (2) Speech and language pathologists;
- (3) Audiologists;
- (4) Occupational therapists;
- (5) Physical therapists;
- (6) Psychologists;
- (7) Social workers;
- (8) Nurses;
- (9) Registered dietitians; Information on Early Intervention Services 12 - 15
- (10) Family therapists;
- (11) Orientation and mobility specialists;
- (12) Pediatricians and other physicians; and
- (13) Vision specialists, including ophthalmologists and optometrists

The evaluation and assessment process

Service coordinator | Once connected with either Child Find or your community's early intervention program, you'll be assigned a service coordinator who will explain the early intervention process and help you through the next steps in that process. The service coordinator will serve as your single point of contact with the early intervention system.

Screening and/or evaluation | One of the first things that will happen is that your child will be evaluated to see if, indeed, he or she has a developmental delay or disability. (In some states, there may be a preliminary step called screening to see if there's cause to suspect that a baby or toddler has a disability or developmental delay.) The family's service coordinator will explain what's involved in the screening and/or evaluation and ask for your permission to proceed. You must provide your written consent before screening and/or evaluation may take place.

The evaluation group will be made up of qualified people who have different areas of training and experience. Together, they know about children's speech and language skills, physical abilities, hearing and vision, and other important areas of development. They know how to work with children, even very young ones, to discover if a child has a problem or is developing within normal ranges. Group members may evaluate your child together or individually. As part of the evaluation, the team will observe your child, ask your child to do things, talk to you and your child, and use other methods to gather information. These procedures will help the team find out how your child functions in the five areas of development.

Exceptions for diagnosed physical or mental conditions | It's important to note that an evaluation of your child won't be necessary if he or she is automatically eligible due to a diagnosed physical or mental condition that has a high probability of resulting in a developmental delay. Such conditions include but aren't limited to chromosomal abnormalities; genetic or congenital disorders; sensory impairments; inborn errors of metabolism; disorders reflecting disturbance of the development of the nervous system; congenital infections; severe attachment disorders; and disorders secondary to exposure to toxic substances, including fetal alcohol syndrome. Many states have policies that further specify what conditions automatically qualify an infant or toddler for early intervention (e.g., Down syndrome, Fragile X syndrome).

Determining eligibility | The results of the evaluation will be used to determine your child's eligibility for early intervention services. You and a team of professionals will meet and review all of the data, results, and reports. The people on the team will talk with you about whether your child meets the criteria under IDEA and state policy for having a developmental delay, a diagnosed physical or mental condition, or being at risk for having a substantial delay. If so, your child is generally found to be eligible for services.

Initial assessment of the child | With parental consent, in-depth assessment must now be conducted to determine your child's unique needs and the early intervention services appropriate to address those needs. Initial assessment will include reviewing the results of the evaluation, personal observation of your child, and identifying his or her needs in each developmental area.

Initial assessment of the family | With approval of the family members involved, assessments of family members are also conducted to identify the resources, concerns, and priorities of the family related to enhancing the development of your child. The family-directed assessment is voluntary on the part of each family member participating in the assessment and is based on information gathered through an assessment tool and also through an interview with those family members who elect to participate.

Writing the IFSP

Having collected a great deal of information about your child and family, it's now possible for the team (including you as parents) to sit down and write an individualized plan of action for your child and family. This plan is called the Individualized Family Service Plan, or IFSP. It is a very important document, and you, as parents, are important members of the team that develops it. Each state has specific guidelines for the IFSP. Your service coordinator can explain what the IFSP guidelines are in your state.

Guiding principles | The IFSP is a written document that, among other things, outlines the early intervention services that your child and family will receive. One guiding principle of the IFSP is that the family is a child's greatest resource, that a young child's needs are closely tied to the needs of his or her family. The best way to support children and meet their needs is to support and build upon the individual strengths of their family. So, the IFSP is a whole family plan with the parents as major contributors in its development. Involvement of other team members will depend on what the child needs. These other team members could come from several agencies and may include medical people, therapists, child development specialists, social workers, and others.

What info is included in an IFSP? | Your child's IFSP must include the following:

- Your child's present physical, cognitive, communication, social/emotional, and adaptive development levels and needs
- Family information (with your agreement), including the resources, priorities, and concerns of you, as parents, and other family members closely involved with the child
- The major results or outcomes expected to be achieved for your child and family
- The specific services your child will be receiving
- Where in the natural environment (e.g., home, community) the services will be provided (if the services will not be provided in the natural environment, the IFSP must include a statement justifying why not)
- When and where your son or daughter will receive services
- The steps to be taken to support your child's transition out of early intervention and into another program when the time comes.
- The IFSP may also identify services your family may be interested in, such as financial information or information about raising a child with a disability.

Informed parental consent | The IFSP must be fully explained to you, the parents, and your suggestions must be considered. You must give written consent for each service to be provided. If you do not give your consent in writing, your child will not receive that service.

Reviewing and updating the IFSP | The IFSP is reviewed every six months and is updated at least once a year. This takes into account that children can learn, grow, and change quickly in just a short period of time.

IFSP and are provided through a team approach that can include: developmental early intervention speech/language therapy occupational therapy physical therapy behavioral therapy nutrition counseling social work service coordination

Services in Natural Environments Early intervention services for young children with special needs are required to be provided in the child's natural environments, places where children and families spend their time in settings typical for infants and toddlers who have no disabilities. The emphasis on natural environments is about much more than service locations. Providing services in this method offers valuable opportunities to observe and learn about children's routines and activities so that early interventionists can support their development in everyday settings, enhancing their daily functioning at home and in the community. Services provided in clinic offices or specialized classes are not considered natural environments because children's experiences in these settings are not representative of their daily lives at home and other places. Early intervention services provided in natural environments more effectively promote children's development than traditional intervention models provided in clinic offices or specialized programs (Raab & Dunst, 2004; Jung, 2007). The natural environment approach supports families and teachers who collaborate with therapists and intervention specialists to target developmental interventions within a context of regular routines and activities occurring throughout the child's day (Rush, Shelden, & Hanft, 2003). When there are children with special needs in an early care and education program, teachers and aides become partners in each child's early intervention services. What Are Routines-Based Interventions? Routines that occur within natural environments for young children provide the most effective framework to support and sustain early intervention activities. When a Integrate interventions in Natural Environments Early intervention services for young children with special needs are required to be provided in the child's natural environments, places where children and families spend their time in settings typical for infants and toddlers who have no disabilities.

Sources:

- Christensen, D., Van Naarden Braun, K., Doernberg, N. S., Maenner, M. J., Arneson, C. L., Durkin, M. S., Benedict, R. E., Kirby, R. S., Wingate, M. S., Fitzgerald, R. and Yeargin-Allsopp, M. (2013), Autism and Developmental Disabilities Monitoring Network, USA, 2008
- For information prepared by DDS on due process and complaint procedures and a general overview of parents' rights and responsibilities visit http://dds.ca.gov/EarlyStart/docs/Parents_Rights_Guide_Sum_Eng.pdf. Also, see Chapter 6, Information on Due Process/Compliance Procedures.



Efficacy of early Intervention on Early Childhood of children with special needs



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Abstract

“Early intervention” program for infants and toddlers from start from birth. The purpose of early intervention, to enhance the development of infants and toddlers with disabilities and to minimize their potential for developmental delay; to reduce educational costs by minimizing the need for special education and related services after infants and toddlers with disabilities reach school age; to minimize institutionalization of individuals with disabilities and maximize their potential for independent living; to enhance the ability of families to meet their infants and toddlers' special needs; and to enhance the capacity of public agencies and service providers to identify, evaluate, and meet the needs of “historically under represented populations” (especially minority, low-income, inner-city and rural).

Keywords:

Developmental delays, Multidisciplinary team, Cognitive development, known etiology, Hearing impairments, Deafness, Visual impairments, Evaluation and Assessment, Screening Diagnosis.

Introduction

The term “infants and toddlers with disabilities” means children younger than three years' old who need early intervention services as they are experiencing developmental delays in the areas of cognitive development, physical development, language and speech development, social or emotional development. In addition, the term also includes infants and toddlers who have a diagnosed mental or physical condition that typically results in a developmental delay. Children younger than three who are at risk of having substantial developmental delays. The eligibility criteria for early intervention services: Infants and toddlers with a developmental delay in one or more of the following five areas: cognitive development; physical and motor development, including vision and hearing; communication development; social or emotional development; or adaptive development. Developmental delay children are those who are determined to

have a significant difference between the expected level of development for their age and their current level of functioning. “Significant difference” means a 33% delay in one developmental area before two years of age. For a child 2-3 years of age, a delay of 50% in one developmental area or a 33% delay in two or more areas is required. The age for making this eligibility determination is the age of the infant or toddler on the date of his initial referral to the program. Infants and toddlers with established risk conditions are children under 3 with conditions of “known etiology” (cause) or conditions with established harmful developmental consequences. The conditions shall be diagnosed by qualified personnel recognized by (or part of) a multi-disciplinary team, including the parents. The condition shall be certified as having a high probability of leading to developmental delay if the delay is not evident at the time of diagnosis. What services are included under early intervention for children from birth up until age three?

Services under early intervention are provided by the regional center or a school district to families under public supervision, and usually at no cost, and must be designed to meet the infant or toddler's developmental needs. These may include:

- Assistive technology devices and services:
- Audiology
- Family training, counseling and home visits;
- Health services (includes catheterization, tracheotomy care, tube feeding, changing of dressings and colostomy bags and physician consultation);
- Medical services only for diagnostic or evaluation purposes;
- Nursing services
- Nutrition services;
- Occupational and physical therapy;
- Psychological services;
- Sign language and cued language services;
- Social work services; Special instruction;

- Speech and language services;
- Transportation and related costs;
- Vision services; and
- Respite and other family support services.

Early intervention services are to be provided by qualified personnel including:

Special educators, including teachers of children with hearing impairments, deafness, visual impairments and blindness; Speech and language pathologists, Physical therapist, Audiologists Occupational therapists, Psychologists, Social workers, Nurses, Family therapists, Orientation and mobility specialists, Pediatricians and other physicians; and Vision specialists, including ophthalmologists and optometrists

The evaluation and assessment process Service coordinator

| Once connected with either Child or community's early intervention program, a service coordinator who will explain the early intervention process and help family through the next steps in that process. The service coordinator will serve as family's single point of contact with the early intervention system.

Screening and/or evaluation| One of the first things that will happen when child will be evaluated to see if, indeed, he or she has a developmental delay or disability. (there may be a preliminary step called screening to see if there's cause to suspect that a baby or toddler has a disability or developmental delay.) The family's service coordinator will explain what's involved in the screening and/or evaluation and ask for your permission to proceed. Family must provide their written consent before screening and/or evaluation may take place.

The evaluation group will be made up of qualified people who have different areas of training and experience. Together, they know about children's speech and language skills, physical abilities, hearing and vision, and other important areas of development. They know how to work with children, even very young ones, to discover if a child has a problem or is developing within normal ranges. Group members may evaluate child together or individually. As part of the evaluation, the team will observe child, ask child to do things, talk to child, and use other methods to gather information. These procedures will help the team find out how child functions in the five areas of development.

For Diagnosis | It's important to note that an evaluation of child won't be necessary if he or she is automatically eligible due to a diagnosed physical or mental condition that has a high probability of resulting in a developmental delay. Such conditions include but aren't limited to chromosomal abnormalities; genetic or congenital disorders; sensory impairments; inborn errors of metabolism; disorders reflecting disturbance of the development of the nervous system;

congenital infections; severe attachment disorders; and disorders secondary to exposure to toxic substances, including foetal alcohol syndrome.

Determining eligibility | The results of the evaluation will be used to determine child's eligibility for early intervention services and a team of professionals will meet and review all of the data, results, and reports. The people on the team will talk with family about whether child meets the criteria under IDEA and state policy for having a developmental delay, a diagnosed physical or mental condition, or being at risk for having a substantial delay. If so, child is generally found to be eligible for services.

Initial assessment of the child | With parental consent, in-depth assessment must now be conducted to determine your child's unique needs and the early intervention services appropriate to address those needs. Initial assessment will include reviewing the results of the evaluation, personal observation of your child, and identifying his or her needs in each developmental area.

Initial assessment of the family | With approval of the family members involved, assessments of family members are also conducted to identify the resources, concerns, and priorities of the family related to enhancing the development of your child. The family-directed assessment is voluntary on the part of each family member participating in the assessment and is based on information gathered through an assessment tool and also through an interview with those family members who elect to participate.

Writing the IFSP | Having collected a great deal of information about child and family, it's now possible for the team (including you as parents) to sit down and write an individualized plan of action for child and family. This plan is called the Individualized Family Service Plan, or IFSP. It is a very important document, and parents, are important members of the team that develops it.

Guiding principles | The IFSP is a written document that, among other things, outlines the early intervention services that child and family will receive. One guiding principle of the IFSP is that the family is a child's greatest resource, that a young child's needs are closely tied to the needs of his or her family. The best way to support children and meet their needs is to support and build upon the individual strengths of their family. So, the **IFSP is a whole family plan** with the parents as major contributors in its development. Involvement of other team members will depend on what the child needs. These other team members could come from several agencies and may include medical people, therapists, child development specialists, social workers, and others. Child's IFSP must include the following:

Conclusion

Child's present physical, cognitive, communication, social/emotional and adaptive development levels and needs. Family information including the resources, priorities, and concerns as parents, and other family members closely involved with the child. The major results or outcomes expected to be achieved for child and family. The specific services child will be receiving where in the natural environment (e.g., home, community) the services will be provided (if the services will not be provided in the natural environment, the IFSP must include a statement justifying why not) When and where child will receive services. The steps to be taken to support child's transition out of early intervention and into another program when the time comes. The IFSP may also identify services family may be interested in, such as financial information or information about raising a child with a disability.

The IFSP must be fully explained to the parents, and suggestions must be considered. Family ***must give written consent for each service to be provided.*** If family do not give their consent in writing, their child will not receive that service. The IFSP is reviewed every six months and is updated at least once a year. This takes into account that children can learn, grow, and change quickly in just a short period of time. IFSP and are provided through a team approach that can include: developmental early intervention speech/language therapy occupational therapy physical therapy behavioral therapy nutrition counseling social work service coordination Services in Natural Environments Early intervention services for young children with special needs are required to be provided in the child's natural environments, places where children and families spend their time in settings typical for infants and toddlers who have no disabilities. The emphasis on natural environments is about much more than service locations. Providing services in this method offers valuable opportunities to observe and learn about children's routines and activities so that early interventionists can support their development in everyday settings, enhancing their daily functioning at home and in the community. Services provided in clinic offices or specialized classes are not considered natural

environments because children's experiences in these settings are not representative of their daily lives at home and other places. Early intervention services provided in natural environments more effectively promote children's development than traditional intervention models provided in clinic offices or specialized programs (Raab & Dunst, 2004; Jung, 2007). The natural environment approach supports families and teachers who collaborate with therapists and intervention specialists to target developmental interventions within a context of regular routines and activities occurring throughout the child's day (Rush, Shelden, & Hanft, 2003). When there are children with special needs in an early care and education program, teachers and aides become partners in each child's early intervention services. Routines that occur within natural environments for young children provide the most effective framework to support and sustain early intervention activities. When a Integrate interventions in Natural Environments Early intervention services for young children with special needs are required to be provided in the child's natural environments, places where children and families spend their time in settings typical for infants and toddlers who have no disabilities.

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Assistive Devices and Technologies



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Assistive devices and technologies are those whose primary purpose is to maintain or improve an individual's functioning and independence to facilitate participation and to enhance overall well-being. They can also help prevent impairments and secondary health conditions. Examples of assistive devices and technologies include wheelchairs, prostheses, hearing aids, visual aids, and specialized computer software and hardware that increase mobility, hearing, vision, or communication capacities. In many low-income and middle-income countries, only 5-15% of people who require assistive devices and technologies have access to them.

Assistive Technology for Learning: What You Need to Know

At a Glance

- Assistive technology is any device, software, or equipment that helps people work around their challenges.
- Some examples of assistive technology are text-to-speech and word prediction.

Assistive technology includes low-tech tools, too, like pencil grips. Technology is everywhere these days. But did you know that there are specific tech tools that can help people who learn and think differently? These tools called assistive technology, or AT are often inexpensive and easy to use.

What is assistive technology? How can kids and adults benefit from these tools, and where do you start?

Assistive Technology Basics

AT is any device, software, or equipment that helps people work around challenges so they can learn, communicate, and function better. A wheelchair is an example of AT. So is software that reads aloud text from a computer. Or a keyboard for someone struggling with handwriting.

These tools can help people work around their challenges, while also playing to their strengths. This is especially important for kids who struggle with learning whether in reading, writing, math, or another subject. AT can help these kids thrive in school and in life. And that can help grow their confidence and independence.

There lots of myths about AT. Some wrongly believe that using AT is "cheating." Others worry that kids who use AT may become too reliant on it.

Examples of Assistive Technology Tools

Despite the word "technology," not all AT tools are high-tech.

AT includes many simple adaptive tools, like highlighters and organizers. A great example of low-tech AT is a pencil grip.

Many AT tools are high-tech, though. And because of advances in technology, tools are now available on a variety of platforms:

- Desktop and laptop computers
- Mobile devices (includes smart phones and tablets)
- Chrome books (and the Chrome browser used on any device)

Examples of high-tech AT tools include text-to-speech (TTS), dictation (speech-to-text), and word prediction. But there are hundreds of AT tools that can help with learning challenges. For more examples, explore:

- Assistive technology for reading
- Assistive technology for writing
- Assistive technology for math
- Assistive technology for listening comprehension

Some of these AT tools are free. Some tools are even built into mobile devices. (Watch as an expert explains how to turn on TTS on a smart phone or digital tablet.)

How to Find the Right Assistive Technology Tool

With so many AT tools available, finding the right one can be overwhelming. One good approach is to choose AT that targets a specific struggle. For example, if a child struggles with writing, try dictation technology. As the child speaks, words appear on the screen.

People with access to a mobile device, like a smart phone or a digital tablet, can add AT tools to it with apps. Explore these ideas:

- Apps to help young kids with reading
- Apps to help teens with organization
- Apps to help with note-taking
- Apps to help younger kids build self-control
- Apps to help teens and tweens build self-control
- Meditation apps for kids
- Apps for back-to-school challenges
- Websites, apps, and games to help with learning to type

People with access to a desktop or laptop computer can use AT software for reading, writing, and math. And those with access to a Chrome book or the Chrome internet browser can look at Chrome tools to help with various challenges.

Assistive Technology for Young Children in Special Education: It Makes a Difference

Technology can level the playing field for students with mobility, hearing, or vision impairments. Technology has opened many educational doors to children, particularly to children with disabilities. Alternative solutions from the world of technology are accommodating physical, sensory, or cognitive impairments in many ways.

Much of the technology we see daily was developed initially to assist persons with disabilities. Curb cuts at street corners and curb slopes, originally designed to accommodate people with orthopedic disabilities, are used more frequently by families with strollers or individuals with grocery carts than by persons with wheelchairs or walkers. The optical character reader, developed to assist individuals unable to read written text, has been adapted in the workplace to scan printed documents into computer-based editable material, saving enormous amounts of data entry labor.

Children with disabilities often feel better about themselves as a result of using technology. Technology can be a great equalizer for individuals with disabilities that might prevent full participation in school, work, and the community. This is most evident in the case of individuals with mobility, hearing, or vision impairments, but is also true for individuals with limitations in cognition and perception. With technology, an individual physically unable to speak can communicate with spoken language. Using a portable voice synthesizer, a student can ask and respond to questions in the "regular" classroom, overcoming a physical obstacle that may have forced placement in a special segregated classroom or required a full-time instructional aide or interpreter to provide "a voice." Improvements in sensor controls enable subtle motor movements to control mobility devices, such as electric wheelchairs, providing independent movement through the school and community. Text and graphics enhancement software can enlarge sections of a monitor enough to be seen by persons with vision impairments. Text can be read electronically by a digitized voice synthesizer for a person who is blind. For persons with hearing impairments, amplification devices can filter extraneous noise from the background or pick up an FM signal from a microphone on a teacher's lapel. Word processing, editing, spell checking, and grammatical tools commonly found in high-end software facilitate the inclusion of students with learning disabilities in regular classrooms by allowing them to keep up with much of the work. Not inconsequentially, the children often feel better about themselves as active learners.

Technology is providing more powerful and efficient tools to teachers who work with children with disabilities. These tools enable teachers to offer new and more effective means of learning while individualizing instruction to the broad range of student learning needs. Educators are using computers as tools to deliver and facilitate learning beyond drill and practice, to provide environments that accommodate learning, and to ensure enhanced and equitable learning environments to all students.

Access to the World Wide Web, email and other electronic learning environments is common in many classrooms. In these environments, students around the world can interact in real time via onscreen messaging or video and audio transmissions. In most of these learning situations, a disability makes no difference at all. The range of potential assistive technology devices is large and includes both high-tech devices like computers and low-tech, manually operated devices.

Assistive Technology Defined

The definition of assistive technology applied to education is extremely broad, encompassing "any item, piece of equipment, or product system whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities."

As a result, the potential range of AT devices is incredibly large, and both "high-tech" and "low-tech" devices are included. High-tech devices may be computers, electronic equipment, or software. Although electronically operated, high-tech devices need not be expensive, a simple low-cost switch that controls a battery-operated toy can be considered a high-tech device, as can a tape recorder. Low-tech devices are manually, not electronically, operated. This group includes devices such as pencil grips, mouth sticks, and mechanical hoists.

This definition also expands the consideration of potential educational applications with its focus on devices "used to increase, maintain, or improve the functional capabilities of persons with disabilities." As educators, we try to increase or add new academic, social, and daily living skills and knowledge to the functional capability of all children. This is a basic goal as we prepare children to take their place in society.

In the case of children with degenerative impairments, such as muscular dystrophy, educators may be working to keep children functioning at their current level. They may be striving to help students maintain their capability to function in the world. Teachers work with students to improve skills and knowledge, making existing skills and knowledge even more functional and improving fluency so that functional capabilities may be generalized into different settings.

It is critical to understand the implications of this definition to comprehend its effect on children with disabilities in our schools. It is fairly easy to understand how the definition is applied with regard to children with physical or sensory disabilities. To see a young child who had been unable to speak for her first five years say her first sentence with a speaking computer device presents an exciting and clear picture of assistive technology. The benefit of AT is also easy to comprehend when a child who cannot hear can understand his teacher's directions because real-time captioning converts the teacher's speech to text projected onto his laptop computer.

The definition of assistive technology also applies to the more difficult-to-gauge tools that teachers use to deliver and facilitate learning, including instructional applications of

technology. These applications range from drill and practice tutorials to facilitated learner-based environments provided through the Internet or interactive hypermedia and multimedia-based instruction.

It is important to understand that virtually all applications of technology -- tools for children to learn, as well as tools for teachers to provide learning opportunities -- can be defined as assistive technology. This is true for individual children with disabilities whose disability has a primary impact on academic performance (e.g., learning disabilities) or functional performance (e.g., multiple physical and visual disabilities).

Legal and Moral Requirements

The mandate to provide assistive technology to children with special needs is grounded in the moral concerns protected by the U.S. Constitution and its amendments. The Education for All Handicapped Children Act (P.L. 94-142) was based on the Supreme Court's 1954 *Brown vs. Board of Education* decision that separate education was not equal education under the 14th Amendment to the Constitution. At the time the law was passed by Congress in 1975, nearly 2 million children were excluded from schools in the United States. With the legislation, the president and the Congress established a legal requirement for a "free appropriate public education in the least restrictive environment" for children with disabilities and, as a result, the field of special education began to flourish for the first time in nearly seventy-five years.

Many controversies surfaced, however, about the extent of the required educational services and the cost to society for those services. The major debates have focused on the need for a clear definition of an "appropriate" education in the least restrictive environment and the requirement to provide assistive technology devices and services to all individuals with disabilities.

'Appropriate' Education

The requirement for an "appropriate" education in the least restrictive environment has led to the development of a separate educational system designed to meet the needs of children with disabilities. Some educators contend that this is the same type of separate system that the Supreme Court found unconstitutional in 1954. These individuals suggest that all children, regardless of ability, should be educated with their neighborhood peers in their local school.

Others in favor of the special education system argue that it is necessary to meet the educational needs of all children with disabilities, particularly in the "continuum of services" mandated by the Individuals with Disabilities Act (IDEA). In their view, children must have specific intervention designed to "mainstream" them back into regular education. Without the intervention, these individuals believe that students will be doomed to continued and more significant failure. They also note that, while the goal of mainstreaming is reasonable, some children may not benefit appropriately from a full inclusion program.

Although there are many arguments on both sides of the issue, it is apparent that new technologies can provide the tools to bring more children with disabilities into "regular" educational settings. In my opinion, assistive technology will certainly mainstream more and more children in wheelchairs, children who cannot physically speak, see, or hear, and children who need computers to write, organize, think, and function educationally.

The AT Requirement

The second debate centers on the requirement to provide assistive technology to all students. The initial legislation, the Education for All Handicapped Children Act, did not require schools to provide assistive technology devices and services to individuals with disabilities. The current assistive technology mandate was created by later legislation and prompted by the technological revolution resulting from the development of the microcomputer.

Subsequent legislation passed by Congress encouraged states to develop services designed to provide assistive technology to all persons with disabilities and required provision of AT as a special education service (trained special education teachers in special classes), related service (occupational, physical, speech therapies, and other services needed to access education) or supplemental service (services necessary to maintain a child in regular education classes).

Many states have not addressed the AT issue, since assistive technology devices and services were identified as requirements only recently. This may be due to a fear of "breaking" instructional budgets by purchasing high-cost equipment in already cash-short school systems. Concern also exists that the rapid evolution of technology creates the potential of costly investment in devices that may have a relatively short life span.

A close look at the situation will show that these concerns are not well grounded, however. Schools already use extensive amounts of AT, and need only to identify it as such. Nearly any use of computers falls into this category, as do tape recorded instructions or homework, copies of notes from a classmate or teacher, switch-operated toys, drawing paper taped to table tops, as well as large pencils and crayons. All of these could be noted, as required, in Individual Education Plans (IEPs) and Individual Family Service Plans (IFSPs).

References:

- <https://www.nided.nih.gov/health/assistive-devices-people-hearing-voice-speech-or-language-disorders>
- <https://www.masters-in-special-education.com/lists/5-examples-of-assistive-technology-in-the-https://www.edutopia.org/assistive-technology-young-children-special-education>
- <https://www.who.int/disabilities/technology/en>
- <https://www.nichd.nih.gov/health/topics/rehabtech/conditioninfo/device>



Parental Involvement - Success for Inclusion



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ABSTRACT

This conceptual research paper is an attempt to study how the involvement of parents and community at large will pave the smooth way for successful inclusive education in India. Research shows that parental involvement is a positive driver of successful educational outcomes for children with disabilities, especially when there is strong collaboration and a healthy partnership between parents and educators. Parental involvement is the foundation of every child's progress in school. Those wards, whose parents are fully involved in their education tend to do better academically than those wards whose parents are not. Parental involvement is seen as an important strategy for advancement of the quality of education. The ultimate objective of this article is to expand the horizons of academic and the social capabilities of students.

Keywords: Parental Involvement, Inclusive education, Learners with special needs.

INTRODUCTION

Parental involvement can be aptly described as the active and ongoing participation of a parent or primary caregiver in the education process of their child. There are several ways in which parents can contribute at home- reading with children, monitoring homework, and discussing school day and events. At school, parents could contribute by volunteering in classrooms, attending parent-teacher meetings, helping with organizing functions. Parental involvement and academic achievement are directly proportional to each other. Schools with enthusiastic parents involve, engage, and communicate with them which incorporate them in the learning process. This has a positive impact on the academic and overall achievement levels of the child.

NEED TO STUDY THIS ASPECT:

Parents involvement in inclusive education program builds positive relationships, encourages new behaviors, and increase self-satisfaction and optimism among themselves, their children and teachers. Such involvement of family is the key component which leads to student's and school's success.

REVIEW OF LITERATURE:

The parental involvement (PI) paradigm has long been recognized as centrally significant to children's educational attainment. Nevertheless, this process had neither been examined nor analytically considered until early 1960s. Interestingly, most reviewed literature on parental involvement (PI) emphasized parental beliefs as the motivator for parent's initial involvement in school activities (i.e. role construction, sense of efficacy). However, the general prospects such as the invitation to engage with school that comes from both school and children (Level I) also influence their involvement with school. Similarly, role construction also denotes parents' perspectives regarding their support for their child's learning (i.e. job as a parent) and it shows a significant correlation between parents with high role construction and school involvement. Also, Bandura (1997) attributes parents' sense of

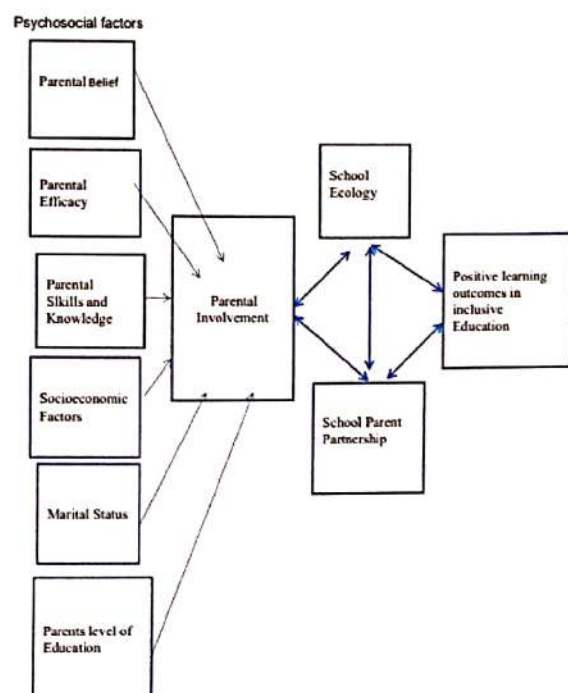


Figure 1. Conceptual framework

efficacy to their school participation, which variably or invariably contributes to children's learning and school success. Besides, parents with higher attribute for PI believe their contributions aid and sustain behavior that brings positive outcomes. This characterized general invitations from both schools and learners as a motivation for working in partnership with schools and to take part in learning activities. This proves that family's participation is desirable and valuable for learner's academic achievement. This broad prospect shows that learners share their concern regarding learning with parents at home or at schools and this allow parents' participation as shown by teachers' attitude towards them.

BRIEF DISCUSSION ON TOPIC:

Objectives of Parental Involvement:-

- To ensure that parents of students with special needs are considered equal partners on their child's education team and participate in decision taking process.
- Parents' involvement in public education needs to be invited and facilitated throughout the student's school years.
- Parents should be considered full partners on their child's education team and should be involved in decision making for their child.
- Establishment of equal, appreciative and student-oriented communication between parents and school.
- Psycho-social support.
- Enable parents for active involvement in the education of their child with disabilities.

Benefits of the Parental Involvement:-

- Parents are the first teacher of their children and motivate them easily. Parents should encourage their wards to develop friendship with classmates.
- Parents can encourage their wards to participate in activities where they can mix and interact with children of the same age group but different abilities.
- Parents can discuss the goals, expectations and preference for their child with his/her teacher, therapists etc. before the commencement of school and deciding upon the education plans for them.
- Parents should be fully aware of the rights of their child to have an inclusive education. School may avoid entertaining the special child in their school therefore parents should explain why they believe in inclusive education for their child

POSSIBLE OBSTACLES IN PARENTAL INVOLVEMENT

There is always a difference in perception about parental involvement. Teachers perceive that parents do not want to be

involved and parents, on the other hand, don't know how to get involved. There is a strong disconnect that exists because of various reasons like lack of time, communication barriers, the experience of parents with their own schooling, the inability of the school to reach out to the parents, and much more. More often than not these reasons become the key factor for children "slipping through the cracks". Supportive and positive school culture will boost academic achievement and reduce a lot of surrounding problems. Schools must educate teachers and other personnel about reaching out to parents to work equally. Schools must also offer parents resources and materials to work with their children. Schools must also assist parents to understand the academic standards, child's progress, and collaborating with teachers to improve standards and achievements. Parental involvement is crucial to foster this culture.

TO WHAT EXTENT PARENTAL INVOLVEMENT IS SUCCESS?

Most parent involvement programs develop as a response to a specific issue or need that arises in the school or community. Parent involvement programs cannot be bespoke or a "one size fits all" prototype. What works for one school may not work for another. Teachers are often not very forthcoming in involving parents in hiring processes, planning curriculum, and choosing books due to lack of expertise. In a nutshell, the successful parent-school partnership must not be for addressing one particular issue or an add-on program. Most parent-school partnership and involvement programs must be aligned with the vision and mission of the school. Programs must be developed collaboratively with parents and must reflect the needs, interests, and issues of the school, parents, and children. From offering child care, clubs and other multiple opportunities schools can show their genuine interest in receiving parent input. Parental involvement fund must be made transparent to parents. Parental involvement is a journey that cannot be bought but has to be nurtured and cultivated over time with care, trust, and patience.

Schools can become successful in engaging parents by making a slow start to expanding definitions of involvement. It is not just about increasing numbers but about the quality and kind of involvement that is brought to the table. It is more about believing that the success of students is a common interest for both school and family. Schools must envision parents as partners in the functioning and learning process. This will go a long way in identifying concrete ways in which the partnership can be cultivated and used for mutual benefit. Kids need to know that they are not making their life journeys alone and a successful school-parent partnership is a foundation for this.

CONCLUSION

The idea of inclusive education is gaining ground all over the world. All children with disabilities should be educated with non-disabled children of their own age and have access to the general education curriculum. Therefore best outcome occur when parents of children with disabilities and professionals work together. Hence, parental involvement in inclusive education is more important for children development.

Parental involvement is associated with a wide range of positive child outcomes in primary and high schools, such as good academic skills, positive attitudes and social competence. Parental involvement in learning acts as a gel that helps to make learning for children pleasant and encourages them to work even more as they seek to make those closest to them proud.

REFERENCES

- <https://parenting.firstcry.com/articles/importance-of-parental-involvement-at-school/#:~:text=Parental%20involvement%20can%20be%20aptly,discussing%20school%20day%20and%20events>.
- Parents' involvement in inclusive education: An empirical test for the psycho-educational development of learners with special educational needs (SENs) By Olusegun Emmanuel Afolabi
- Jeynes WH. A metaanalysis of the relation of parental involvement to urban elementary school student academic achievement. *Urban Educ.* 2005;40(3):237-69.
- Berger K. *The developing person through the life span.* Worth, New York. 2006.
- Guy B, Goldberg M, McDonald S, et al. Parental participation in transition systems change. *Career DevExceptIndivid.* 1997;20:165-77.
- Ascher, C. (1988). Improving the home-school connection for low-income urban parents. *Urban Review*, 20(1), 109-123.
- Ardel, M., & Eccles, J. S. (2001). Effects of mothers' parental efficacy beliefs and promotive parenting strategies on inner-city youth. *Journal of Family Issues*, 22(8), 944-972.



Skill Based Knowledge makes Inclusive Education Successful



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ABSTRACT

This study is purported to determine the impact of skill based education in Inclusive Education (IE) in India. The skill-based education in India is considered and treated to be a vocational skill obtained through short-term training or course but not part of the formal education system that pave the way for gainful employment opportunities. These skills are also envisaged as part of the government's Pradhan Mantri Kaushal Vikas Yojna (PMKVY) scheme, which aims to promote recognition and standardization methods in Inclusive Education. However expertise needs to be developed in the formal learning system as well. With the advent of rapid adoption of Information and Communication Technology (ICT), formal education today has become more holistic and engaging approach in nature. It is possible to teach soft skills through the prudent use of digital tools. Digital platforms, for example, encourage collaboration between learners and thus allow them to work in a team. This will help students to hone their interpersonal skills, to improve their academic performance, which can monitor self-productivity. There are major challenges confronting formal education system around the world and in India in particular that made difficult for academia in finding ways of including all children in schools. In economically poorer countries this problem is serious as result of this today millions of children is not able to attend classes in formal education (UNESCO, 2015). Faced with these challenges, there is umpteen evidence of an increased interest in the concept of making formal education more inclusive and equitable. However, the field remains haywire, shrouded with utter confusion and decries for appropriate actions needed in order to formulate suitable policy and practice forward.

Keywords: Inclusive Education, Vocational, PMKVY Economically poorer countries, Mainstream of Inclusive Education.

INTRODUCTION

Our world changes in geometric speed every day linguistically, culturally, politically, and economically as a result of local events that may have serious global impacts. The demographic changes are taking place due to global movement of people

inevitably will affect us as to how we can educate students and prepare teachers forever- changing world. In recent years, we have witnessed the immigration of people with the hope of finding safer and better places to live, often escaping war-torn countries or looking for better economic opportunities. Recently concept of Inclusive Education (henceforth, IE) is becoming critical and in particular its management needs to be more systematic and holistic.

MEASURES FOR MAKING IE A SUCCESS:

In almost every country, IE has emerged as one of the most powerful education system. With the publication of the Salamanca Declaration, a large number of developing nations started reformulating their plans to engage more students into normal schools in 1994 to provide basic education. The country's future citizens are all school-going children, no matter their socioeconomic status (UNESCO, 2009a; 2009b; UN, 1993). All school-going children, be they deprived of basic civic amenities or not, they are entitled to education because they are the country's future citizens. IE is an education system that offers to all students who are with special disabilities, but is theoretically empowered with outstanding skills and/or abilities, so that children with specific challenges can be integrated into mainstream of educational setting combined with students without special need Inclusive Education studies indicate that teachers work more closely and spend most of their time practicing their specialization in inclusive settings, and they will be learning new approaches from each other, developing their skills, showing a greater commitment to using more creative approaches to meet the needs of all students.

THE INTERNATIONAL POLICY CONTEXT

Over the last 30 years there have been major international efforts to encourage inclusive educational system followed with undertaking research studies extensively. In particular, the United Nation's Education for All (EFA) movement has worked to make quality basic education available to all learners. Agreed in letter and spirit in 1990, the EFA Declaration sets out an overall vision, which is about being proactive in identifying the barriers, as some learners encounter difficulties while they are attempting to access educational opportunities. It also involves

the identification of basic infrastructures and resources available for students at national and community level, and empowering them to bear these problems to overcome those barriers. This vision was reaffirmed by the World Education Forum (WEF) meeting held in 2000 at capital city Dakar of Senegal. This meeting held with an agenda to review the progress made in the previous decade in the field of Inclusive Education. The Forum declared that EFA must take particular account of the needs of the poor and the disadvantaged, including working children, remote rural dwellers and nomads, ethnic and linguistic minorities, children, young people affected by conflict, HIV/AIDS, hunger and poor health, and those with special learning needs.

INCLUSION AND EQUITY: KEY ELEMENTS

Terms such as 'equity' and 'inclusion' can be confusing and slightly ambiguous since they may have shades of meaning, mean different things to different people. This is a particular problem when anybody trying to move forward with other people for betterment not least in schools, where everybody is so busy and preoccupied. Put simply, if there is no shared understanding of the intended direction, progress will get hampered and difficult to move forward. There is, therefore, a need for agreed definitions of these concepts. Recent international policy documents argue that these basic concepts should be seen and treated as principles that comprise all aspects of educational policy (e.g. UNESCO, 2017).

In some countries, inclusive education is still considered as an approach to serving children with disabilities within general education settings. Internationally, however, it is increasingly seen more broadly as a principle that supports and welcomes diversity amongst all prospective learners. It presumes that the aim of it is to eliminate social exclusion which is a consequence of attitudes and responses to diversity in race, social class, ethnicity, religion, gender and ability. As such, it starts from the belief that education is a basic human right and the foundation for all in a given society.

SCHOOL CURRICULUM: KEY INGREDIENT

There is not one single model of what an inclusive school looks like. What is common to highly inclusive schools, however, is that they are welcoming and supportive places for all of their students, not least for those with disabilities and others who experience difficulties (Dyson, Howes, & Roberts, 2004). This does not prevent these schools from also being committed to improving the achievements of all of their students. Indeed, they tend to have a range of strategies for strengthening achievement that are typical of those employed by all effective schools, and the emphasis will be laid on supporting vulnerable students who does not appear to inhibit these strategies. A key factor is the emphasis placed on tracking and supporting the progress of all students.

INVOLVEMENT OF THE COMMUNITY

In order to foster concepts of inclusion and equity in education, governments need to mobilize human and financial resources, some of which may not be under their direct control. Forming partnerships among key stakeholders and interested parties who can support and own the process of change is therefore essential. These stakeholders include: parents/caregivers; teachers and other education professionals; teacher trainers and researchers; national, local and school-level administrators and managers; policy-makers and service providers philanthropists in all walks of life chosen from different sectors (e.g. health, child protection and social services); civic groups in the community; and members of minority groups that are at risk of exclusion.

Family involvement is particularly crucial. In some countries, parents and education authorities already cooperate closely in developing community-based programs for certain groups of learners, such as those who are excluded because of their gender, social status or impairments (Miles, 2002). A logical next step is for these parents to become involved in supporting change for developing inclusion in schools.

SHARPENING SOFT SKILLS WITH HI TECH BASED SOLUTIONS

Often, educational institutions don't teach soft skills due to their already overburdened curriculums. Digital learning can inculcate soft skills in a far more effective manner, leveraging technology. Ed-tech start-ups use interactive tools, specific game, and activity-driven group programs to impart soft skills. The future of innovation in the Ed-tech sector is specific game. Sports learning could be improved with the inclusion of Artificial Intelligence (AI), Big Data, cloud technologies, mobile learning, and Virtual Reality (VR). These techniques support the use of game-based learning techniques in the classroom to maintain students' interest in the subject matter. Additionally, because it encourages students to utilize their creativity, specific game enhances the likelihood that instructional concepts will be applied practically. The specific game practices would make it easier for professors to teach students since they would provide a thorough introduction to real-world applications of the subject matter. Due to their immersive and engaging nature, the lessons have a far higher probability of being retained by the students. The simulation modules encourage improvisation, just like on-the-job training does. Additionally, these modules can be highly customized and typically presented in smaller groups for optimum attention.

NEP'S ROLE TO FOSTER STUDENTS' SKILL DEVELOPMENT:

A reform that is expected to bring the Indian educational market to its peak by introducing vocational education from the sixth grade and establishing the National Committee for the Integration of Vocational Education (NCIVE). The National

Education Policy is expected to give students a wide range of viable career options as well as lessen the social stigma attached to contemplating vocation as a career option.

National Education Policy (NEP), 2020 emphasizes employability and recognizes the importance of education in equipping students with the necessary skill sets. Through this program, the government hopes to fulfill the goals of the 2030 Agenda for Sustainable Development, which aims to guarantee universal access to inclusive and equitable education and to encourage possibilities for lifelong learning.

It encourages a shift away from the traditional route, content-heavy learning method and focuses on holistic method of learning. In addition to science and math, it instills a creative, multi-disciplinary curriculum that places equal emphasis on other disciplines including the humanities, sports, fitness, languages, culture, and the arts.

The National Education Policy 2020 also acknowledges the significance of soft skills as essential life abilities, including communication, teamwork, problem-solving, decision-making, analytical thinking, resiliency, etc. The program employs a method that imparts academic knowledge. However, for students this program motivates to advance in their academic trajectory, leadership qualities are also inculcated.

Due to education's immersive and engaging design, the lessons have a far reaching higher probability of being retained by the students. Ed-tech start-ups are unleashing students' potential starting at the elementary level. Deeper, longer-lasting experiences are made possible by ongoing learning. They create cutting-edge programs to tap into a child's creativity and inventiveness so they can develop a healthy, all-encompassing personality. Technology has redefined the educational sector for both conventional and mainstream courses as well as alternative courses by making education more accessible. It has opened door to endless possibilities.

REVIEW OF LITERATURE

Waychunas, W. (2020). Student diversity in general education classrooms is widening at a progressive and constant rate, and so is the range of accommodations, services, and modifications being required to meet the educational needs of each student. General education teachers are expected to be involved in curricular modifications for all students (Vaughn, Bos, & Schumm, 2007); however, this is often easier said than done.

Yildiz Teknik Üniversitesi, Turquia (2022). The inter-cultural virtual exchange project had positively impacted the participants' perceptions of and engagement on social justice issues in the classroom as evidenced in the statistically significant survey test results and participants' self-reported/perceived growth throughout the project (2022).

Alzahrani, S. S., & Flynn-Wilson, L. (2021). The extent to

which EI teachers in Saudi Arabia modify their EI services based on cultural differences has received little previous research attention. In the present study, all teachers reported making modifications based on cultural differences. This finding is promising for the current and future delivery of EI services. Interestingly, more experienced teachers proved more likely to make such modifications. Established teachers have a wealth of experience to "fall back on" and confidence that newer teachers may not have.

Warman1 (2021) To sum up, our findings reveal that (1) there are substantial gaps in teachers' pedagogical abilities according to their involvement with in-service training programs for IE, with teachers with a greater level of preparation showing better pedagogical skills. In addition, (2) the expectations of teachers for IE show that 61% of teachers believe it is extremely relevant, 37% believe it is relevant, and 3% find it unimportant. Finally, (3) the subjects for in-service training materials deemed most important by teachers include (a) defining types of disabilities children, (b) features framework for teacher-training plans.

Sumaya Saqr1 & Lilly Tennant1, (2016) The stated challenges and barriers pointed out by the participants raise major issues about their preparation; in asking for more knowledge, more practice, more experience with SEN students, it is evident they are making a clear statement that the current Bachelor of Education Program does not adequately prepare them to meet diverse learning needs of students whom they will have to address as newly qualified future teachers.

Karin Bertills 1, Mats Granlund2 and Lilly Augustine (2019) our results suggest that intended learning outcomes in the PE-syllabus are promoted in high-level teaching since time-saving PE lesson structures increase students' learning opportunities and enable more individualized instructions (feed-back and feed-forward), with higher levels of student engagement as a result.

Mel Ainscow (2020) Promoting inclusion and equity in education: lessons from international experiences, These study indicate that the promotion of inclusion and equity in education is less about the introduction of particular techniques or new organizational arrangements, and much more about processes of social learning within particular contexts. As I have argued, the use of evidence as a means of stimulating experimentation and collaboration is seen as a central strategy.

Margaret P. Weiss1, Anthony Pellegrino1, and Frederick J. Brigham1 (2017) We found from this study that the candidates in the co taught course group who participated in activities within a collective environment that included those outside their own discipline grew in their understanding of the conceptual underpinnings and tools of collaboration, attaining a higher level of appropriation than those who practiced

collaboration with only those within their own discipline.

DISCUSSION ON THIS TOPIC:

The importance of including disabled children is an essential strand within this new international policy agenda. This was stressed in the United Nations' Convention on the Rights of Persons with Disabilities (United Nations, 2008), which states: 'The right to inclusive education encompasses a transformation in culture, policy and practice in all educational environments to accommodate the differing requirements and identities of individual students, together with a commitment to remove the barriers that possibility.' The Convention defines non-inclusion, or segregation, as the education of students with disabilities in separate environments (i.e. in separate special schools, or in special education units located with regular schools). It commits to ending segregation within educational settings by ensuring inclusive classroom teaching in accessible learning environments with appropriate support. This means that education systems must provide a personalized educational response, rather than expecting the student to fit the system.

As these key studies indicate, the move towards inclusive schools can be justified on a number of grounds. There is an educational justification: the requirement for inclusive schools to educate all children together means that they have to develop ways of teaching that respond to individual differences and that therefore benefit all children; a social justification: inclusive schools are able to change attitudes to difference by educating all children together, and form the basis for a just and non-discriminatory society; and an economic justification: it is likely to be less costly to establish and maintain schools which educate all children together than to set up a complex system of different types of school specializing in particular groups of children.

CONCLUSION

The ideas that have emerged from this study of earlier researches and policy regarding ways of Increasing Skill Based Education for Inclusion are as follows:

- Strategies should be informed by evidence regarding the impact of current practices on the presence, participation and achievement of all students;
- There should be an emphasis on whole-school approaches in which teachers are supported in developing inclusive practices;
- Education departments must provide leadership in the promotion of inclusion as principles that guide the work of teachers in all schools;
- Policies should draw on the experience and expertise of everybody who has an involvement in the lives of children, including the children themselves.

These ideas indicate that the promotion of inclusion in education is less about the introduction of particular techniques

or new organizational arrangements, and much more about processes of social learning within particular contexts. As I have argued, the use of evidence as a means of stimulating experimentation and collaboration is seen as a central strategy. Copland (2003) suggests, inquiry can be the 'engine' to enable the distribution of leadership that is needed in order to foster participation in learning, and the 'glue' that can bind a community together around a common purpose. Working with schools over many years to introduce this way of thinking, I have become aware of the complexities involved. One way to think about the processes at work is to see them as linked within 'ecology of equity' (Ainscow et al., 2012).

REFERENCES

- Ainscow, M., & Messiou, K. (2017). Engaging with the views of students to promote inclusion in education. *Journal of Educational Change*, 19(1), 117. [Crossref], [Web of Science®], [Google Scholar]
- Waychunas, W. (2020). Where Teachers Thrive: A book review. *Research in Educational Policy and Management*, 2(2), 129-132.
- Yildiz Teknik Üniversitesi, Turquia (2022). Supporting Teachers' Engagement in Pedagogies of Social Justice (STEPS): Collaborative project between five universities in Turkey and the USA Focus on *ELT Journal*, vol. 4, núm. 1
- Alzahrani, S. S., & Flynn-Wilson, L. (2021). Cultural influences on early intervention services. *International Journal on Studies in Education (IJonSE)*, 3(1), 1-9. Warman1 (2021)
- Sumaya Saqr1 & Lilly Tennant1, (2016) Emirati General Education Pre-service Teachers' Preparedness for Diversity in Inclusive Classrooms, *International Journal of Education* ISSN 1948-5476 2016, Vol. 8, No. 2
- Warman1 (2021) Establishing the Governmental Policy to Promote Engagement within the Inclusive Education System in Indonesia, *Journal of Social Studies Education Research*, 12 (1), 124-148
- Karin Bertills 1, Mats Granlund2 and Lilly Augustine (2019) Inclusive Teaching Skills and Student Engagement in Physical Education <https://doi.org/10.3389/feduc.2019.00074>
- Mel Ainscow (2020) Promoting inclusion and equity in education: lessons from international experiences, *Nordic Journal of Studies in Educational Policy*, 6:1, 7-16. DOI: 10.1080/20020317.2020.1729587
- Margaret P. Weiss1, Anthony Pellegrino1, and Frederick J. Brigham1 (2017) Practicing Collaboration in Teacher Preparation: Effects of Learning by Doing Together, *Teacher Education and Special Education* 2017, Vol. 40(1) 6576
- Alves, I. (2019). International inspiration and national

- aspirations: Inclusive education in Portugal. *International Journal of Inclusive Education*, 23(7/8), 862875. [Taylor & Francis Online], [Web of Science®], [Google Scholar]
- Armstrong, P., & Ainscow, M. (2018). School-to-school support within a competitive education system: Views from the inside. *School Effectiveness, School Improvement*, 29(4), 614633. [Taylor & Francis Online], [Web of Science®], [Google Scholar]
 - Ball, S. J. (2010). New class inequalities in education. *International Journal of Sociology and Social Policy*, 30(3/4), 155166. [Crossref], [Google Scholar]
 - Booth, T., & Ainscow, M. (2002). *The index for inclusion*. Bristol: Centre for Studies on Inclusive Education. [Google Scholar]
 - Bubb, S., Crossley-Holland, J., Cordiner, J., Cousin, S., & Earley, P. (2019). *Understanding the middle tier: Comparative costs of academy and LA-maintained school systems*. London: Sara Bubb Associates. [Google Scholar]
 - Copland, M. A. (2003). Leadership of inquiry: Building and sustaining capacity for school improvement. *Educational Evaluation and Policy Analysis*, 25(4), 375395. [Crossref], [Web of Science®], [Google Scholar]
 - Dyson, A., Howes, A., & Roberts, B. (2004). What do we really know about inclusive schools? A systematic review of the research evidence. In D. Mitchell (Ed.), *Special educational needs and inclusive education: Major themes in education*. London: Routledge. [Google Scholar]
 - Fulcher, G. (1989). *Disabling policies? A comparative approach to education policy and disability*. London: Falmer. [Google Scholar]
 - Hargreaves, A., & Ainscow, M. (2015) The top and bottom of leadership and change. *Phi Delta Kappa*, November, 2015 [Crossref], [Google Scholar]
 - Huberman, M. (1993). The model of the independent artisan in teachers' professional relationships. In J. W. Little & M. W. McLaughlin (Eds.), *Teachers' work: Individuals, colleagues and contexts* (pp. 6583). New York: Teachers College Press. [Google Scholar]
 - Kerr, K., Dyson, A., & Raffo, C. (2014). *Education, disadvantage and place: Making the local matter*. Bristol: Policy Press. [Crossref], [Google Scholar]
 - Appleby, A. N., Adler, M., & Flihan, S. (2007). *Interdisciplinary curricula in middle and high school classrooms: Case studies of approaches to curriculum and instruction*. *American Educational Research Journal*, 44, 1002- 1039. doi:10.3102/0002831207308219
 - Arthaud, T. J., Aram, R. J., Breck, S. E., Doelling, J. E., & Bushrow, K. M. (2007). Developing collaboration skills in pre-service teachers: A partnership between general and special education. *Teacher Education and Special Education*, 30, 1-12. doi:10.1177/088840640703000101
 - Collis, B., Andernach, T., & van Diepen, N. (1996, October, 15-19). The web as process tool and product environment for group-based project work in higher education. Paper presented at WebNet'96, San Francisco, CA. Retrieved from <http://doc.utwente.nl/18727/1/ED427657.pdf>
 - Engeström, Y., & Miettinen, R. (1999). Introduction. In Y. Engeström, R. Miettinen, & R. L. Punamäki (Eds.), *Perspectives on activity theory* (pp. 1-18). Cambridge, UK: Cambridge University Press.
 - Friend, M., & Cook, L. (2013). *Interactions: Collaboration skills for school professionals*. Boston, MA: Pearson.
 - Fullerton, A., Ruben, B. J., McBride, S., & Bert, S. (2011). Evaluation of a merged secondary and special education program. *Teacher Education Quarterly*, 38(2), 45-60.
 - Greene, B. A., Lubin, I. A., Slater, J. L., & Walden, S. E. (2013). Mapping changes in science teachers' content knowledge: Concept maps and authentic professional development. *Journal of Science Education Technology*, 22, 287-299.
 - Boylan, M. (2009). Engaging with issues of emotionality in mathematics teacher education for social justice. *Journal of Mathematics Teacher Education*, 12, 427-443.
 - Boylan, M., & Woolsey, I. (2015). Teacher education for social justice: Mapping identity spaces. *Teaching & Teacher Education*, 46, 62-71.
 - Carson, T. (2005). Beyond instrumentalism: significance of teacher identity in educational change. *Journal of the Canadian Association for Curriculum Studies*, 3(2), 1-8.
 - Chun, D., Smith, B., & Kern, R. (2016). Technology in language use, language teaching, and language learning. *Modern Language Journal*, 100, 6480. <https://doi.org/10.1111/modl.12302>



Barriers Hamper Promotion of Inclusive Education



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ABSTRACT

The Ministry of Social Justice and Empowerment (MSJE) is responsible for the education and rehabilitation of persons with disabilities (PwD). On the other side, the sustainable development goals (SDGs) emphasized the Quality Education which is adopted by India in 2015. As a developing nation, India has attempted to develop a quality system of education under the familiar slogan of 'Education for All'. Although in India education is one of the fundamental right and for supporting this very fundamental Right, New Education Policy 2020 chapter 6 and 14 emphasis on equity and inclusion in school for higher Education level. However, for achieving success in adopting and implementing it in letter and spirit inclusive education in India, there are several obstacles, barriers and challenges. Many challenges such as lack of well-educated teachers, course curriculum, resources, good infrastructural facilities, awareness, positive attitude from parents caretakers, and communities are still lacking. Teacher's and professionals can follow several strategies for promotion of inclusive education in school. In this conceptual research article, efforts have been made to throw light on the challenges creeping in for promotion of Inclusion in India.

KEYWORDS: Quality Education, Ministry of Social Justice and Empowerment (MSJE), Education for all, New Education Policy (NEP), Sustainable Development Goals (SDG), Inclusive Education.

INTRODUCTION

As we all know that Education is a fundamental right and it plays an important role in developing nation. Taking it to consideration people of India started thinking about educating children with disabilities. However, India has diversity in terms of caste, class, creed, gender, region, language etc. and where disability has always been taken seriously out of the typical setting, discriminated and deprived (State of the Education Report for India, 2019). Although Education for children with disabilities has been taken seriously since the late 19th century and also Government of India has made several policies for promoting and supporting Inclusive Education. Inclusion is one

of the most widely studied topic in teaching and learning process in educational field. Inclusion means the act of including or the state of being included and it is about equal opportunities for all pupils. Pupils should all be included regardless of their age, gender, ethnicity, ability, attainment and background. The Chinese proverb, (IRC, 2006), says, "Tell me and I forget, teach me and I remember, involve me and I learn." The classroom is built upon interaction, cooperation, group work, and participation. These can be done through inclusion in curriculum, Infrastructure, Environments, Teaching learning process etc.

"Inclusive education according to UNESCO means that the school can provide good education to all pupil irrespective of their varying abilities. The government of India practice inclusive education but 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. It is because of various barriers which are both external and internal as well. These barriers, being faced by children with disabilities are summarized below.

CHALLENGES FOR INCLUSIVE EDUCATION

Rigid Curriculum: No special curriculum is here to fulfill the diverse needs of special students. The curriculum is one of the major obstacles or tools to facilitate the development of more inclusive system. Rigidity in curriculum does not allow the special students to learn with the non-disabled ones. As a result of the knowledge based curriculum, the examinations are also too much content oriented rather than success oriented. This is also a barrier to measure the achievement of children with special needs.

Peer Pressure: Peers of children with disabilities are sometimes thought that they are Children with disabilities are often an easy target for being teased and bullied by their non-disabled peers. This vulnerability to bullying is found across all types of disabilities. Hence, a negative peer attitude proves to be a major barrier to full social inclusion at school for students with disabilities.

Attitude of Regular Teachers: There are two general attitudes of regular teachers which affect their acceptance and commitment to implementing inclusion. Firstly, regular teachers consider children with disabilities as the responsibility of the resource teachers. Secondly, they feel children with disabilities to be a 'disturbance' to the class and as causing distractions which delayed course completion. Therefore, they choose to ignore their presence and concentrate on execution of their lesson plans.

Buildings and Infrastructure: Children with disabilities face barriers if the building has not been constructed with their mobility needs in mind. Most school buildings don't respond to the requirement of the learners properly. The students with special needs cannot access all the places in the compound such as playgrounds, washrooms, library, doors, passageways, stairs and steep ramps, recreational areas, etc.

REVIEW OF LITERATURE

Sonam Dorji, Revealed that there should be cooperation among teachers, students and parents and educate the public to dispel the negative attitude towards disabilities, providing trainings to instill skills required in inclusive classrooms and revising curriculum to make it flexible enough to respond to the different needs of the students.

Mitika, Alemu and Semahegn (2014), found that there are several obstacles and challenges related to teacher preparation and to promote inclusive education. It is not possible to attain success in inclusive education in country through effective teacher preparation strategies, so to make inclusive appropriate teacher preparation for inclusive education must be made compulsory in all teacher education programme irrespective of elementary or secondary level furthermore qualitative resources, facilities, faculties must be supplied to each teacher education institution to make inclusive education programme successful. Major findings of this study were:

1. Attitude of teachers and parents towards disable children
2. Lack of attention from education institution
3. Lack of educational materials
4. Problem is to create a good effective and competent teachers who can lead and practice inclusive education adequately.
5. Large class size.
6. Lack of skilled manpower
7. Schools do not conduct scientific way of identification and assessment process to identify and assess the special child.
8. Schools do not have eligibility criteria to admit students with special needs.
9. Teachers do not prepare individualized educational plan (IEP) for disable child.
10. Teachers do not have extra time to complete their activities.

11. Testing procedure is not modified according to need of special child.
12. Visually impaired students are not placed or positioned according to their need to accommodate all stationary and other material.

According to Linklater & Florian (2010), although inclusive education has received global attention, it's viewed as major challenge in the educational system around the world. Similarly, in Bhutan, implementing the policy is key challenge of the policy. While implementing the policy, teachers are encountered with various challenges which hinders the success of inclusive education. Introduction of inclusive education has exposed teachers to challenges while discharging their normal duties (Gandiya, 2002).

Sarao (2016), Revealed in a study of 'obstacles and challenges in inclusive education in India with special reference to teacher preparation.' that many problem such as lack of well educated teachers, curriculum, resources, good infrastructural facilities awareness, positive attitude, plans, policies are creating hurdles for extending the concept of inclusive education in India.

Thwala (2015), revealed that majority of teachers were not trained on how to teach in an inclusive classroom, however literature indicates that with proper training and resources inclusion can be practical and effective learning environment for disable child. This study also revealed that mainstream teachers generally lack confidence as they attempt to include students with disabilities in the classes so this study suggests that there should be holding of special need class courses, workshops and conferences for teachers only then they can get acknowledge with the different needs of special child and only then they can manage them in a normal classroom.

DISCUSSION

Inclusive education aims at strengthening the Indian Education System so that it reaches every child and provide them opportunities for academic and social achievement. Inclusive education believes that all children, regardless of the nature of their disability, should be educated in general schools alongside non-disabled children. Since change is the only constant, changing the mindsets of communities, schools, and governments toward people with disabilities by ensuring that they embrace socially inclusive policies is a key step toward creating a disabled-friendly India.

A socially inclusive community needs to provide disabled people with the skills, tools, and support they need to make a living and live independently. In recent years, people's access to technology platforms and the internet has made it simpler to learn, adapt, and up-skill digitally. It has created more chances and new options for disabled people to overcome discrimination, such as the ability for a disabled person to listen

to an audio book and learn. As citizens of the modern community, we should support people with disability to interact with other children to be active citizens.

Inclusive learning and teaching look at how schools, classrooms, programs, and lessons are arranged so everyone can be a part of them. By considering a wide range of needs, inclusive teaching guarantees that everyone has an equal chance to learn. This allows teachers to access students who are often left out of the school system.

Due to the increased skill development in the following generation, the benefits of these educational approaches influence the broader community. Below are the key benefits of inclusive education or its importance in today's society

HOW INCLUSIVE EDUCATION BENEFITS SOCIETY:

It takes into account needs of student: Using inclusive and interesting teaching strategies in the classroom allows students of all ages and abilities to learn meaningfully from the lessons being taught. There is a chance for students of all abilities and backgrounds to reach their full potential because schools are open to everyone.

It's important to have the right arrangement to go to school in normal classrooms and not be separated or excluded.

It points out several types of people in society: When schools are more inclusive, they help people understand and accept their differences. Children from all over the world should learn together in the same classroom. As a result, it can build friendships outside of school, which can help parents, kids, and society work together and cooperate in the community.

It means no one is left out because of their identity: Inclusivity means that all students get the system when it comes to school. Because of this, there will be more involvement in co-curricular and extra-curricular activities.

By including all students in early education, school systems can give children the chance to make friends and more chances to interact with other people.

Inclusive education means all children in the same classrooms, in the same schools. It means real learning opportunities for groups who have traditionally been excluded not only children with disabilities, but speakers of minority languages too.

Inclusive education values diversity and the unique contributions each student brings to the classroom. In a truly inclusive setting, every child feels safe and has a sense of belonging. Students and their parents participate in setting learning goals and take part in decisions that affect them. Inclusive systems provide a better quality education for all children and are instrumental in changing discriminatory attitudes. Schools provide the context for a child's first relationship with the world outside their families, enabling the

development of social relationships and interactions. Respect and understanding grow when students of diverse abilities and backgrounds play, socialize, and learn together.

Education that excludes and segregates perpetuates discrimination against traditionally marginalized groups. When education is more inclusive, so are concepts of civic participation, employment, and community life.

HOW TO OVERCOME BARRIERS IN THE WAY OF Inclusive Education:

Use of teaching assistants or specialists: These staff have the potential to be inclusive or divisive. For instance, a specialist who helps teachers address the needs of all students is working inclusively. A specialist who pulls students out of class to work with them individually on a regular basis is not.

Inclusive curriculum: An inclusive curriculum includes locally relevant themes and contributions by marginalized and minority groups. It avoids binary narratives of good and bad, and allows adapting the curriculum to the learning styles of children with special education needs.

Parental involvement: Most schools strive for some level of parental involvement, but it is often limited to emails home and occasional parent teacher conferences. In a diverse school system, inclusion means thinking about multiple ways to reach out to parents on their own terms.

Ensure that educators have the training, flexibility, and resources to teach students with diverse needs and learning styles

Ensure that kindergartens and schools receive adequate and sustainable financial support so that all activities and services are fully inclusive.

Empower parents to assert their children's right to education in inclusive settings

Enable the entire community including mainstream and special educators, social workers, parents, and students to work together and participate in the design, delivery, and monitoring of education, thereby reframing inclusive education as a shared responsibility

Hold government accountable for implementing anti discrimination legislation, legal mandates for inclusion, and policies to remove barriers

CONCLUSION

In my opinion successful inclusion is a must inside the classroom. When pupils are included properly, they will equally have the same chance to achieve, learn and acquire new experiences inside their school. There are inadequate infrastructures and education facilities, sanitation facilities, lack of ramps, dirty and dusty classrooms and acoustically non-

treated classrooms, equipments and services; moreover, negative attitudes of teachers, lack of budget, limited professionals, lack of responsible personnel in district, zone and region education offices. Parents started to send their children to school; however, there is lack of skilled professionals who will screen and identify according to interests of learners. There is highest number of repeaters and dropouts in early schools because of unfriendly learning environment for diversified learners. The study suggested that high attention is needed from the concerned parties for the implementation of the inclusive education in India.

REFERNCES

- DorjiSonam Challenges Faced by Teachers in Implementing Inclusive Education: A Case from Changangkha Middle Secondary School, Thimphu. Retrieved 12 January 2023 from <http://202.144.157.211:8080/jspui/bitstream/1/308/1/Sonam%20Dorji.pdf>.
- Paquette, D., & Ryan, J. (2001).Bronfenbrenner's Ecological Systems Theory. Retrieved 12 January 2023 from<http://pt3.nl.edu/paquetteryanwebquest.pdf>.
- Thwala , S. (2015). Challenges encountered by teachers in managing inclusive classroom in Switzerland. Researchgate.Mediterranean journal of social sciences. www.researchgate.net
- Mitiko, W., Yitayal, A. Mengsitu, S. (2014).Challenges and opportunities to implement inclusive education.Asian journal of humanities, arts and literature.volume 1(2).
- UNESCO. (1994). Salamanca: Five Years On: A Review of UNESCO Activities in the Light of the Salamanca Statement and Framework for Action on Special Needs Education. Paris: UNESCO.

ICT Based Learning for Children with Special Needs



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ABSTRACT:

This conceptual research article purported to study the importance and significance of Information and Communication Technology (ICT) based learning in Inclusive Education system with special reference to Children with Special Needs (CWSN). It is observed that few International policies and legislations on the rights of persons with disabilities will serve as essential ingredient in making IE successful and thereby ensure children with disabilities to receive their education in an inclusive, rather than segregated, school setup. It is perceived that children with diverse needs including disabilities are most valued members of the school community. Keeping this objective as base the teachers can facilitate a positive environment in the school that encourage inclusiveness and provides equal learning opportunities to the children with special abilities, hailing from varied social backgrounds and diverse learning needs. Hence, inclusive education system promotes learning of all children, with special abilities, with various social backgrounds and with diverse learning needs. The present IE system advocates that wherever possible, children with disabilities are accommodated in inclusive schools conveniently. This measure promotes cost-effectiveness and leads to a more inclusive opportunities in different walks of society. ICT is one of many techniques that can enable the realization and implementation of inclusive education. ICT has a major role to play in enabling educational authorities, academic regulators, teachers, students and parents to move towards a more inclusive educational system.

Key Words: ICT, Assistive Technology, Inclusive Education, auditory, digital, Curriculum, society, promotion, children with special need

INTRODUCTION:

The main objective of ICT technology is to help individuals with disabilities and function in the learning process of those individuals without disabilities thereby helping to bridge the gap between what people can do and what they may need to do. In this paper I shall discuss the role of ICT in an inclusive classroom and how various ICTs can be used in teaching -

learning processes. Besides ICT, I shall address the need of Assistive Technology (AT) in the inclusive classroom. The impact of ICT on the overall development of the personality in the inclusive environment is extremely significant. In particular its effect on the improvement of communication skills with students is treated as a central goal of the ICT curriculum. Language barriers and isolation can play negative role in denying students access to the wide range of digital information and resources. Physically challenged students and in particular the visually impaired and hearing impaired needs additional support. Heightened awareness on the part of the IE system will help to address these students' problems of access.

OBJECTIVES OF ICT BASED LEARNING:

- To explain the concept of inclusive classroom;
- appreciate the role of ICTs in promoting inclusion in classroom;
- discuss the appropriate use of ICTs as per the diverse needs of students;
- relate different assistive technologies (ATs) to various special needs; and
- explain the use of ATs in inclusive classroom.

FEATURES OF INCLUSIVE CLASSROOM

You have already read the Course Behavior and Education Support (BES) 128, in which it was discussed on how to create an inclusive school and deal with special needs of children. International policy and legislation on the rights of persons with disabilities is strongly in support of children with disabilities receiving their education in an inclusive, rather than segregated, school setting. Children with diverse needs including disabilities are the valued members of the school community. Teachers can facilitate a positive environment in the school that respects inclusiveness and provides equal opportunities to the children with special abilities, from varied social backgrounds and diverse learning needs. Hence, inclusive classroom promotes learning of all children, with special abilities, with various social background and with diverse learning needs. The present system advocates that where possible, children with

disabilities are accommodated in inclusive schools. This promotes cost-effectiveness and leads to a more inclusive society. ICT is one of many supports that can enable the realization and implementation of inclusive education. ICT has a major role to play in enabling educational authorities, teachers, students and parents to move towards a more inclusive educational system.

ROLE OF ICTs IN INCLUSIVE CLASSROOM:

When we consider using ICTs for students with special needs, then it is very important to ensure that the technology can be used by them. That means- it has to be accessible. Accessible ICTs are the wide range of assistive and mainstream technologies and formats that can enable students with a disability to enjoy an inclusive education. Accessible ICTs also include assistive technology (AT) which can be defined as a "piece of equipment, product system, hardware, software or any service that is used to increase, maintain or improve functional capabilities of individuals with disabilities." A person's ability to use technology may be impaired due to various physical, sensory, emotional or cognitive disabilities. One common feature of accessibility is the small tactile node, or 'dot', found on the '5' key on most keypads for computers and telephones. By finding the '5' key by touch, anyone can locate the other numeric keys without looking at it. Accessible ICTs hold the potential to enable students with disabilities to receive education and become independent in social and economic life of their communities. Moreover, they provide equitable learning opportunities through enabling communication with teachers and fellow students. They also provide access to learning materials, so that students are able to do the course work, assignments and appear for examinations. In general, accessible ICTs:

- enable greater learner autonomy;
- unleash hidden potential for those with communication difficulties;
- enable students to demonstrate achievement in ways which might not be possible with traditional Methods and
- enable tasks to be tailored to suit individual skills and abilities.

Benefits of ICT based learning for teaching and non-teaching staff:

- Reduces isolation of teachers working for children with special educational needs by enabling them to
- Communicate electronically with colleagues.
- Supports reflection on professional practice via online communication.
- Improves skills for staff and a greater understanding of assistive technology used by students
- Enhances professional development and effectiveness of the use of ICT with students through
- Collaboration with peers

- Materials already in electronic form (for example, from the Internet) are more easily adapted into
- Accessible resources such as large print or Braille.

The Right to Education Act (RTE) and Samagra Shiksha on Inclusive Education for Children with Special Needs

- In the year 2018-19, the Department of School Education & Literacy, - Ministry of Human Resource Development (MHRD) has launched Samagra Shiksha an integrated scheme for School Education covering children with special needs from classes I to XII.
- The Scheme is governed and regulated by the provisions of the RTE Act, 2009.
- The Right of Children to Free and Compulsory Education (RTE) Act, 2009 enshrines the entitlement to free and compulsory elementary education, access to school and barrier free access for all children including children with disability.
- Section 3(2) of the RTE Act lays emphasis on the elementary education of all children with disabilities.
- As per the Amendment of 2012, the RTE Act also mandates that, a child with multiple and/or severe disabilities have the right to opt for home based education.

Provisions under Samagra Shiksha for Children with Special Needs (CWSN)

- Under Samagra Shiksha, there is a dedicated component for Inclusive Education for Children with Special Needs (CWSN) through which various provisions are made available for the educational needs of differently abled children such as,
- Identification & assessment camps
- Provision of aids, appliances
- Assistive devices, teaching learning materials (TLMs)
- ICT resources like JAWS & SAFA, as well as transportation, escort & scribe allowances and stipend for all girls with special needs (from Class I to XII).
- Further, individualized support is provided through therapeutic interventions at the block level.
- Home based education: Further, CWSN with severe impairment requiring individualized attention are provided home based education through special educators.
- Financial support: A Separate provision for financial support of Special Educators has been made under Samagra Shiksha in order to appropriately address the educational requirements of children with special needs from elementary to higher secondary levels.
- Samagra Shiksha also has provisions for ramps, handrails and disabled friendly toilets for barrier free access to schools for all children.

CONCLUSION:

The current trend in international level on Inclusive education and social policy is turning toward integration of those who are at vulnerable level and they are at risk of exclusion from society, and efforts are on in providing them with the access to high-quality basic education.

- ◆ The movement for inclusion has been extended over the whole category of people who have been deprived of the opportunity to receive education. This includes those with inborn or innate or acquired impairments, socio-economic deprivation, consequences of war and other conflicts, and other negative factors. These causes represent barriers to learning.
- ◆ A number of international human rights agreements were agreed upon to support the view that compulsory segregation in education is against basic human rights of children and young people covered in the UN Convention on the Rights of the Child (1989), the UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1993), and the UNESCO Salamanca Statement (1994).
- ◆ The general understanding of disability has changed from the attitudes which regarded disability merely as a personal problem related to a specific impairment, to a common social issue. The first step in this direction is the recognition of the necessity of radical social and environmental changes to facilitate disabled people's inclusion in everyday life of the community.
- ◆ People with Special Education Needs (SEN) experience many difficulties in learning caused by social, economic, and physical factors.
- ◆ Overcoming of barriers and providing appropriate strategies for inclusive education to students with a wide range of special needs physical, cultural, and educational must be facilitated to enable them to play appropriate roles in modern society, thus contributing to future knowledge-based nation.
- ◆ The primary reason to promote the Inclusive Education (IE) by motivating regular attendance by students with special needs in schools of IE to increase their learning opportunities through constant interaction with teachers, parents, peers and to provide for their active participation in the life of the community. This uniting process greatly impacts the societal development.

Reference:

- Brinker, R. P. and Thorpe, M. E. (1984). Integration of Severely Handicapped Students and the Number of IEP Objectives Achieved. *Exceptional Children*, 51, 168-175.
- D'Alonzo, B., Giordano, G., and Van Lecuwen, D. (1997). Perceptions by Teachers about the Benefits and Liabilities of Inclusion. *Preventing School Failure*, 42(1), pp. 4-11.
- Epps, S. & Tindal, G. (1987). The Effectiveness of Differential Programming in Serving Students with Mild Handicaps: Placement Options and Instructional Programming. In Wang, M.C. , Reynolds, M.C., & Walberg, H.J. (Eds.). *Handbook of Special Education: Research and Practice* (vol. 1, pp. 213-248). Oxford: Pergamon Press.
- European commission (2002). Key Data on Education in Europe. Chapter B. Structures and Schools. Online: http://www.mszs.si/eurydice/Key.D.ata.2002/B_en_structures2002/19-42b.pdf
- Ferguson, P.M. and Asch, A. (1989). Lessons from Life: Personal and Parental Perspectives on School, Childhood, and Disability. In Biklen, D., Ferguson, D., & Ford, A. (Eds.). *Schooling and Disability*. Chicago: University of Chicago Press.

Strategies & Challenges for Promotion of Inclusion



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Inclusive Education (IE) a popularly known concept which is applied to imparting basic education at the global level though the fraternity of learners may be suffering from one or other disability(s) universalized but thereby assuring the society and community at large that concept of IE aiming to maintain equity in the education.

Without quarantining them in to the boundaries of special educational schools, provisions can be made for children with special needs who can also get opportunity to learn with other students having equal quality and facilities.

But at the same time it is the benign endeavor of all stakeholders, interested parties educators, educationists and academicians to provide basic education without any discrimination or disparity to all children of the country whether they are normal human beings or disabled by equity or fair treatment. But in today's scenario we come across some barriers or hurdles, that is plagued the education sector in India. Some genuine problems have hampered the success of Inclusive Education in India. These are to name few, are absence of trained special educators, outdated course curriculum, knowledge sources, educational institutions not equipped with proper required infrastructures, people at society and community level do not have sufficient knowledge about aim and scope of inclusive Education, people do not have positive attitude towards IE, Further our government's plans are not sufficient, have impaired the growth and development of Inclusive Education in our country.

Inclusive Education still shrouded within the realm of theory and far from real practice especially in the Jammu and Kashmir State which is the central focus of our study. In this backdrop, this study has been devised has been aimed to search for more genuine problems that are confronting this area of special education which are creating severe impediments on the way of Inclusive Education movement. But whatever impediments may be making the Inclusive Education limping the advocates of Inclusive Education are making special emphasis on Government's policy(s) enactments for their instant implementation in letter and spirit to create an amicable environment that is conducive for its practice. Similarly there are other genuine fallacies like people's

perception on disabled fraternity, disinterest on the part of society and community to participate in the peoples movement to make the disabled people's life happier. Among all aforesaid challenges and problems one problem which is difficult to deal with is to make untrained special educators fully trained by conducting workshops, Faculty Development Programs, and Brain storming Workshops. This task of making special educators fully trained and fully competent to deal with any eventualities is a herculean task. Once these untrained special educators can be made fully competent they can lead and carry forward the concept of Inclusive Education to fullest advantage. Still there are more plans to be done to create conducive environment for the people with disabilities to reap the fullest advantages of inclusive Education in our country.

KEYWORDS: Inclusion, Education, Inclusive Education, Issues, Strategies, challenges, perspectives.

BACKGROUNDER: Inclusion is seen as an universal human right. The sole objective of Inclusion is to provide basic education to all people with fair treatment, without any disparity, or discrimination, gender, race, caste, or creed, normality, disability, so that at one common platform all will be able learn and get education together and this will promote togetherness. This kind of fair treatment in imparting basic education to all people will promote feeling of oneness and provide equal access and appropriate opportunities in equal and fair treatment.

In today's scenario we see the concept of inclusion is not being followed in letter and spirit in different facets of our life. This is because of the fact that there are few strategies and challenges, which put hurdles in the task of promoting inclusion in all facets of our day to day activities of our life.

This conceptual study paper is an attempt to find out which are these strategies, and challenges that put hindered the growth of IE in general and full implementation of Inclusive education concept in particular in our country. These strategies comprises: use of inclusive language, challenging unconscious biases or prejudices, educating leadership, mentoring in all spheres of life, encouraging cultural feelings, and holding

events, emphasizing the concept of diversity, upholding core values in all spheres, and thereby creating congenial environment in all the spheres of life. The principle of inclusion can be implemented in letter and spirit in sustainable environment (water, energy, digital technology, transport sector, infrastructure, hospitality sector, rural economy, and education and training sphere.

Sequel to the Salamanca Conclave in 1992 in Salamanca Island located in between Madrid and Barcelona wherein more than 194 countries' mandarins and representatives of around 25 Educational Organizations all over the world have discussed on the education method and unanimously adopted the new name Inclusive Education (IE) for giving basic education to people with disabilities (PwD) with fair treatment and with equity. And special emphasis was laid down on identifying the nature of disabilities and type of weaknesses exists in those disabled children to give individual attention to boost their learning capabilities to fullest level under the same roof within one classroom and one special educator. Another contradictory terminology Inclusive Design which means creating appropriate places to get basic education that everyone can use. But this term has different interpretation where these different places so created will in one way or the other affect people with disabilities in their movement in perceiving any object, or to communicate either symbolically or verbally with their colleagues.

Thus we can say Inclusive Design aims to ally possible fears among disabled children in general and to remove the possible barriers which may create undue effort and separation in particular.

In other words it will motivate people of society and community at large to actively involve and participate voluntarily on humanitarian grounds and mix freely with people with disabilities to make their future radiant and vibrant which is the ultimate goal of all in a given society and community.

In Education sector, "Inclusion" has become popular notion used to describe the basic right of parents and children to access the mainstream education alongside their peers, where the parents' aspiration and children's needs both can be met. And with integration in Inclusive education the focus revolves around the child's ability to adapt new learning skills has been replaced by inclusion. The focus for inclusion is on the setting's ability to adapt to the needs of the child, altering where it is necessary the way it works.

Thus we can say the Inclusive setting will focus with an object to render meticulous designs with umpteen activities which will cater to individual needs. That is to say n number of educational organizations have found that a move towards Inclusive education that has led to an improvement in general teaching educational standards. This objective is backed up by n number of research studies carried out by prospective researchers, academia and educationists. In all hypes and buzz we can say education does not mean how well you can read and write but to ascertain how well you can communicate and understand the

world around you. A good system of impartment of education not only teaches the best skills but also helps us to broaden the available horizons but to give students better prospects and teach students to think for you.

Today people are fully quite aware and comfortable with good communication skills speaking publicly about social injustices, and other pressing issues that were failed to take-off. These characteristics and features can be linked to easy and quickly availing to Education globally which will make society and communities more literate and courteous and well-mannered and disciplined. Therefore we can dub education is basic and key element of human evolution.

The relevance of Education can be compared to metaphor in the area of creativity and dissemination of knowledge source. In other words we can define Education will stimulate the memory and cognitive abilities and thereby it will enrich the students with variety of knowledge sources. Further education will provide more insights and new way of thinking, analyzing, and maximizing fullest potentials of new knowledge to students. We can say Inclusive Education is the best technique for students fraternity and disabled students fraternity in particular will motivate all students to go to school to learn basic essence of education and to gain expertise in basic education.

From inclusive education students will get trained under one roof, under one platform with use of simple and common Inclusive Education will give more confidence to students and learners to get acquainted with new knowledge and ability to communicate properly with colleagues and friends in public. In inclusive education the syllabus and pedagogy is clearly introduced and students will be able to comprehend easily, the doctrines. Theoretical knowledge and practical knowledge and at the end of their course all the students will take home vast resource of knowledge both theoretical and practical to serve the community and society in general and to make the precious lives of people with disabilities more happier.

INTRODUCTION:

Inclusive Education is most powerful technique that will motivate children of all age groups and both abled and disabled to attend their schools regularly and learn the lessons under one roof and under one common platform without giving any room for discrimination or disparity of gender, caste, creed or race or religion. This type of impartment of basic education will give confidence among intellectually disabled children to real learning opportunities in sitting within traditional classroom. But students' progress of their performance will come slowly but steadily when they receive study materials and all related materials such as graphic representation, illustration, caricatures, etc. Inclusive education will empower the students with power of advocacy, awareness-raising, capacity building, and practical support.

Being included is not something that a child must be ready for. All children are at all times ready to attend regular schools and classrooms. Their participation is not something that must be earned.

Inclusive education is a new way of thinking about how to be creative to make our schools a unique place of learning where all children can participate. Creativity is the hallmark of this concept, may mean teachers learning to teach in different ways or designing their lessons so that all children can be involved to learn at same time and same place.

As a core value, inclusive education reflects the expectation of interested parties and stakeholders in education that we want all our children to be appreciated and accepted new way of learning throughout their life span. The inclusive education will have some advantages and principles which includes: IE helps all children to learn, it helps All children attend age appropriate regular classrooms in their local schools, All children receive appropriate educational programs, IE also help all children receive a curriculum relevant to their needs, It also motivates all children to participate in extra co-curricular and extracurricular activities, IE also helps all children get benefited from cooperation, collaboration from every home, and every school, and from all community.

To promote inclusion in our education system we should adhere to few principles which underlines the fact that we should be aware of unconscious bias, we should adhere to communicate the importance of managing bias, pay equity should be promoted, developing strategic training program, encourage holidays of all cultures, motivating people to take part in employee resource groups, and encourage our people to mix freely with each other in solidarity to express feeling of oneness.

The three main types of inclusion are work group inclusion which should be associated with positive outcomes like job satisfaction, organizational commitment, job performance and well being of people. Second type is the Leader inclusion in which research studies suggests inclusive leaders are nodal points for facilitating better performances in teams, and the last type is organizational inclusion.

When we think of important pillars of inclusion the first and foremost pillar we come across is access, which explores the importance of a welcoming environment and the habits that create it. Next comes attitude which will look at how willing people will embrace the inclusion and diversity to take meaningful action in their own sphere. Other pillars are Choice, Partnerships, Communication, Policy, and Opportunities.

Regarding principles that are governing the concept of inclusion there are six principles designing for equity and accessibility benefits, seeking out points of exclusion, identifying situational challenges, recognizing personal biases, alternate ways to engage themselves, providing equivalent experiences, and the last principle is rendering help to people in solving their own problems.

RELEVANCE OF INCLUSION

Let us minutely introspect on the term 'inclusion' and how it is relevant in our day to day life. What is inclusion and why is it important? It is not just about including learners with Specific

Learning Differences (SpLDs). Inclusion is a basic right of everyone and its objective should be to embrace every one regardless of race, age, gender, disability, religions and cultural beliefs and sexual orientation. When we have true inclusion, it is when we have removed all barriers, discrimination, disparities and intolerance. When implemented properly, inclusion should make everyone feel included and supported which ever environment they are in.

Inclusion is about how we structure our schools, our classrooms and our lessons so that all our students learn and participate together. An inclusive classroom is one that creates a supportive environment for all learners, including those with learning differences, and can also challenge and engage gifted and talented learners by building a more responsive learning environment.

Inclusivity also means respecting people from all backgrounds and cultures, and by teaching our students the importance of this we create a much more tolerant and understanding environment, not just in the classroom and school but also in wider society.

An inclusive school or classroom can only be successful when all students feel that they are truly part of the school community. This can only happen through open, honest discussion about differences and understanding and respecting people from all abilities and backgrounds. An inclusive environment is one where every one feels valued.

NEED OF THIS STUDY

This study attempt to determine the bottlenecks that are posing as barriers in the task of promotion of inclusion in different facets of our life in general and in promoting inclusion concept in the education sector in particular. This study will further aims to study different attitudes of teachers working in Education sphere and Special education sphere in India, towards inclusive education while it will examine Issues, strategies and challenges hampering inclusive education movement in different states and at national level.

A growing international interest in the education of students with disabilities is increasingly motivated and justified by reference to economic factors (relationships between population and education in pursuit of national or international economic growth) and equity concerns (practical benefits of access to education for all individuals). Economically, the quest to sustain progressive development has increased awareness of human resources as a source of wealth. A nation's failure to harness human resources to their fullest potential is considered by many to be its greatest economic loss. Economic rationales often dictate political policies on education, and it is fair to say that signatories to the Salamanca Statement were influenced largely by economic agendas. (In June 1994 representatives of 92 governments and 25 international organizations formed the World Conference on Special Needs Education, held in Salamanca, Spain. They agreed a dynamic new Statement on the education of all disabled children, which called for inclusion to be the norm). However, there is also increasing

recognition that education for all is an important provision of basic human rights, and central to social justice agendas. Questions remain, however, about the extent to which these policy imperatives are understood or accepted by teachers working in diverse field of education in vastly different contexts who are tasked with the 'inclusion' implementation.

Further, questions relating to how teachers explain their reactions are also important. This will draw attention to the influence of this context on the implementation of inclusion policy. International declarations are politically significant and provide important direction and focus. However, it is imperative to realize that the interpretation and pursuit of Salamanca Statement goals always occur in a specific local context: a context shaped by experiences, traditions and values that can challenge attempts to move from policy to practice. Attitudes do not develop in a vacuum. Studies seeking to identify teachers' attitudes towards inclusive education require an awareness of the diverse factors that shape their attitudes.

National Policy on Education. The National System of Education implies that, upto a given level, all students irrespective of caste, creed, location or sex, have access to education of a comparable quality. To promote equality, it will be necessary to provide for equal opportunity to all not only in access, but also in the conditions of success. Awareness of the inherent equality of all will be created through the core course curriculum. The purpose was to remove prevailing prejudices and complexes transmitted through the social environment and accident of birth. (Department of Education, 1998, Section 3, Article 2) Special emphasis on the removal of disparities and to equalize educational opportunity of attending to the specific needs of those who have been denied or deprived equality so far. Constitution of India No citizen shall be denied or deprived of admission into any educational institution maintained by the State or receiving aid out of State funds on grounds only of religion, race, caste, language or any of them. (Planning Commission, 1950, Article 29(2))

To this end, this article investigates the implementation of India's inclusive education policy. More specifically, it explores various strategies and challenges that hinder or advance the progressive implementation of the inclusion and in particular the role that the teachers' attitudes play in this complex process. Abstract - keywords - introduction - review of literature - discussion - conclusion

REVIEW OF LITERATURE:

The literature review examines research on inclusive education from the global and Indian perspective with emphasis on literature related to our country- India in particular. This overview will establish a gap in the existing research focused on this context and thereby validate our aim to investigate into the issues, strategies and challenges confronting inclusive education implementation in India. The study focuses on teachers' roles, decision making authorities, and policy makers in translating inclusion policy into practice and, specifically, on their beliefs about inclusive education. I will therefore review

literature relating to factors that influence most important strategies and challenges that are making it difficult task towards inclusive education. In the first instance historical attitudes towards disability, next models of disability (contemporary model, biological model, medical model, individual model, social model) and few studies for Inclusive Education, views of Government of India towards Inclusive Education, and surveys carried out by government, views of First Indian education Commission, and studies undertaken by National Literacy Mission.

Historical Attitudes towards Disability : A step backwards into human history will show that persons with disabilities for centuries have been, and continue to be, a marginalized section of so Social stigmatization has deprived persons with 21 disabilities of active participation in mainstream society. "For practically all of the history of civilization, education has been for the elite, and education practices have reflected an elitist orientation" (Blankenship & Lilly, 1981, p.18).

Mackelprang and Salsgiver (1996) reaffirm Plato's view that "Western culture... viewed people with disabilities as standing in the way of a perfect world" (p. 1), as does Morris (1986): "like the Greeks, the Romans also abandoned disabled or deformed children to die"(p.1).

During the Industrial Revolution era, persons with disabilities occupied the lowest rung of the social ladder (Livneh, 1982; Mackelprang & Salsgiver, 1996; Stone, 1984). In England, the Elizabethan Law 1601 (Bloy, 2002) classified persons with disabilities as "deserving" of marginal monetary assistance to ease their economic problems. This marked recognition illustrates the need for "political will" as essential for persons with disabilities' support. While this research project explores attitudes towards disability in a contemporary context.

Models of Disability - Early Model: The Religious Model In the 17th-century religious model, physical or mental impairment was often linked to an individual's failure to please God. Therefore, persons with disabilities were often discriminated against and segregated from the societal mainstream. As Swain, Finkelstein, Frenchand Oliver (1993) explain, people perceived the differences associated with disability, but failed to recognise the commonalities between people.

Contemporary Models The Biological Model: During the first phase (WWI [1914-1918] to WWII [1939-1950]), the biological model, based on Darwin's (1869) "survival of the fittest" philosophy, viewed disability unfavorably. Persons with disabilities were denied what today are regarded as basic human rights. Segregated from society, they often lived in poverty and endured social humiliation. Some philanthropists established asylums to provide custodial care for housing persons with disabilities (Bender, 1970; Pritchard, 1963) but the dominant approach was negative.

The Medical Model The second phase was marked by advancement in medicine and an associated desire to represent

disabilities as medical problems. The medical model defined disability by comparing the disabled body to the able body (Linton, 1988). Disability was explained as the result of biological and physiological dysfunction (French & Swain, 2001). This perspective was based on the premise that an ideal level of biological and physiological functioning is essential for a body to be considered "normal". Failure to meet the expected functionality levels was termed as dysfunctional and "abnormal". From this perspective, all individuals were either normal or abnormal. Any individual with a dysfunctional and abnormal physical body was labeled as "disabled" (Kutner, 2007, p.101).

The individual model: In the early 1960s the medical model moved towards a more humane and positive approach (Oliver, 1996a, 1996b). This new approach has been called the individual model (Llewellyn & Hogan, 2000, pp. 157-158). Oliver (1990) explained that the individual model of disabilities presents two fundamental considerations: "Firstly, it locates the 'problem' of disability within the individual and secondly it sees the causes of this problem as stemming from the functional limitations or psychological losses which are assumed to arise from disability" (Oliver, 1990, p.3)

The Social Model: A policy development associated with disabilities took a more humane approach, now described as the social model. In 1976 the Union of Physically Impaired Against Segregation advocated for elimination of negativity towards persons with disabilities (Schilling & Coles, 1997). Social model advocates such as Finklestein (1980), Barnes (2012) and Oliver (1990, 1996a, 1996b) identified "society as the problem", since individuals are "alterable" and appropriate treatment enables persons with disabilities' adjustment into society. However, society is "unalterable... within a society the handicap becomes disabled" (Llewellyn & Hogan, 2000, p.163).

Towards Inclusive Education: The inclusive education system was conceptualized in the last decades of the 20th century to enhance the education of students with disabilities (Sailor, 2002a, 2002b; Turnbull et al., 2002). It has been argued that: In inclusive programs, the diverse needs of all children are accommodated to the maximum extent possible within the general education curriculum. Driven by a vision of schools as a place where all children learn well what we want them to learn, schools become creative and successful environments for adults and the children they serve. (Salisbury, 1991, p.82) However, the concept of inclusive education has multiple definitions and uses. At this juncture, it is therefore vital that the concepts of main streaming, integration and inclusion be discussed in more detail: especially since inclusive education is often mistaken as synonymous with main streaming and integration. All three concepts imply particular beliefs about student placements (i.e., where they were taught), teacher attitudes (i.e., how they were taught) and modification of the regular curriculum (i.e., what they were taught).

Policies and Practices Post-Independence: Historical research into the Government of India's interest in students with disabilities' education shows that this was slow paced during the early post-independence era (Alur, 2002b). The Government of India's involvement in improving students with disabilities' education extended to the establishment of 50 special education schools nationwide (Alur, 1998), and an increase from one to 20 schools for the mentally retarded and grants - in - aid (financial assistance) to non-government organizations (Kundu, 2000).

It is of interest to note that still today non-government organizations are serving as the back bone of Inclusive education for students with disabilities in India (Canadian International Development Agency, 2003; Sharma & Deppeler, 2005). Their efforts are reflected in the aims and operational working of institutions such as the Divine Light Trust for the Blind, a pioneer non-government organization school, in Karnataka, South India, established in 1982, which has attempted to introduce an inclusive education program.

Also included is the Spastics Societies, the National Association for the Blind, the National Federations for the Mentally Handicapped and the Hearing-Impaired, the Karnataka Handicapped Parents Association and religious organizations, offering education and vocational training on a micro level. As a point of interest, terms such as spastic and mentally handicapped continue to be used in India to describe various types of disabilities, although internationally these terms have been phased out and replaced with more sensitive labels such as the differently abled.

The Government of India's (1994) national survey recorded 2,456 non-government organizations caring for persons with disabilities. Non-government organizations operated 1,200 special schools to accommodate students with disabilities, of which 450 received national and state government grants for operational costs (Kumar & Singh, 2006). These statistics disclose the Government of India's poor involvement in the education of students with disabilities (Jangira, 1995). In summary, the Government of India perceives that students with disabilities' education are best catered for by non government organizations.

The first Indian Education Commission, or the Kothari Commission Report (1964) and the Sargent Review (1968), recommended that the central and state governments assume responsibility for the students with disabilities' education. Furthermore, it recommended inclusion of students with disabilities in the regular school system (Gupta, 1984; Jangira, 1995). The Kothari Commission made the following recommendations: Their education has to be organized not merely on humanitarian grounds of utility. Proper education generally enables a handicapped child to overcome largely his or her handicap, and makes him into a useful citizen. Social justice also demands it. It must be remembered that the Constitutional directive on compulsory education includes handicapped children as well. (Kothari, p. 204) The

Government of India in 1986 approved the Common School System recommended by the Kothari Commission, However, this approval never materialized and the project was shelved for no given reason.

At a similar time, the National Literacy Mission (Department of Education, 1988) was launched with responsibility to eliminate adult illiteracy and create social awareness for students with disabilities. Four premier national institutes The Artificial Limb Manufacturing Unit established for "developing, manufacturing, marketing and distribution of artificial limbs" (Naik, 1994). The Education for All Summit (Naik, 1994) explained that district rehabilitation centers were organized to provide rehabilitation services training, employment and distribution of specialized equipment.

In 1989 the Government of India signed the United Nation's Rights of the Child legislation and the United Nations Educational, Scientific and Cultural Organization Jomtien Convention policy of 1990 (Wadi, 1990). This resulted in the Rehabilitation Council of India Act 1992 No. 34 (Ministry of Welfare, 1992) to standardize teaching requirements for students with disabilities (Vakil, Welton, & Khanna, 2002). The Government of India's commitment to the Salamanca Statement is reflected in the Delhi Declaration on Education (1994) advocating education for all (Singal, 2005)

In 2002, the President of India in 2002 approved the Bill of Rights (Jain, 2002) and the Sarva Shiksha Abhiyan program to promote universal elementary education. The Sarva Shiksha Abhiyan is a subdivision of the Ministry of Human Resource Development, financially supported in a 75:25 ratio between the Government of India and state governments respectively.

BRIEF DISCUSSION ON THE TOPIC:

Inclusive education is a strategy to make education universalized irrespective of any disability within the learner and to maintain equity in the society. It emphasizes that children with special need can be included in general school system without any demarcation and differentiation. Inclusive education is a developmental approach seeking to address the learning needs of all children, youth and adults with a specific focus on those who are vulnerable to marginalization and exclusion. An increasing number of publications, policy papers, workshops etc. have supported the ideology of inclusion. Some organizations and people, however, doubt whether the ordinary classroom can provide quality education for disabled children. The major goal of inclusive education is the Flagship goal. Recognizing the right to education, the Flagship seeks to unite all EFA partners in their efforts to provide access to quality education for every child, youth and adult with a disability. The Flagship has been formed by an alliance of diverse organizations, including global disability organizations, international developmental agencies, inter governmental agencies, and experts in the field of special and inclusive education. In order to reach this goal, all the parties have to take the full participation with disabilities and families in the design of all Flagship activities. Promote the full

participation of persons with disabilities and families in the development of policies and guidelines related to the education of persons with disabilities at local, national, regional and global levels. Seek to ensure that all governmental entities, donors and NGOs endorse the universal right to education for all children, youth and adults with a disability. Availability of specialist teacher supports, if possible to the regular classroom teachers. Thus, we as teachers, parents, teacher-educators etc. have to facilitate the implementation of inclusive education not only as a program but also as an ideology-an ideology based on the principles of human rights approach wherein stress is laid on giving importance to the individual and respecting his/her potentiality in the teaching learning process.

For an education system conceived on the principles of social justice and equality within an "inclusive" mindset to be effectively implemented it must address issues that confront those with the responsibility to implement the program the teachers. As shown in this study, although Indian pre-service and in-service teachers agree that every child has a right to education, and all support social equality principles, they are actually reluctant, apprehensive or unable to implement the inclusive education program. Studying the influence of subjective norms and perceived behavior controls on their beliefs and, by extension, attitudes suggests that this situation can be reversed if the teachers are provided with the knowledge, skills and community support required to effectively implement the inclusive education program. With these essentials in place, the teachers may develop enhanced self-efficacy, which would foster a positive attitude towards the inclusion of the students with disabilities in the general classroom

CONCLUSION

India is a developing country, and similarly to other developing countries, it is a young democracy struggling with economic and social cultural constraints coupled with political power struggles. In this situation, the Government of India's attention has been concentrated on rapid economic development. Nonetheless, the Government of India's attempt to promote social equality in India's culturally fragmented society prompted the Government of India to become a signatory of the Salamanca Statement and to pass legislative policies advocating the inclusive education aims, principles and practices nation wide.

However, the inclusive education program implementation is not confined in isolation to the learning experience between teachers and students. Community involvement is imperative for the success of the program. Collaborative support from the local community (school administrators, co-teachers, para professionals and parents) encourages teachers' positive attitudes towards the inclusive education program. Additionally, policy makers need to shift interest from mere policy legislation to also support their policy stipulations with particular emphasis on the promotion of teacher empowerment (implementers of the policy). In effect, it is teachers who will

promote and implement the inclusive education program. Effective implementation of any national program requires the provision of all mechanics (namely, policy, finance, proficiency, implementers and public support) essential for transferring the (inclusive education) program from the boardroom to the classroom.

Lastly even if there are several obstacles, strategies and challenges related to promote inclusion in Indian educational system which hinders task of implementation of inclusion in education, there is a ray of hope. It is not impossible to attain success in inclusive education in India as there are number of alternate effective strategies and other means to tackle the problem. But at the same time there are some issues as well as some challenges which we have to handle by soft hands. To make inclusion in Education sector an awareness campaign should be created to make teachers aware about objectives of inclusion, and their whole hearted attitude towards disabilities, retention of special children etc. should be made compulsory in all levels of education sphere- primary, secondary, collegiate level, and higher education. Further quality resources, faculties and facilities must be supplied to each institution to make inclusive education Program successful.

REFERENCES

- Advani, L., & Chadha, A. (2002). The inclusive initiative in India. *Journal of the International Association of Special Education*, 2:17-22. Retrieved from <http://iafor.org>.
- Aggarwal, A. K. (November, 2001). Best practices in inclusive education experiences from the field: Inclusion of visually impaired children. Paper presented at the National Workshop on Inclusive Education for Children with Disabilities: Prospects and Challenges. November, New Delhi: NIPCD and Planning Commission, Government of India.
- Aggarwal, J.C. (2008). *Theory and Principles of Education*, (12th Revised Edition). Vikas Publishing House Pvt Ltd.
- Alur, M. (2001). Inclusion in the Indian context. *Humanscape*, 8(6): 1-8. Retrieved from <http://el.doccentre.in> fo.
- Alur, M. (2002a). Special needs policy in India. In S. Hegarty and M. Alur (Eds.) *Education and Children with Special Needs- From Segregation to Inclusion*: 51-66. New Delhi: Sage Publications.
- Anglo Info. (2000). *The school system in India. Everyday Life in India, in English*. Anglo Info Limited. Retrieved from <http://india.angloinfo.com>
- Armstrong, F., Armstrong, D., Barton, L. (Eds.). (2000). *Inclusive Education: Policy, Contexts and Comparative Perspectives*. London: David Fulton Publishing.
- Baquer, A. & Sharma, A. (1997). *Disability: Challenges vs. Responses*. New Delhi: Concerned Action Now
- Barton, L. (1996). *Disability and Society: Emerging Issues and Insights*. Longman Publishers.
- Bhatnagar, N. & Das, A. (July,2013). Attitudes of secondary school teachers towards inclusive education in New Delhi, India. *Journal of Research in Special Education Needs*, 14(4). (DOI:10.1111/1471-3802.12016).
- Bose, J. (Autumn, 2009). Education and the architecture of inclusive society. *Peace Prints: South Asian Journal of Peace building*, 2(1): 1-4. Retrieved from <http://wiscomp.org>.
- Chadha, A. (2000). *From Isolation to Inclusion*. DEDP Calling. 810 December.
- Chaturvedi, K. N. (2007). *The Constitution of India (As modified upto the 1st December, 2007)*. New Delhi: Ministry of Law and Justice, Government of India
- Gupta, S. K. (1984). *A Study of Special Needs Provisions for the Education of Children with Visual Handicaps in England and Wales and in India, Associateship Study*. London: University of London, Institute of Education.
- Huchaiiah, P. (2007). *Implementation of Inclusive Education for Children with Special Needs in Karnataka with Special Reference to Tumkur District*. Unpublished Masters Dissertation: Alagappa University
- Kothari, D.S. (1966). *Volume: General problems. Education and National Development Report of the Education Commission, 1964-1966*. New Delhi: Ministry of Education, Government of India. Retrieved from <http://www.teindia.nic.in>.
- Kundu, C.L. (Ed.). (2000). *Status of Disability in India*. Rehabilitation Council of India
- Mani, M. N. G. (2000). *Inclusive Education in an Indian Context*. Coimbatore: IHRDC for the Disabled.
- Ministry of Welfare. (1992). *Rehabilitation Council Act of India Act 1992 No. 34 of 1992*. New Delhi: Government of India. Retrieved from <http://www.rehabcouncil.nic.in>
- Office of the High Commissioner for Human Rights. (1975). *Declaration of Rights of the Mentally Retarded Persons Proclaimed by General Assembly Resolution 2856 (XXVI) of 20, December, 1971*. Geneva, Switzerland: United Nations Educational, Scientific and Cultural Organization. Retrieved from <http://www.ohchr.org>
- Pandey, R.S. & Advani, L. (1995). *Perspectives in Disability and Rehabilitation*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Pathak, R.P. (2012). *Development and Problems of Indian Education*. South Asia: Dorling Kindersley (India) Pvt. Ltd. Pearson Education
- Pooman, D. (April, 1996). *Mainstreaming Students with Disabilities: Teachers Perspectives in India*. Prude University
- Sarva Shiksha Abhiyan. (2008). *In-service Teacher Education Inclusive Education Distance Education Programme- Sarva Shiksha Abhiyan*. New Delhi: INNOU Ministry of Human Resource Development Government of India.
- Singh, A. (21, March, 2005). *Comprehensive Action Plan for Inclusive Education*. New Delhi: Ministry of Human Resource Development, Government of India. Retrieved from <http://unicef.in>.
- Swarup, S. (2006). *Education of Children with Special Needs*. S. Aurobindo Marg, New Delhi: National Council of Educational Research and Training
- Tulli, U. (February, 2002). *Challenges of inclusive education and government initiatives: Disability is no barrier*. Paper presented to the National Seminar on Disability Issues. Chennai: Government of India



Importance of Inclusive Education (I.E.) for India



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ABSTRACT

Inclusive Education (IE) is an innovative approach that helps the children with disability and learning difficulties in receiving education under the same umbrella as that of children without any disability. It brings the scholars together on same the platform, the classroom and community, anyhow of their achievements or leggings in any area, and seeks to raise the eventuality of all scholars. It is one of the most constructive ways by which we are able to promote an inclusive and tolerant society. According to the findings and observations of UNESCO Institute of Statistics (UIS), it was found that in 2010, approximately 73 million primary school age children were not in school, as compared to over 110 million children in the 1990s. The percent of Indian population living in rural areas is about 80%, which means this much amount of people are living without any provision for special or inclusive schools. This leads to a deduction that there are an estimated 8 million children in India, who are not able to avail the facility of education (MHRD 2009 statistics), many of whom are identified by dimensions such as poverty, gender, disability, and caste. Today, what are the requirements and challenges for achieving the thing of inclusive education? How will an inclusive environment take care the needs of all children with disabilities? How quality education can be perfectly and suitably delivered for all children? Hence, inclusive schools are needed in order to address the needs of children in every community. Keeping these questions in mind, this article provides an in-depth discussion on the challenges and measures to implement inclusive education in India and defines the meaning and significance of Inclusive Education in India.

Key words: Inclusive Education, Children with special needs, Disabilities, Inclusion

INTRODUCTION

The differently abled children learning needs has been addressed by different scholars at different levels of society in many ways through Inclusive education. The Government of India has been putting its best efforts over the last five decades towards providing comprehensive range of services towards providing special education to the children with disabilities. In

1974, The Indian Government centrally implemented various scheme for Integrated Education for Disabled Children (IEDC). It was introduced to provide equal opportunities to children with disabilities in general schools to encourage the interest among the different societies to facilitate their retention. The government support in the area of inclusive education dates back to the National Educational Policy implemented in 1986, which made it their goal, 'to integrate the handicapped with the general community at all levels in the society as equal partners, to prepare them for their normal growth in the schools and for the up lift their courage and confidence'. Furthermore, The World Declaration on Education for All adopted in 1990 gave a push to the various processes already set by the Government of India. In 1992 The Rehabilitation Council of India Act implemented a training program for the development of professionals to respond to the needs of society special needs.

In 2006, National Policy was introduced for persons with disabilities, it attempts to clarify the framework under which the state, all sector of societies must work together in order to ensure a respectable life for persons with disability and support for their caretakers. Most recent development is the Right of Children for Free and Compulsory Education (2009) which ensures the right to free and compulsory education to all children between ages six to fourteen. Education for a child with disability, the act has to be read in relation with Chapter V of the Persons with Disability Act, 1995. Chapter V of the PWD Act ensures that every child with disability is eligible to get free education up to the age of 18 years. Keeping in view, Govt. of India went through a policy shift and introduced a new scheme of Inclusive Education, which aimed at achieving the target of 'Education for All' (EFA) by 2010. Inclusion is an attempt to assure that all learners those with disabilities, those speaking different languages and part of different cultures or different family backgrounds, are able live in the same society with harmony. Inclusive Education makes sure that every child comes to the mainstream of our education system, irrespective of their strengths or weaknesses. The education policy in India has steadily increased the focus on children and adults who are

of special needs, and inclusive education in all schools has become a primary goal to achieve.

In most of the countries, inclusive education has raised as one of the most the high agenda issues in the education. In 1990s, a significant number of developing countries took the initiative to reform their policies, in order to promote the inclusion of students with disabilities into mainstream/conventional schools. Many forthcoming researches show that educators in inclusive environment are more likely to collaborate and spend more time planning, learning new techniques from one another, to show a greater willingness to change, and use a wide range of creative strategies to meet students' needs. Every child, irrespective of them being disabled or not, have the right to education as the future of the country lie in their hands. In today's world, it has become an internationally accepted fact that inclusion is the key to maximizes the potential of students, and is the professional approach for the current and upcoming age, in the field of special education.

DISCUSSION

At the World Education Forum (Dakar, Senegal 2000), the "World Conference on Special Needs Education: Access and Quality" was initiated, which aimed at the common voice of governments to give the highest priority for making education systems inclusive. Also, to adopt the principle of inclusive education as a basic matter of policy. The idea of inclusion is further initiated by the United Nations to adopt Standard Rules for better and equal opportunities for Person with Disability. Inclusive Education (IE) is defined as a process of addressing the diverse needs of all learners by reducing hurdles within the learning environment in schools and societies. It means at the appropriate age and class of the child's local school, with individually specific level of support (UNICEF 2007). Inclusive education is the process of making one's strong with the capacity of the education system to meet the need of all learners. At the World Conference (1990) organized in Thailand, how to achieve the goals for 'Education for All' were set and it was announced that every person (child, youth and adult) must be able to extract benefit from the educational opportunities, which would lead to, them meeting their basic learning needs. Inclusion is an approach and philosophy which provides good opportunities for academic and social achievement to all students. To provide best opportunities to participate in the field of social, recreational, arts, sports, music, day care and all other activities suitable as per their needs.

In 1987, National Council of Educational Research and Training (NCERT) collaborated with UNICEF and launched Project Integrated Education for Children with special needs (PIED), to further strengthen the knowledge of learners with disabilities in all schools. In recent years, the concept of inclusive education has been expended to enhance not only special students but also all students who may be deprived. This major concept understanding of curriculum has shown the way

for developing the National Curriculum Framework (NCF-2005) that indicates the important value of each child and enables all children to experience overall development with dignity and the confidence to learn better.

ADAPTATION CHALLENGES OF I.E. IN INDIA

In our country the number of the disabled people are in good number and their problems so complicated, poor available resources and poor social background. The road map for achieving inclusive education seems very long and complicated one, on which number of challenges and opportunities will arise to them. Our country is a multi-lingual, multi-cultural, multi-religious country, in which people are stratified based on their financial conditions.

Due to the fact the India is the world's second most populous country after China. It accounts to 20% of the world's out-of-school children. The aim of inclusion is to bring support to the students with special needs. The basic purpose is more challenging in our societies with diverse background as schools accommodate students with good number to address their major concerns and abilities. The Census carried out by Government of India in 2011, the number of people with disabilities in the country are 26 million, or roughly 2.1% of the total population.

In 2000 UNICEF's Report on the Status of Disability in Indian states was around 30 million children are affected in some form of disability. Near about 10% of the world's population have some kind of disability and the developing countries inhabit about 80% of these people. But 75% of people with disabilities live in village areas in our country. The Government has implemented number of policies in the field of special education since the country's independence. Many challenges might arise while trying to integrate education of children with disabilities in regular classrooms.

In our society these challenges may produce in the form of scarcity of sufficient human and material resources, negative attitudes of teachers and community, non-disabled persons of same age and their parents. The Government of India has attempted to implement policies that are inclusive for the people of societies with disabilities, their implementation efforts have not met their goal in an inclusive system of education. Moreover, dropping out students' number is observed more, especially in villages and below poverty line areas. Students are forced to leave school due to their parents' poor financial condition, and to work to help their parents to make their end meets. Due to this, the number of children working as laborer keeps on increasing, which eventually leads to them being physically and psychologically disabled.

Different challenges arise due to the negative behavior and attitude of both, parents and educators, with respect to the ability of disabled children to learn. Another serious challenge is the fact that most disabled people are still out of reach to education main stream.

Another challenge from number of societies for the implementation of inclusive education in the Indian context. The present practical skill levels of regular primary and secondary school educators was examined by Das, Kuyini and Desai in 2013 in Delhi, India in order to literate students with disabilities in inclusive education. It was discovered that approximately 70% conventional school educators didn't have any experience in teaching students with special needs, moreover, they didn't even receive any form of training in special education.

Almost, 87% of the teachers did not have knowledge how to implement services in their classrooms. With respect to the 6th All India Educational Survey carried out by NCERT in 1998, approximately 20 million children (6-14 years of age) are in dire need of special education, out of the 200 million children in India. In our country the average enrolment in school is over 90 per cent, less than five per cent of children with special needs are in schools. Acceptance by persons of same age and position in the society provides a much greater challenge for children of special needs.

Number of school personnel in India are not so trained to develop, design and implement educational programs for students with special needs in regular schools. Majority of the teacher training programs in India does not have the facilities to incorporate disability studies (M Reddi & Narayan, 2000). The quite good number of schools in India are mismanaged and few are equipped to meet the special needs of students with disabilities. There are more difficulties while procuring and resourcing for helping devices. Despite all the attempts made for the betterment of inclusive education in India, about 94% of children with disabilities are not able to receive any form of education.

Some of these challenges that our country shares with other developing countries are some special features that will make the implementation of educational reform very difficult. The resolution of the Government of India towards Universalization of Elementary Education (UEE) cannot be fully achieved without caring about the special educational needs of the mentally and physically challenged children. Inclusion is becoming a major tool and doing the rounds in education circles but there are still a lot of difficulties around.

CONCLUSION

Inclusive education can play a leading role in enabling disabled persons to live normal lives. It is not only necessary to support such children in their academic activities, but it is also necessary to promote their overall growth. In an inclusive educational era, poor scoring students are able to get extra help even though they did not qualify for special education. Classmates of students with disabilities also experience growth in social recognition, often they can become more aware of the needs of others in inclusive classrooms. Inclusive education is a new approach to education which emphasizes providing access to education for all children, both with disabilities and without, under the same one umbrella. An inclusive education system embraces every student and promotes them to learn and grow.

REFERENCE:

- NCERT (1998).Sixth All-India Educational Survey.New Delhi: National Council of Educational Research and Training.
- NCERT (2006).Including Children and Youth with disabilities in Education, a Guide for Practitioners. Department of Education of Groups with Special Needs.New Delhi: National Council of Educational Research and Training. Available on <http://ncert.nic.in> NCF (2005).National Curriculum Framework. New Delhi: NCERT. PP:79-89
- Pandey, Y (2006). From Special Education to Inclusive Education: an Analysis of Indian Policy. Paper Presented at Achieving Equality in Education: New Challenges and Strategies for Change. Kuala Lumpur, Malaysia (16-21 July 2006) Available at <http://www.icevi.org/publications/>
- Save the Children (2006). Inclusive Education: A Policy Statement. Source: http://www.eenet.org.uk/key_issues/policy/SC%20UK%20IE%20policy%20English.pdf Retrieved on 25th March 2015.
- UNESCO (2006).Inclusive Education. Available on http://portal.unesco.org/education/en/ev.php-URI_ID
- UNICEF (2007). Promoting the Rights of Children with Disabilities. Innocent Research Centre. Retrieved from <http://www.unicef-irc.org/publications/pdf/digest13-disability.pdf> on 5th December 2015



Provisions in National Education Policy 2020 for Technology Based Learning Inclusion



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ABSTRACT

Various new education policies were formed to modify the educational scenario suitable to prepare our youth to meet present and upcoming challenges. NEP 2020 is based on the components of easy access in school, justice to all, maintaining education quality, low expenditures and accountability. NEP 2020 restructured school curriculum and pedagogy from 10+2 to 5+3+3+4. These changes are made to make students alert and appropriate to their developmental needs. This article will focus on Equitable and technology based Inclusive Education. National Education Policy 2020 envisages its pivotal role of technology and categorized into four parts: viz-teacher preparation and Continued Professional Development; Technology in classroom; Technology access to education and Planning, administration and management of the education system. Inclusive education means that all students regardless of their abilities, disabilities or health care needs, are placed in age- appropriate general classes to receive instruction, interventions and support to enable them to meet success in core curriculum. It is the access to quality education for all students. Main objective of inclusive education is to provide all students the most appropriate learning environments and opportunities to achieve their potential Further NEP 2020 emphasize on the needs for technology based apps teaching, challenges being faced by specific learning disabled (SLD) students in the country, prevailing technical gadgets for SLD students, and extent of scope for technology based teaching system.

Key words: NEP 2020, education quality, restructured school, professional development, and technology based learning, school curriculum. Students with learning disabilities.

INTRODUCTION

Based on the recommendations of Kothari Commission, the first National Policy of education was announced in 1968 by the Government of Prime Minister Indira Gandhi. The second National Policy of Education was launched during the tenure of Prime Minister Rajiv Gandhi in 1986. The Government of India has appointed a new committee under K. Kasturirangan to

prepare a draft for the new National Education Policy in 2017 and in 2019 the Ministry of Human Resource Development (MHRD) announced a draft on New Education Policy, which was prepared to improve the education in India to provide better education.

The New Education Policy document states that there is a special emphasis on socially and economically disadvantaged groups to make education equitable and inclusive. For the benefit of disadvantaged groups, Special Education Zones will be established. The National Education Policy envisages an inclusive and structural change in the educational system. It focuses on 'Equitable and Inclusive Education' which reverberates the idea that no child should be left behind in terms of educational opportunity because of their background and socio-cultural identities

The NEP 2020 recognises the importance of providing Children with Special Needs (CWSN) the same opportunities of obtaining quality education as any other child. The RTE Act Amendment Act, which came into force with effect from the 1st of August, 2012, provides for the inclusion of CWSN as contained in the Persons with Disabilities Act 2005 and the National Trust Act, under the purview of the RTE Act, thereby providing CWSN free and compulsory education; in fact, the RTE Act ensures CWSN free and compulsory education either until the completion of the elementary stage of school education or till the age of 18 years. Further, the RTE Act also provides to parents of children with severe and profound disabilities the right to opt for home-based education. The Policy points indicated in Section 6.1 are all important in the context of CWSN as well.

NEED FOR TECHNOLOGY BASED TEACHING

Teaching based technology have provided different options such as online courses like SWAYAM and MOOC by which teachers can easily update their knowledge which is also known as Continued Professional Development (CPD). Through technology based applications teachers can easily collaborate

with students in their curriculum and fulfil the need of students with special needs in an inclusive classroom.

CHALLENGES FOR LEARNING DISABLED (LD) STUDENTS:

Students with Specific Learning Disability face many challenges like they have difficulty to understand the non-verbal gestures or cues, they have poor social interaction and they also have poor confidence, they also has a problem in the academic areas like Reading, Writing and Arithmetic.

It is observed that in rural and remote areas, schools are facing various challenges like inappropriate teacher student ratio, inadequate infrastructure of the school; lack of teachers in the school and where the inaccessible technology which is a big challenge to remove the barriers.

PREVAILING TECHNOLOGY FOR LD STUDENTS:

There are many tools and apps which support students with specific learning disability like-Text to speech software, Speech to text software, Smart boards, and Talking calculators.

SCOPE FOR TECH BASED TEACHING

Through technology teaching learning process get more meaningful for both teacher and learner. Technology based instructions help to promote inclusion and in main streaming the students with special needs. There are a number of devices and software which can be used for different learning requirements of students with special needs.

SALIENT FEATURES OF NEP 2019:

Some feature of National Policy of Education 2020

- NPE 2020 includes quality improvement of early childhood education for all children between ages of 3-6 by year 2025.
- NPE pay special attention to the disadvantage group or community.
- It launches two programmes 1. National Tutor Programme which mainly focuses on the peer tutoring. 2. Remedial Instructional Aided Programme which provide instructors from the local community.
- Social workers and counsellor to help Children with Special Needs.
- NPE includes the multiple way of learning like formal learning, informal learning, distance learning and open schooling with the help of technology.
- It also provides special education in Rural and Remote areas to all over the country.
- Its target to provide funding to all the institution to make them access and inclusion.
- Its include Continuous Professional development for teachers by which they can enhance their knowledge and teaching patters through online courses which is provided by the MOOC and SWAYAM.

- It also focuses on educational technology to improve teaching and learning process.
- NPE also provide vocational training programme to all the institutions for making better future.
- It also promotes language, literature and scientific vocabulary in the field of Indian education.

SIGNIFICANCE OF TECHNOLOGY UNDER NPE 2020

As we already know that technology plays a crucial role in the improvement of educational processes and outcomes. Thus, the technology and education is inseparable at all levels. There are broadly four dimensions of technology which is used in education, first of three are directly concerned with students, teachers and classroom processes.

1. Continued Professional Development: CPD mainly helps teacher to receive proper training by which they can update their knowledge to get better outcome. Teachers have the benefit of online courses like MOOC and SWAYAM.
2. Classroom processes: Through technology, teaching learning process get more meaningful for both teacher and learner. Technology based instruction helps to promote the classroom process in main streaming students and students with special needs.
3. Access to Education: The group of students like differently-able, girls and women, and students living in remote and rural areas get a proper education by the help of technology.
4. Education System: The forth area is mainly concern about how to manage the whole education system.

SWAYAM

SWAYAM is an online programme which initiate by the Government of India and this is designed for achievement of three principle of education: accessibility, equality and quality. SWAYAM is platform that facilitates all the courses and taught from class 9 to post graduation at anytime and anywhere. SWAYAM has four parts:

- Video lecture
- Reading material were prepared which can easily download
- Self-assessment tests by test and quizzes.
- Online portal for clear all the doubts.

The learners get free of cost courses which are delivered with SWAYAM. The learners who want a SWAYAM certificate should registered for the final exams. There is some eligibility that learner have to fulfil before gets its certificate which will be announce on the cover page.

MASSIVE OPEN ONLINE COURSES (MOOC)

The term MOOC is self explanatory. Massive means unlimited so the courses which is provided online and unlimited. It also can be used as a tool in blended learning programme where student can grab more information as compare to information which is provided in the class. There are lot of advantages

discuss below:

- Quick feedback.
- We can use it anywhere and at anytime.
- There are so many varieties of subjects.
- Available in different languages.
- Anybody can use it.
- Courses available at free of cost.

CONTINUED PROFESSIONAL DEVELOPMENT (CPD)

CPD is the continuous process of maintaining, developing and documenting of the professional skills. The skills will be classified by two methods formally and informally.

Formally	Informally
<ul style="list-style-type: none"> - Courses - Training - Conferences - Seminars 	<ul style="list-style-type: none"> - During Job - By watching others - Talk and presentation - Self directed study of practice notes.

SPECIFIC LEARNING DISABILITY:

Specific Learning Disability is one of the difficulties in academics where person relate to the ability of learning, writing and studying.

According to Rights of Person with Disability Act, 2016, a disorder in one or more of the basic psychological processes involved in understanding or using in language, spoken and writing that manifest itself in an ability to listen, speak, read, write, spell or do mathematical functions.

Types of Specific Learning Disability

1. **Dyslexia:** Dyslexia is a neurogenetic deficit which is related to reading and spelling processes. Student with dyslexia have trouble matching the letters they see on the page with the sounds those letters and combinations of letters make. And when they have trouble with that step, all the other steps are harder. Dyslexic children and adults struggle to read fluently, spell words correctly and learn a second language, among other challenges.
2. **Dysgraphia:** Dysgraphia is a specific learning difficulty that impacts on writing skills. While no two individuals will experience the same set of symptoms, it is a brain-based disorder that can cause difficulty with forming letters, spacing words and even organizing text into complete sentences. Students with dysgraphia may struggle with taking notes in class, completing homework and long-term assignments.
3. **Dyscalculia:** Dyscalculia refers to a range of math learning disabilities. Students with dyscalculia have difficulties in understanding what numbers mean, remembering math

facts, and steps to complete math problems or may have difficulty with visual-spatial concepts used in making patterns or in geometry. Dyscalculia may be related to language processing disorders which result in difficulties learning math vocabulary needed to understand math concepts and to solve more complex problems

4. **Non-Verbal Learning Disability:** students with NVLD has trouble to understand the nonverbal cues like body gestures, facial expression. These students have specific strengths like verbal domains which include early speech, rote-memory, early reading and spelling skills.
5. **Dyspraxia:** It is a motor planning disorder in which brain have to conceive and organize the sequence of unfamiliar actions.
6. **Dysphasia:** Student with Dysphasia has language disorder which includes difficulty in speaking and comprehending. Students may struggle with the right word to use, using of omission and substitution of the works while talking.

MAJOR CHALLENGES FOR SLD STUDENTS:

Every child learns to read, to write, communicate and express in his or her own way. Some children do well or some will face difficulties. Students with Specific Learning Disability have to face so many problems. There some challenges discuss below:

- Non-verbal gestures: students with Specific Learning Disability have difficulty to understand Non-verbal gestures or cues like facial expression, body gestures.
- Poor social skills: students have difficulty to adapt the nearby environment, they have difficulty in making friends and they do not indulge themselves in the group activity.
- Poor Confidence: Students with Specific learning Disability may have poor confidence in which they were not able to tell something to someone.
- Difficulty in Academic area: Students with Specific Learning Disabilities have difficulty in reading, writing and in mathematical calculation.

REMOTE AND RURAL AREAS:

It is observed that in rural and remote areas, schools are facing various challenges like inappropriate teacher student ratio, inadequate infrastructure of the school; lack of teachers in the school and where the inaccessible technology which is a big challenge to remove the barriers.

CHALLENGES

- Inadequate Infrastructure: Schools of Rural and Remote areas in India have poor infrastructure. There are less numbers of schools in several villages. Many schools have lack of classrooms, building, unhygienic toilets and no proper water supply.

- Inappropriate teacher student ratio: In most of the schools there is lack of teachers by which students does not get proper education.
- Lack of teaching learning material: Most of the students need support by which they can easily understand the curriculum. Teaching learning material like blackboard, books, stationary items and other resources which a student need for their studies.
- Lack of teachers in the school: In Rural and Remote areas where schools are established but there were lack of teachers.
- Lack of accessibility: Somewhere schools of Rural and Remote areas where technology reach but teachers or educators are not trained in use of technology by which learners are not in accessible to use for fulfil their need.

TECHNOLOGY FOR SLD STUDENTS:

There are many tools and apps which support Students with Specific Learning Disability.

- Speech to Text software: Speech recognition is an inter disciplinary of computer linguistics that develop methodology and technology that enables the recognition and translation of the spoken language in the text.
- Word Prediction: It is a word processing feature that makes writing breakdowns for the students simply by reducing number of keystrokes of typing words.
- Step Pad: This tool is for the person who has difficulty in completing multiple step tasks by themselves. In Step Pad all the steps and direction were recorded according to the task which give prompt to the person who need this to remember or learn the task easily.
- Talking Calculator: It is built in a speech that reads aloud the number, symbol or the operating key which is press by the user. This will help to student with dyscalculia to check the accuracy of the keys and to verify the answers.
- Number Shark: it is a computer program in which learner learns through games by which they can understand, reinforce and use the number properly.
- First Then Visual Scheduled (FTVS): this is an app for students with special needs. This app is creating auditory and visuals and it is a multi-sensory which help student to develop their skills.

SCOPE FOR TECHNOLOGY BASED LEARNING:

In this era every teacher or learner needs technology to fulfil their academic needs. Through technology teaching learning process becomes more meaningful for both teacher and learner because they both can use technology as a teaching learning material using which teacher can easily teach through various kinds of technology. As we know technology plays a decisive role to promote inclusion where mainstream and students with special need learn together by the help of technology they can learn same curriculum easily. Many types of tools and apps which are based on technology can fulfil the needs according to the requirement of students with special needs. For every type of technology, students with special needs can fulfil their academic needs by the help of technology. Through technology students will collaborate and cooperate with their classmates and they can enhance their skills like study skills, social skills and communication skills etc.

Online learning like MOOC and SWAYAM where anybody can update their knowledge which we called Continue Professional Development (CPD) and for students they can use to provide distance learning from school to post graduation courses.

REFERENCES

- Sridevi, K., Reddy, S., Radhika, S. (2019) Integrating Gender and Inclusive Perspective in Education
- Brill, J.M. & Galloway, C. (2007) Integration of Technology in Classroom-based Practices. British Journal of Educational Technology
- https://www.ugc.ac.in/pdfnews/3563340_PPT-Draft-NEP-2019.pdf
- <https://www.skillsyouneed.com/ps/continuing-professional-development.html>
- <https://swayam.gov.in/about>
- https://en.wikipedia.org/wiki/Massive_open_online_course
- <https://www.helpguide.org/articles/autism-learning-disabilities/learning-disabilities-and-disorders.htm>
- Draft NEP 2020

Special Education in New Education Policy 2020



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Abstract

NEP 2020 stresses on development of Inclusive educational structure and inclusive educational culture in our school education s with the help of infrastructural support and by making required changes in curriculum transaction based on human values such as respect for all, tolerance, human rights, empathy, gender equality, inclusion and equity. It requires co-operation of all to overcome the barriers and remove different biases and stereotypes. This policy aims to promote inclusion, developing respect for diversity with the help of promoting understanding about various cultures, religions, languages, caste, gender identities etc. among children, teachers and other school functionaries. Implementation of policy will help in empowerment of all through effective way of using resources and improved governance and effective monitoring mechanism with cooperation and support from schools for the education of children with disabilities and SEDGs. The School Complexes will affect the education by bringing different changes and empowering our school education system from the view of inclusion and equity among all learners in schools, School Management Committees, teachers, students, supporting staff, parents, and local citizens are called to join hands for providing all possible support to school education.

Key Words: ECCE, SEDGs, ODL, NIOS, ISL, Divyang, CWSN, SEZs

Introduction

The new education policy stresses on providing support to all students, irrespective of their place of residence, a qualitative education system, with stress on under represented and disadvantaged groups. It proposes that education is a great equalizer and is the best tool for achieving economic and social progress, inclusion, and equality. It emphasis that initiatives must be taken to ensure that all students from such groups, despite obstacles, are provided various opportunities to excel in the educational system.

Emphasis on Early Childhood Care and Education: The Foundation of Learning:

It focuses on inclusion and equal participation of children from disadvantages groups and for disabled children in ECCE. Pre-school sections covering at least one year of early childhood care and education will be added to Kendriya Vidyalayas and other primary schools around the nation, particularly in disadvantaged areas.

Foundational Literacy and Numeracy: Pre-requisite to Learning

“The nutrition and health (including mental health) of children will be fulfilled through healthy meals and the introduction of well-trained workers, counsellors, and community involvement into the schooling system.

All school children must undergo periodic health check-ups especially for 100% immunization in schools and health cards will be issued to monitor the same.”

Special focus will be there on health monitoring of special children.

Reduction in Dropout Rates and Providing Universal Access to Education at Each Levels

To provide learning for all students, with special emphasis on Socio-Economically Disadvantaged Groups (SEDGs), the scope of school education will be broadened to facilitate various pathways to learning including both formal and non-formal education ways. Open and Distance Learning (ODL) programs offered by the National Institute of Open Schooling (NIOS) and State Open Schools will be expanded and strengthened for meeting the learning needs of young people in India who are not able to attend a physical school due to physical barriers or personal issues.

Curriculum and Pedagogy in Schools:

Indian Sign Language (ISL) will be standardized through out the country and National and State curriculum materials will be developed for use by students with hearing impairment. Local sign languages will also be respected and taught as well as, where possible and relevant

Role of Teachers in Special Education

"There is utmost need for additional special educators for different areas of school education. Such specialist requirements include teaching different subjects to children with disabilities/Divyang children at Primary, Middle and Secondary school level, including teaching for specific learning disabilities". Such teachers require not only subject knowledge and understanding but also the relevant skills for understanding of requirements of special children. Hence, such areas as secondary specializations for subject teachers or general teachers, during or after pre-service teacher preparation could be developed.

Overcoming Gaps and strengthening existing measures

Bridging gaps in relation to access, learning outcomes and participation of disabled children will be one of the major goals. This Policy recognizes the importance of developing mechanisms for providing Children with Special Needs (CWSN) or Divyang, the same opportunities of getting qualitative education as any other child.

Research work related to special education

Different researches would be conducted for providing effective and quality education to all children and especially those belonging to SDGs. Researches will help to throw light on **effectiveness of various provisions**, one-on-one teachers, peer tutoring, open schooling, suitable technological interventions and appropriate infrastructure to ensure access can be particularly effective for certain children with disabilities.

Special Education Zones (SEZs)

Certain geographical areas contain larger proportions of SEDGs. There are many locations that have been recognised as Aspirational Districts by the Government which require special intervention services for promoting their educational development. NEP 2020 recommends that regions of the country with large populations from educationally-disadvantaged SEDGs should be declared Special Education Zones (SEZs), where all the schemes and policies are implemented with additional efforts, in order to change their educational scenario.

RPWD Act 2016

Target Groups:

- Dwarfism cases
- Intellectual Disability
- Complete Blindness
- Low-vision students
- Locomotor Disability cases
- Leprosy Cured persons
- Hearing Impairment (deaf and hard of hearing)
- Cerebral Palsy affected
- Muscular Dystrophy
- Thalassemia affected
- Hemophilic students
- Speech and Language disability
- Sickle Cell anemia
- Acid Attack victims
- Parkinson's disease
- Multiple Sclerosis
- Mental Illness cases
- Autism Spectrum Disorder
- Specific Learning Disabilities
- Multiple Disabilities including deaf blindness
- Chronic Neurological conditions

Effective Resources and Effective Governance in School Complexes

Sharing of resources across school complexes will improve support for children with disabilities and children belonging to disadvantage section.

School complexes will provide resources for the integration of children with disabilities, recruitment of special educators with cross-disability training, and for the establishment of resource centres, wherever needed, specially for children with severe or multiple disabilities.

Schools and school complexes will work for providing all children with disabilities, accommodations and support mechanisms according to their needs and to ensure their complete participation and inclusion in the classroom.

Involvement of Counselors and Social workers for working and communicating with students, parents, schools, and teachers in order to enhance enrolment, attendance and learning outcomes of children belonging to disadvantage and disabled categories.

Major recommendations of NEP 2020

- Making building, infrastructure, campus and various facilities accessible;
- Accommodation according to the individual's

requirements;

- Equal educational opportunities to all;
- Appropriate pedagogical measures; required modifications in the curriculum and examination pattern
- Providing education in most suitable languages, modes and means of communication
- Training professionals and staff to support inclusive education
- Establishing appropriate number of resource centres,
- Promoting research to improve learning
- Equal opportunities for sports and recreation activities
- Monitoring of participation and progress;
- Provision of scholarships to the needy
- Proper transportation facilities;
- Promoting use of appropriate augmentative & alternative modes, means formats of communication,
- Providing books, appropriate assistive devices and learning materials
- Training & employing teachers, teachers with disability, teachers qualified in sign language & Braille,
- Personalised support and other measures

References:

- <http://www.diyafoundation-india.org/national-education>
- <https://www.researchgate.net/publication/331111111/Educational-Policy>
- <https://www.education.gov.in/sites/default/files>
- <https://www.hindustantimes.com/education/barrier-free>
- <https://wecapable.com/Laws-and-Policies>

A Peep into the Society through a Kitchen

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ABSTRACT

Most females in our society are having a difficult married life but not many of them are having the privilege or courage to walk out of it or stand up for their rights, as they are uneducated or helpless due to financial dependence or even the societal pressure. After a period of sustained silence, they might end up having depression or other mental health issues or even end their lives. Some believe it is the right thing to do and enjoy it by blindly following it. Some suppress their emotions and dreams and passively live their life and go unrecognized. Some stand up for their rights and might even break their marriages. Some lucky females get to be married as well as live a life without such issues due to progressively thinking husbands and families where marriage is considered a partnership instead of ownership, where both partners accept egalitarian roles. The patriarchal ideas existing in the society and the magico-religious beliefs existing around menstruation are also addressed.

Keywords: Gender roles, Marital rape, Marriage, Menstrual myths, Movie review, Patriarchal society.

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A kitchen is incomplete without a female in it or that is how we are conditioned to think. We even glorify womanhood with the selfless work she does at home. Such a kitchen and household are brought to us by the Malayalam movie THE GREAT INDIAN KITCHEN directed by Mr Jeo Baby. The lead role is played by Miss Nimisha Sajayan, as her husband, Mr Suraj Venjaramood and Mr Suresh Babu as her father-in-law. For a story with multiple repetitive frames of the kitchen and its dark walls, the director has done magic with his presentation style. The lead characters are not given any names so that we could think of anyone around us in their roles and their realistic acting has made it easier that sometimes we feel hatred toward them as well as relatable. The movie is happening around a traditional Hindu household in Kerala. The difference in the bride and groom's house is shown even in the lighting. The dark walls of the husband's house and the kitchen which carries the ancient look and the colorful modern household of the heroine indicate the color of their thoughts too.

The couple is getting an arranged marriage considering their caste and status. For the lady brought up in a modern family, as a daughter of a father working abroad, well educated, and aspiring to become a dancer, the practices of the new family seem to be odd. While she was trying to get adjusted to it, the mother-in-law has to leave abroad to take care of her pregnant daughter. Following this, we can see the lady trying to fit into her mother-in-law's shoes and struggling with it.

Despite having specific interests in the way things are done, the males are never seen to lend her a helping hand and the mental and physical exhaustion of the heroine are left unattended. This shows how patriarchal ideas work in the society, thinking all these are a female's job and that is what a "good woman" is supposed to do.¹

The facilitation of men's lives by the lady goes unnoticed like the waste plate ignored on the dining table with wastes around it. When she mentions about table manners while at a restaurant, we can see the husband feeling insulted and later manipulating her into apologizing to him.

The lady gets a rest from these unending duties only when she is menstruating. The existence of strong magico-religious beliefs such as untouchability surrounding menstruation is illustrated in the movie. When the males are preparing for the temple visit, the

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menstruating lady is kept isolated and asked to sleep on the floor, even seeing her is considered a sin. When she holds him after he falls from the scooter, we can see the priest telling him drinking cow urine is the solution, but since it is the modern world, he can just take some dips in the river. This shows how the rules change conveniently for the men. How the menstruating lady is treated and she is blamed for not knowing such beliefs are shocking for some; while relatable to many.

Stories of other females, like her friend living her dreams, show the reversal of gender roles assigned.¹ The happy husband bringing black tea for his wife is a hope we have in the progressive society.

The husband gets offended when she demands foreplay and ends up insulting her physical appearance. Many times the husband is having sex with her without a proper consent. At times her excuses are ignored and treats her like a property owned by him.²

After enduring oppression, the anger and helplessness pile up in her like the dirty water getting filled from the beginning of the movie. She finally stands up against it and leaves it all behind and lives her dreams proudly.

DISCUSSION

The heroine grew up seeing her mother taking up her father's roles too while he was away and being a powerful lady would have influenced her and made it difficult to accept traditional female roles, which caused the marital discord.³ We can see how girls are brought up to be served last and ease the life of men and the idea of marriage and being submissive to their husbands¹ are



Fig. 1: Great Indian kitchen pic

ingrained in us since infancy through lullabies,⁴ such children may even end up accepting violence later in their married life.¹ Even then her mother is not supporting her choice at first due to the stigmas around divorce.¹ Female's family is seen inferior to the male's family⁵ in most of the marriages, no matter how educated or wealthy she is. The society does not accept it when people stand against these cultural taboos.⁵ The ladies of the house are more emotionally adaptable and is expected from them whereas men are considered to have emotional stability, which is forcing them to act assertive³ and give them a feeling like females of the house should obey them.¹ Even though femininity in men is a quality required for close relationships, in a country like India, "feminine men" are considered inappropriate.³ It is a sad reality that ladies cannot have career choices, and even if she is educated, she should be kept at home for the better future of the next generation.¹

CONCLUSION

Most females in our society are having a similar life but not many of them are having the privilege or courage to walk out of it or stand up for their rights, as they are uneducated or helpless due to financial dependence or even the societal pressure. After a period of sustained silence, they might end up having depression or other mental health issues or even end their lives.⁵ Many psychosocial factors are involved in the development of depression and strained interpersonal relationship with in-laws; marital discords are some of the reasons which lead to adjustment disorders, depressive disorders, and anxiety disorders. The children brought up in such chaotic environments could grow up to have psychological

morbidities. Some believe it is the right thing to do and enjoy it by blindly following it like the father-in-law's sister. Some suppress their emotions and dreams and passively live their life and go unrecognized like the mother-in-law. Some stand up for their rights and might even break their marriages. Some lucky females get to be married as well as live a life without such issues due to progressively thinking husbands and families where marriage is considered a partnership instead of ownership, where both partners accept egalitarian roles (Fig. 1).³

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REFERENCES

1. Ali TS, Krantz G, Gul R, et al. Gender roles and their influence on life prospects for women in urban Karachi, Pakistan: a qualitative study. *Glob Health Action* 2011;4:7448. DOI: 10.3402/gha.v4i0.7448.
2. Trevelyan J. Marital rape. *Nurs Times* 1991;87(13):40–41. DOI: 10.4135/9781452229300.n1156.
3. Isaac R, Shah A. Sex roles and marital adjustment in Indian couples. *Int J Soc Psychiatry* 2004;50(2):129–141. DOI: 10.1177/0020764004040960.
4. Katyal A, Chanda I. How to be a good woman: The playway method. *Indian J Gend Stud* 1998;5(2):165–183. PMID: 12348889.
5. Elliott CM. Introduction. *Bulletin (Centre for Women's Development Studies)* 1999;6(2):177–184. DOI: 10.1177/097152159900600202.



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JOJI: MACBETH IN COVID TIMES

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Keywords:	joji, macbeth, movie, authoritarian parenting

JOJI: MACBETH IN COVID TIMES

Abstract

Joji based on Macbeth shows an upper-middle-class Christian family in the high ranges of the Kottayam district of Kerala during the Covid pandemic. It shows the authoritarian family interaction of three generations, the father Kuttappan, his three sons Jomon, Jaison and Joji, Jaison's wife Bincy & Jomon's son Poppy and its effect.

Key Words: Joji, Macbeth, Authoritarian parenting

Introduction

Movies present a scene, event, and narration in the form of moving images¹. Joji is a 2021 Indian Malayalam-language black comedy crime drama film directed by Dileesh Pothan and written by Syam Pushkaran². Movie is set during the time of covid pandemic. It starts with Poppy receiving an air gun he ordered from Kuttappan's online shopping account without his knowledge. This act of delinquency is responded to in the form of harsh punishment by Kuttappan towards Joji, the lead role. Kuttappan (P.N. Sunny), a widower, is depicted as a strict patriarchal authoritarian father who expresses no warmth towards his family, gives harsh punishments and controls finances and other important family decisions. His control over financial matters is illuminated when he abuses Joji over his investment in horse-trading and does not permit Jaison to buy a flat in the city. The patriarchal nature of the family is evident when Bincy (Unnimaya), the only female in the Panachel family, is always seen busy doing chores like an unpaid maid. However, soon after Kuttappan's death, she hires a maid and takes charge. When Kuttappan's authority declines due to stroke, the three sons' anger, fear and resentment is seen to be expressed differently. Eldest son Jomon (Baburaj), who is divorced, becomes the new head of the family. He is emotionally bonded to his father. He tries to hold the family together by refuting rumours circulating on social media regarding Joji's involvement in his father's death. He also seems authoritative. He goes against the social and religious norms of the society when he decides to burst crackers at his father's funeral. His abuse of alcohol becomes evident when Joji reveals the way to bring him for the partition talk. He shows that he knows how to get his way with threats, when he reminds the priest that the church is indebted to the Panachel family as a result of their generous donations. He later proceeds to harass the priest at the funeral feast. So, it looks like he develops an alcohol abuse problem and is manipulative but lacks administrative skills for which he pays dearly with his life to Joji. Second son Jaison (Joji Mundakkayam) is married without children. He is a family man, is hardworking, lives by the societal norms, is obedient, manages the family finances like a clerk for his father, but fails to get any deserved respect. He struggles to balance his relationships with his father and his wife. This is depicted beautifully in the conversation with his father regarding wanting a separate home in the city. Jaison is anxious while discussing topics of his interest with his father, elder brother or the priest. He would rather agree with significant others than express his disagreement with strong words. It seems he is like the average child reared in an authoritarian family, who tends to depend more on their parents, is submissive, less socially adept, less confident, less intellectually curious and less committed to achievement³. Joji (Fahadh Faasil), the lead role of the movie, is a college dropout and seems unfit in family functioning. He desires easy money and is unsuccessful in most of his ventures except for one. He calls himself a subject of his father's Kingdom. He lies low and spends his days in the castle sleeping, eating and pursuing his passion for horse business at a small scale. He is financially dependent

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5 on his father and faces restrictions, both emotional and behavioural. These restrictions
6 make him socially withdrawn, with inadequate social relationships. He shows that he
7 is manipulative when he asks Poppy for details regarding the world of online
8 transactions and takes away his air gun, deflects murder rumours about his father's
9 death onto Jomon and tries to eliminate Jaison's suspicions on Joji regarding Jomon's
10 death. He finds escape impossible at last and shoots himself with the air gun. Joji had
11 no say in family functioning and was supposed to live like a sloth. Behavioural
12 problems, which include defiance, impulsivity, disruptiveness, aggression, and
13 antisociality are seen to be present in Joji and may be related to being in a single
14 parent family, poor family support and inadequate family communication⁴. Poppy is
15 the youngest member of the Panachel family. He shows lack of emotional expression
16 during his father's and grandfather's funerals and other family crises. He takes
17 advantage of Kuttappan's ill health and enjoys online shopping with Joji, expecting
18 his grandfather to die. He is not seen interacting much with any of the family
19 members and seems neglected. He conducts delinquent acts, tells lies and lacks
20 emotional expression, depicting features of conduct disorder.
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23 **Discussion**

24 Following topics seems relevant

- 25 1. Authoritarian parenting
- 26 2. Communication pattern

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28 Authoritarian parents are strict, punitive and very much controlling with less warmth⁵.
29 Such parents score high on the demandingness and low on the responsiveness⁶. So
30 family members are less self-dependent, have poor self-control and difficulty in
31 handling situations, and thus achieve little awards⁵ like Jomon. Studies show that
32 adolescents with parents in the authoritarian cluster report significantly higher
33 externalising problems like aggression, disruptiveness, defiance, hyperactivity, and
34 impulsivity as evident from the characters, Joji and Poppy. As the adolescents grow
35 older, parental control is perceived as invasive and no longer perceived as a sign of
36 support⁶. Communication pattern in authoritarian family express less warmth, don't
37 allow independence for children in expressing emotions, believe in inflexible rules
38 and harsh punishment is awarded. Poor communication can increase emotional and
39 behavioural problems in children and if left untreated, may have negative long-term
40 consequences. This is also associated with non-intact family and may be a contributing
41 factor in Joji's character formation. Magico-religious beliefs prevailing in society can
42 affect the recovery and outcome of illness.
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45 **Conclusion**

46 Emotional and behavioural problems have a high prevalence and can have long-
47 lasting consequences not only for adolescents but also for their families and society as
48 a whole. It can be associated with a number of factors. One of the important domains
49 is the family environment which includes parenting style and communication pattern.
50 The movie depicts how parenting style and lack of support makes Joji a criminal
51 though he had no such intention.
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Reference

1. T. J. Smith, "Film (cinema) perception," in Encyclopedia of perception, Sage Knowledge, 2010.
2. "Fahadh Faasil and Dileesh Pothan's 'Joji' to release on OTT". The News Minute. Retrieved 31 March 2021
3. M.H. Bornstein, D. Zlotnik, in Encyclopedia of Infant and Early Childhood Development, 2008
4. Paclikova K, Veselska ZD, Bobakova DF, Palfiova M, Geckova AM. What role do family composition and functioning play in emotional and behavioural problems among adolescent boys and girls?. International journal of public health. 2019 Mar;64(2):209-17.
5. Sanavi FS, Baghbanian A, Shovey MF, Ansari-Moghaddam A. A study on family communication pattern and parenting styles with quality of life in adolescent. J Pak Med Assoc. 2013 Nov 1;63(11):1393-8.
6. Calders F, Bijttebier P, Bosmans G, Ceulemans E, Colpin H, Goossens L, Van Den Noortgate W, Verschueren K, Van Leeuwen K. Investigating the interplay between parenting dimensions and styles, and the association with adolescent outcomes. European child & adolescent psychiatry. 2020 Mar;29(3):327-42.

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Long Covid Syndrome - How long?

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Keywords:	long covid syndrome, Lockdown,, coping strategies

Long Covid Syndrome - How long?

As we are writing this paper we are still in the midst of third wave of Covid 19 pandemic and further waves of the pandemic is still speculated. We as a developing country immunized more than 100 crores of population and helped in immunization drive across the globe. The pandemic initially was categorized in to mild, moderate and severe disease with severity based mostly on respiratory symptoms. The diagnosis was based on RT-PCR reporting of naso-pharyngeal swab and if possible the CT scan of chest. The severe cases usually would take three to four weeks for recovery and if gets complicated ICU admission, and ventilator care was needed. The mild case was perceived to get better in a week or two.

As the people got tested positive the fear of severe illness to themselves and fear of spreading the disease to others at risk grappled. Because of the stigma the patient turning positive would hide their status while visiting healthcare facility for some other acute/chronic comorbidity. As people recovered they faced the stigma of being positive and the milder symptoms persisted mostly in the form of breathlessness, dyspnea and other non specific symptoms. The discrimination was a psychological stress for them.

People from the social media formed a group on facebook called LONG COVID facebook group with over 20000 members and they started sharing their experience which caught the attention of National institute of health research. Other researchers across the globe particularly from western world and China tried to understand the long covid symptoms. There were no diagnostic criteria or any treatment protocol available for understanding the long covid symptoms. People were feeling ignored by healthcare workers since their symptoms made no diagnosis and no further evaluation were done. Mark Honigbaum and Lakshmi Krishnan in their article in Lancet points that pandemics always reminds us about limitation of narrow biomedical models and the importance of listening to patients narratives of illness.

The review done by Yelin et al in September 2020 revealed that the most prevalent long term symptoms associated with covid were fatigue, dyspnoea, chest pain, joint pain, palpitations, anosmia and dysgeusia, hair loss, cognitive symptoms (memory and attention deficits) and psychosocial distress (loneliness, anxiety, depression and sleep disorders)¹. Psychiatric symptoms like low mood, mood swings, hopelessness, heightened anxiety, sleep/wake cycle dysregulation and neurocognitive disturbances including brain fog, difficulties with memory, concentration and executive function have been reported. Post-traumatic stress disorder symptoms have also been reported. Infact upto 25–56% of patients report psychiatric symptoms (Nalbandian et al., 2021), and this is consistent with past SARS pandemics².

The social media discussion of the long covid symptoms along with research by different scientific institutes led to meeting at International level at WHO. The meeting was the first in a series aimed at developing a global consensus on the case definition, diagnosis, prevention and management of post COVID-19 condition³. Further such meetings are warranted to come to a

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5 comprehensive guidelines for long covid diagnosis and management failing which this would be
6 pandemic of pandemics as appropriately said by Dr. Carlsen from Oxford University³.
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8 The covid 19 pandemic has not just been a respiratory or multisystem disorder but has affected
9 the human lives in unprecedented way and may be considered different as compared to earlier
10 pandemics. The damage of health had put restrictions on economy of families as well. In the post
11 independence India first lockdown brought worst economic contraction in the history of country
12 which increased the economic inequality between India and the world. Also the income and
13 wealth inequality increased in India doubling the number of poor in the country. An estimated
14 230 million people in India have fallen into poverty as a result of the first wave of the pandemic.
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17 The wave of pandemic is occurring every year with different strains of the virus. The strategies
18 adopted by the government over the globe were different with lockdown being the most frequent
19 measure. Lockdown included restriction on national and international travel, closure of school,
20 universities and shops. The offices, hotels, malls and gym were closed. Social distancing, use of
21 mask and frequent sanitization behavior was advertised. The behavior was followed depending
22 on awareness and acceptance level of various communities. This medical ritual of screening for
23 temperature, use of mask and frequent hand sanitization has become so common in society that
24 obsessive symptoms of compulsive hand washing may get confused. The various measures
25 taken by the government to control the pandemic has also made them susceptible to criticism by
26 public.
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30 Gradually the society and government had developed more sustainable coping strategies as
31 complete lockdown had poor impact on economy, education and mental health. The vaccination
32 became available. The stigma and fear of Covid 19 infection has gradually deescalated. The
33 enforcement of partial lockdown was more acceptable.
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36 Post covid world looks a little different than pre-covid and it's a matter of time which would
37 decide what behavioral and cognitive changes would persist. Few of them worth mentioning are:
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- 40 1. The violence against frontline health workers has increased across the globe however
41 because of strict law amendment, it was low in India⁴.
- 42 2. Work from home has been an option for employees.
- 43 3. Syllabus of schools and colleges is being completed through online classes.
- 44 4. The rise in tele consultation for health and other service sectors. The teleconsultation may
45 have impact on doctor- patient relationship which is difficult to foresee. Even the court
46 proceedings switched to virtual mode.
- 47 5. The religious and political gathering which used to be norm are under legal scrutiny for
48 now and future of such guidelines is not clear.
- 49 6. The screening of individual before entering any social building through temperature and
50 mask monitoring is a new norm, which is further getting reinforced by vaccination
51 certificate.
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7. The restriction on regular exercise and workup at gym is complicated. People are not able to continue their regular exercise sometimes because of lockdown while at other times the long covid symptoms restricts the stamina. Also death of few celebrities has panicked the public from cardiac workup at gym.

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Conclusion

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Covid has influenced our life in all possible ways and continues to morph it. The impact has been on social, economic, occupational, education and not only on health as is usually the case with a virus. The mental health is impacted severely by the long covid. The guidelines to manage such long term impact shall be helpful, failing which health workers and the people would be helpless.

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1. Yelin D, Margalit I, Yahav D, Runold M, Bruchfeld J. Long COVID-19—it's not over until?. *Clinical Microbiology and Infection*. 2021 Apr 1;27(4):506-8. doi.org/10.1016/j.cmi.2020.12.001
 2. Llach CD, Vieta E. Mind long COVID: psychiatric sequelae of SARS-CoV-2 infection. *European Neuropsychopharmacology*. 2021 Aug 1. doi.org/10.1016/j.euroneuro.2021.04.019
 3. *CMAJ* 2021 March 1;193:E318-9. doi: 10.1503/cmaj.1095923
 4. Manoj MA, Padubidri JR, Saran J, Rao SJ, Shetty BS, D'Souza H. Violence against healthcare personnel in India: Covid-19 prompts stricter laws. *Medico-Legal Journal*. 2021 Dec;89(4):260-3. doi:10.1177/00258172211006276



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**COVID-19 related psychosocial information: findings from a public
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Keywords:	Covid 19, psychological issues, mental health, Social support, search engine

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Abstract

PURPOSE: There is emotional and psychosocial impact of COVID 19 pandemic. We planned to find the responses, provided by online search engine, to an internet user when searching for psychosocial issues related to COVID 19 pandemic.

METHODOLOGY: Key terms “COVID 19” and “COVID 19 PSYCHOSOCIAL” were searched on Google Search. Responses from first five pages were considered. 62 relevant articles were found.

RESULTS: Articles were grouped in to news article, journal article and resource article. The article describes impact of COVID 19 and coping methods. Few provided helpline numbers and online courses.

CONCLUSION: Media channels, scientific community and various government and non-government organization published various articles catering to needs of general public, risk groups and professionals. The effects of these articles on people should be looked in to.

KEY WORDS:

Covid-19; pandemic; psychological issues; mental health; Social support; search engine

For Peer Review

INTRODUCTION

The coronavirus disease (COVID-19) [1] pandemic has created an unprecedented situation in the whole world. News of affected and dead people all around the world are drumming the brain every moment. Added to this are the news of misery of the population like loss of livelihood, getting stranded away from family, not getting daily supply of food and medicines to name a few. People are also going through a phase of disruption of their daily routine as a result of lockdown and/or quarantine. The anxiety level is shot up when one hears the news of somebody known becoming COVID positive [2]. As a result, the people are often turning onto the internet via search engines to find some respite.

We attempted this study with the aim of finding out the responses provided to an Indian Google user related to the mental health and psychosocial issues during the COVID 19 pandemic. Our objectives were to find out the number and content of responses related to the psychological and psychosocial issues out of a general search on COVID 19 and out of a specified search on the same.

METHODOLOGY

Out of the initial lockdown period of 21 days imposed by the Government of India, we selected four random days. On these days, we searched the key terms “COVID 19” and “COVID 19 PSYCHOSOCIAL” on the Internet via Google search engine on our laptop. We looked up each article in the first five pages. Each page generated ten results. Psychosocial means “pertaining to the influence of social factors on an individual’s mind or behaviour and to the interrelation of behavioural and social factors” [3]. Articles satisfying the above criteria were noted down by the two authors independently and the articles agreed upon by both were then further categorised and studied.

RESULTS

When the term “COVID 19” was searched for, out of total 68 articles, 12 articles were available which were related to the psychosocial aspects, excluding repetitions on subsequent days. These twelve articles were broadly categorised into news articles, journal articles and resource articles (government or non-government), details of which has been tabulated in table number 1.

Table No. 1

Category	Number	Theme
News articles	4	a) Consequences of the pandemic like grief, stigma b) Advice on protection of mental health

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Journal articles	1	a) Impact of the pandemic on psychological and psychosocial aspects
Resource articles	7	<ul style="list-style-type: none"> a) Provision of helpline to discuss issues related to mental health b) Identification of issues like anxiety, depression c) Tips on caring for mental health for self, children and others d) Videos on coping for problematic alcohol usage, stress and stigma e) Videos on coping for an indoor life

When the term “COVID 19 PSYCHOSOCIAL” was searched for, it generated 50 relevant articles out of 66 articles excluding repetition on subsequent days. The fifty articles were broadly categorised into news articles, journal articles, resource articles (government or non-government) and websites. Details of these articles are tabulated in table number 2.

Table number 2

Category	Number	Theme
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News articles	15	<ul style="list-style-type: none">a) Ways to manage anxietyb) Psychosocial issues due to the pandemic including plight of the migrant workersc) Impact of the pandemic on psychological and psychosocial issuesd) Provision of helpline for studentse) Tele psychotherapyf) Support for medical professionals
Journal articles	5	<ul style="list-style-type: none">a) Social issues related to specific genderb) Relationship between lung function and psychosocial stressorsc) Call for papers related to COVID 19

For Peer Review

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Resource articles	23	<ul style="list-style-type: none"> a) Psychosocial support for migrant workers b) Message to general population, health workers, team leaders and employers to reduce stigma and anxiety c) Guidance for indoor activities d) Videos on reducing the psychosocial impact e) Mental health of the elderly f) Well-being of students g) Advice for psychologists and therapists h) Job offers in helping during the pandemic i) Telehealth courses
websites	7	<ul style="list-style-type: none"> a) Social support for migrant workers b) Psychoanalytical support c) Tips on how to keep oneself confined in a small place and how to deal with stress and conflict

DISCUSSION

Our study to investigate the importance of psychosocial aspects in the community during a pandemic is first of its kind. We used the term “COVID 19” to find out how much information is generated for the psychosocial aspects out of a general pool of information. The term “COVID 19 PSYCHOSOCIAL” was used to determine the type of information available in the online platform regarding the psychosocial aspects during the pandemic. We have limited our search in the first five pages only as data shows that relevance of the results to the search item gradually decrease over the pages [4] and more than 90% people limit their search in the first three pages [5].

From table number 1, we can see that approximately 18% of the articles on COVID 19 were related to psychological and psychosocial aspects. Since similar study has not been conducted

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4 before to our knowledge, it cannot be commented whether psychosocial aspects have been
5 adequately addressed or not. It is also observed that a majority of them are discussing about
6 the impact or consequences due to the pandemic and methods to implement caregiving and
7 coping for the same. Few of them have provided helplines also to support the community at
8 stake. No article was found on telepsychiatry which probably points to the fact that online
9 consultation has not yet become popular.
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12 Table number 2 shows that a wide range of psychological and psychosocial aspects have been
13 addressed. The main focus is found to be on minor psychiatric symptoms and not disorders
14 per se. they are devoted to identifying symptoms of stress and anxiety on individual basis.
15 Some are also related to management of those symptoms with behavioural techniques,
16 namely, meditation, yoga, indoor activities, taking break from COVID news, connecting with
17 friends and family members. There are also articles for the community at large and
18 specifically focuses on the marginalised sections like migrant workers. The articles have also
19 focussed on specific gender issues. There was lack of particular policy for addressing the
20 psychosocial issues of COVID 19.
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23 During lockdown when both public and government were unaware of the course of pandemic
24 and fear and stigma of covid-19 had enveloped them, google had been used most commonly
25 to understand and cope up with it. The general public use the search engine for getting more
26 information about mental health problems and learning coping skills. They also try to search
27 for helpline numbers which may be used during the crisis. The professional people use the
28 search engine to understand the need of people and accordingly formulate the questions while
29 interviewing the clients.
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32 Google search engine results show that news channel played a prominent role in spreading
33 awareness about science behind the Covid-19, its natural course, comorbidity associated with
34 the disorder and when and where to seek help. The experts from different field would address
35 the media and general doubts of public would be answered. The lockdown had impacted the
36 life of migrant workers and students away from home in unimaginable way which had been
37 brought to notice of both government and general public through media. The media also tried
38 to come with the general help for public by trying to suggest the popular coping skills and
39 recommending the lifestyle changes.
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43 Government and non- government organization had tried to find out ways to help the needful
44 and various resource articles were published. The pandemic forced government to amend
45 rules on daily basis and so such resource articles were handy for general public. The
46 psychosocial impact of lockdown was initially anticipated and various counselling helpline
47 numbers were made available to general public.
48

49 Various segment of society had various need and lockdown and covid had differential impact
50 on their life. The resource articles show that guidelines have tried to address the need of most
51 of segment like elderly, children, migrant workers, healthcare workers and counsellors along
52 with general public.
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55 The search on google also shows that research articles are gradually getting published to
56 understand the psychological and psychosocial impact of Covid-19 and their call for further
57 research. However the media and resource articles were the major help available to general
58 public.
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Vulnerable populations like elderly, migrant workers, single mother, widow and students had unprecedented impact of covid and lockdown. The children's school were closed and social life was abruptly halted which increased online usage and burden on parents and caregivers increased. The published articles tried to fulfil the needs of various group.

LIMITATIONS

The study was done based on the responses generated on four days only. Daily searches throughout the lockdown period could have yielded better results. Our search item was non-specific. Specific psychiatric disorders were not searched for. We did not compare our findings from other search engines.

FUTURE DIRECTION

More data may be gathered and how these articles are influencing people may be searched. As google is a search engine and gives its results based on logarithm based analysis of data, the content of such search is not reviewed. The quality of content of such information is not available and so at time of pandemic like condition when general public turn towards such web based help, the authenticity of information shall be criteria before such information are made available.

CONCLUSION

During this digital era common people turn towards online resources for information and coping techniques. It is imperative to understand the psychosocial consequences of COVID 19 pandemic. Public policies related to psychosocial issues are required to help us better to cope with this pandemic. General public awareness about the psychological impact and the various facilities available to cope up shall be available easily from reliable sources.

DECLARATION

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- **Consent to participate:** Not applicable (as no human subject)
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- **Acknowledgement:** Nil

1
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3
4
5 REFERENCES:

- 6
7 1. World Health Organization. (2020 February 11). Naming the coronavirus disease
8 (COVID-19) and the virus that causes it. Retrieved on 17th April, 2020, from
9 [https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it)
10 [guidance/naming-the-coronavirus-disease-\(covid-2019\)-and-the-virus-that-causes-it](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it)
11
12 2. Stankovska G, Memedi I, Dimitrovski D. (2020) Coronavirus Covid-19 disease,
13 mental health and psychosocial support. Society Register 4 (2), 33-48.
14
15 3. Oxford English Dictionary. (1612). Retrieved 18 April 2020, from
16 <https://www.oed.com/>
17
18 4. Search engine's results' page (SERP). Wikipedia. Wikimedia foundation. (2019)
19 Retrieved 24th March 2020, from
20 https://en.m.wikipedia.org/wiki/Search_engine_results_page
21
22 5. Petrescu P. Google Organic CTR - 2014 Report. (2019). Retrieved 18 April 2020,
23 from <https://www.advancedwebranking.com/blog/google-organic-ctr/>
24
25
26
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28
29
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For Peer Review

Left Behind: Surviving Suicide Loss

Sashi B Gupta¹, Preeti S², Mahesh R Gowda³, Chandrashekar M⁴

Q2 Q3

Keywords: Suicide, Suicide stigma, Suicide survivors.

Indian Journal of Private Psychiatry (2021); 10.5005/jp-journals-10067-0066

INTRODUCTION

The book *Left Behind* is about people surviving suicide loss. The stigma around the topic is high, and people rarely share experiences regarding their loss. Nandini Murali is a gender and diversity researcher and practitioner and a communication professional. She also writes on Hindu dharma and is passionate about wildlife photography. In this book, she has shared her personal experience during the first three years after the death of her husband Dr TR Murali due to suicide. She highlights the need for validation of grief reaction to the survivors. Her journey on finding meaning in the pain guides readers and gives a ray of hope; however, the stigma and poor support from society remain prevalent.

SUMMARY

The guided use of selected books as an adjunct to treatment is applicable to patients in all stages of life and with a variety of problems.¹

The book *Left Behind: Surviving Suicide Loss* written by Nandini Murali leaves a deep impact in our hearts.² A senior psychiatrist Dr Raguram introduced this book to me. The author has shared her traumatic grief reaction to an unnatural death. She takes the reader through the overwhelming emotional turmoil for the first few years and its impact on her life. She writes, "A cocktail of toxic emotions throttled me—shame, fear, guilt, anger, and remorse. They would ambush me with the stealth and ruthlessness of an apex predator." She overcomes it with courage, compassion, and connection. Courage as she explains is "acceptance of one's vulnerabilities and is a key factor for authenticity." She shares how she was helped by her support groups and expresses her gratitude toward her family, friends, her two dogs (Mali and Minnal), her servants, people she met while exploring her pain, her spiritual guru, and suicide survivors she met in her journey of pain to purpose. This compassion of others with whom she felt connection was vital to explore herself. In her journey of seeking the meaning of the pain, she found spiritual practices and group therapy were similarly helpful. She courageously and scientifically explains the pain she underwent had its manifestation at her physical, emotional, and psychic grounds. She ferociously searched for help and experienced that the Shradh ceremony along with group therapy and psychiatric medicines have their part and were helpful. She believes every suicide is unique and not only family but significant others also go through grief and how stigma blocks the usual grief reaction. She expresses how

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the stigma around suicide is prevalent and her observation and experience that even mental health professionals lack adequate empathy. She comments on the magnitude of death by suicide by use of statistical data and how this problem has become a social issue. She talks about the need of training programs like suicide gatekeepers at a community level. One year of her husband's death, she launched SPEAK—an initiative to prevent suicide and promote mental health. She teaches from her experience and as an expert of language regarding communication skills to be used with suicide survivors "what to say and what not to say." She is a perfect example who searched for the meaning of suicide in her life. Her journey from turbulent ocean to shore guides the reader to introspect their emotional wreck at a painful situation and to deal with them directly without shame and secrecy. She shares experiences of other grieved families in different circumstances and finds that every suicide survivor needs validation of their emotional pain and unconditional support from society. The book offers much more than we expect and acts as a guide for people in grief. The book is based on her experiential introspection as well as massive research on the topic. Also she has substantiated the truth by personally meeting authors and other suicide survivors.

ANALYSIS

As a psychiatrist, our learning is limited to treating patients with depression and averting suicide. Our helplessness in failure to prevent death by suicide in our patient induces guilt and doubts about our own judgment. However, very often we are not sensitized regarding survivors who have lost their near and dear. This book is enlightening in this perspective as she says the questions with which survivors grapple remain unanswered, ironically acceptance of this ambiguity is a milestone in the healing journey. Myself have witnessed a change in my mental health practice and have become

more compassionate, empathetic, and sensitive to suicide survivors as compared to previously.

CONCLUSION

Indian literature lacks books on suicide survivors because of stigma and shame. The book is particularly helpful in the Indian context as the author shares the rites and rituals unique in Hindu dharma and her experience during those spiritual practices. Also she recommends modern therapy and the role of mental health professionals in taking care of survivors.

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REFERENCES

1. Katz G, Watt JA. Bibliotherapy: the use of books in psychiatric treatment. *Can J Psychiatry* 1992;37(3):173–178. DOI: 10.1177/070674379203700305.
2. Nandini M. *Left behind*. Westland Publication Pvt Limited; 2021.

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Indian Journal of
Private Psychiatry

Joji-A Play of Authoritarian Parenting

Journal:	<i>Indian Journal of Private Psychiatry</i>
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Manuscript Type:	Letter to Editor
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Keywords:	joji, authoritarian parenting, movie

Joji- A Play of Authoritarian Parenting

Abstract

Joji is a 2021 Indian Malayalam-language black crime drama film directed by Dileesh Pothan and written by Syam Pushkaran. Based on William Shakespeare's Macbeth, this movie is about an upper-middle-class Christian family in the high ranges of Kerala during the COVID- 19 pandemic. This movie portrays a Father being authoritative leading to internalizing and externalizing behaviours like aggressiveness, defiance, poor coping skills, self harm and submissiveness in his children.

Keywords: Joji, Movie, Authoritarian Parenting

Introduction

The movie starts with Poppy (Alser Alex), who is a socially withdrawn unhappy grandson of Mr. Kuttappan (authoritarian head of Panachel family), ordering an air gun using Kuttappan's Netbanking account without his knowledge. This act of delinquency is misdirected by Kuttappan (P.N. Sunny) towards Joji (Fahadh Fasil), his youngest son and the film's lead character, who assumes him to be the miscreant and a loser, in the form of harsh punishment. Kuttappan, a widower and the head of Panachel family, is depicted as a strict patriarchal authoritarian father who expresses no warmth towards his family members, gives harsh punishments, and controls the finances and other important family decisions. His control over financial matters is illustrated when he physically abuses Joji over his investment in horse-trading and also does not permit Jaison (Joji Mundakkayam), his second son, to buy an apartment in the city.

Joji is unsuccessful in most of his ventures to earn easy money and is seen spending most of the days loitering around. He is financially dependent on his father and is restricted to express his emotions in the family as depicted by his silent anguish when alone in his room. He manipulates Poppy to reveal details of online transactions with an aim to steal money from Kuttappan's account for his aspirations.

Jaison, husband of Bincy (Unnimaya), is a hardworking family man, living by the societal norms, managing the family finances like a clerk for his father, but without any respect or recognition. His submissiveness and under confidence causes struggles in the relationship between his father and his wife. He is anxious while discussing topics of his interest with his father, elder brother or the priest. He finds it difficult to express his disagreement with significant others.

The patriarchal nature of the family is evident when Bincy is made to indulge in household chores like an unpaid maid.

The movie takes a turn when Kuttappan suffers from stroke. Kuttappan's eldest son, Jomon (Baburaj), who is a divorcee and the father of Poppy, becomes the new head of the family after his fathers serious condition. Being a single authoritarian parent along with his regular alcohol use would probably explain the distressed behaviour of his son. Some of kuttappan's family members see an opportunity for financial inheritance anticipating his death following serious health conditions and his recovery is seen as loss of this opportunity. Joji secretly hatches a plan to murder him and succeeds with masked support from Bincy. Following father's death, Jomon goes

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3 against social and religious norms when he decides to burst crackers at his funeral.
4 He shows his authority by protecting the family from rumours circulating regarding
5 their involvement in their father's death and also when he reminds the priest that the
6 church is indebted to the Panachel family due to their generous donations.
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9 Joji successfully murders Kuttappan but the subsequent chain of events to cover-up
10 the act ends in murdering his elder brother Jomon (Baburaj) as well. When
11 Jaison, who is suspicious of Joji's heinous act and refuses to fall for his
12 manipulations, Joji attempts suicide blaming the society for his decisions. Many of
13 the behavioural problems portrayed by Joji, including defiance, impulsivity,
14 disruptiveness, aggression, antisociality and self harm is related to psychosocial
15 factors of his dysfunctional family.
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19 Discussion

20 Authoritarian parents are characteristically strict, punitive, controlling and usually
21 express less warmth¹. Such parents are very demanding and aim to exert control over
22 a child's behaviour². Authoritarian parenting is linked to externalizing and
23 internalizing behaviour, poor academic achievement and poor self concept.
24 Externalizing behaviour include aggression, delinquency and hyperactivity whereas
25 internalizing behaviour include social withdrawal, anxiousness and suicidal
26 behaviour. Children reared in such family are less independent, have poor self-
27 control and difficulty in handling stressors¹. Jaison and Poppy are portrayed as
28 submissive, socially inept, under confident, and less committed to achievement³
29 pointing towards internalizing behaviour whereas externalizing behaviour is present
30 in varying degrees in characters of Jomon and Joji.
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36 Identifying dysfunctional parenting styles and psychoeducation may prevent the risk
37 of developing social, emotional and behavioural problems in adolescence⁴ which
38 may lead to self harm. Parents need to consider the adolescents' age and adjust their
39 parenting accordingly because late adolescents, perceive parental control as invasive
40 and not as a sign of support^{5,6} and hence adolescence is the most challenging stage of
41 childrearing⁷. Hierarchical relationship in family need transformation to a more
42 egalitarian type of relationship as the adolescent age progresses⁸.
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47 Conclusion

48 Social, emotional and behavioural problems in adolescents have long-lasting
49 adverse consequences like self harm and also impacts families and society as a
50 whole. It can be associated with several factors. One of the critical domain is the
51 family environment which includes parenting style and communication pattern. This
52 movie depicts how Kuttappan's authoritarian parenting style could have impacted the
53 lives of Jomon, Jaison and Joji differently.
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56 References

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58
59
60
1. Sanavi FS, Baghbanian A, Shovey MF, Ansari-Moghaddam A. A study on family
communication pattern and parenting styles with quality of life in adolescent. J Pak
Med Assoc. 2013 Nov 1;63(11):1393-8.

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2. Calders F, Bijttebier P, Bosmans G, Ceulemans E, Colpin H, Goossens L, Van Den Noortgate W, Verschueren K, Van Leeuwen K. Investigating the interplay between parenting dimensions and styles, and the association with adolescent outcomes. *European child & adolescent psychiatry*. 2020 Mar;29(3):327-42.
 3. Pinquart M. Associations of parenting dimensions and styles with externalizing problems of children and adolescents: An updated meta-analysis. *Developmental psychology*. 2017 May;53(5):873.
 4. Lee SM, Daniels MH, Kissinger DB (2006) Parental influences on adolescent adjustment: parenting styles versus parenting practices. *Fam J* 14(3):253–259
 5. Branje S (2018) Development of parent–adolescent relationships: conflict interactions as a mechanism of change. *Child Dev Perspect* 12(3):171–176. <https://doi.org/10.1111/cdep.12278>
 6. Sorkhabi N (2010) Sources of parent-adolescent conflict:content and form of parenting.*SocBehavPersonal*38(6):761–782. <https://doi.org/10.2224/sbp.2010.38.6.761>
 7. Buchanan CM , Eccles JS , Flanagan C , Midgley C , Feldlaufer H , Harold RD . 1990 . Parents' and teachers' beliefs about adolescents: effects of sex and experience . *J. Youth Adolesc.* 19 : 363 – 94
 8. Youniss J , Smollar JM . 1985 . Adolescents' Relations with Mothers, Fathers, and Friends . Chicago : Univ. Chicago Press

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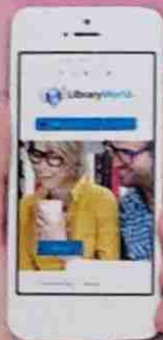
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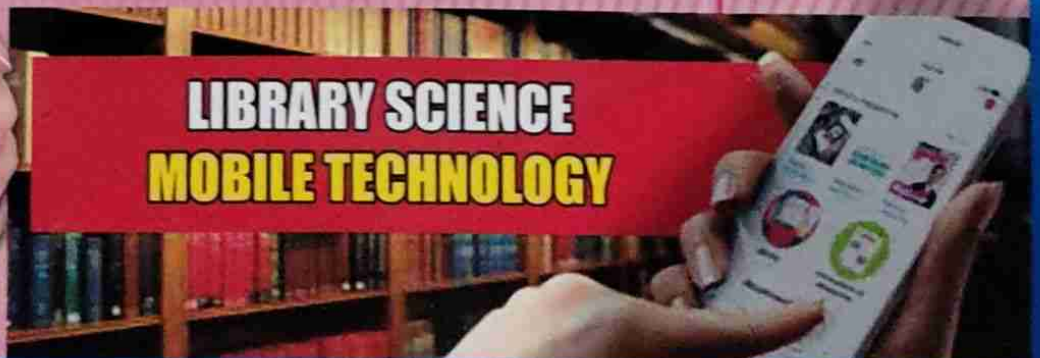
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National Education Policy Opportunities & Obstacles

Education policy comprises of the standards and government policies in the educational sphere as well as the collection of laws and rules that govern the operation of education systems. Education occurs in many forms for many purposes through many institutions. Examples include early childhood education, kindergarten through to 12th grade, two and four-year colleges or universities, graduate and professional education, adult education and job training. Therefore, education policy can directly affect the education people engage in at all ages. The National Education Policy, is out in the public domain. Though the new education policy has work on the various points to improve the quality of the current education system there are various drawbacks in this policy like not addressing with sufficient clarity curricular, pedagogical and teacher education-related issues that plague the teaching and learning of early literacy in many Indian classrooms and many others. This paper focuses on the various praiseworthy aspects and the shortcomings of the new education policy and also analyzes the challenges in the implementation the new education policy.

Education policies are the principles and government policymaking in educational sphere, as well as the collection of laws and rules that govern the operation of education systems. Education occurs in many forms for many purposes through many institutions. Examples include early childhood education, kindergarten through to 12th grade, two and four-year colleges or universities, graduate and professional education, adult education and job training. Therefore, education policy can directly affect the education people engage in at all ages. Examples of areas subject to debate in education policy, specifically from the field of schools, include school size, class size, school choice, school privatization, tracking, teacher education and certification, teacher pay, teaching methods, curricular content, graduation requirements, school infrastructure investment, and the values that schools are expected to uphold and model. Education policy analysis is the scholarly study of education policy. It seeks to answer questions about the purpose of education, the objectives that it is designed to attain, the methods for attaining them and the tools for measuring their success or failure.

History of National Education Policy & Need for New Education Policy

To promote education among Indians, the Government of India formulated the National Policy on Education in 1986 which was later modified in 1992. The agenda of this policy is to spread the elementary education in rural and urban India both. As the policy was last modified in 1992, various changes have taken place in this policy since then. Among all those changes, the population was the major one for which the Government of India had to draft a New National Education Policy with regard to quality education research and innovation aiming to provide the necessary skills and knowledge to the students and eliminate the shortage of manpower in technology, industry, science and academics.

National Education Policy has described its vision for the education system in India. The vision of India's new education system has accordingly been crafted to ensure that it touches the life of each and every citizen, consistent with their ability to contribute to many growing developmental imperatives of this country on the one hand, and towards creating a just and equitable society

on the other. We have proposed the revision and revamping of all aspects of the education structure, its regulation and governance, to create a new system that is aligned with the aspiration goals of 21st Century education, while remaining consistent with India's traditions and value systems.

Salient Features of NEP

Preschool Education

Preschool education has not received the necessary attention in the past as government schools do not provide preprimary education. According to the draft National Education Policy the following policy initiatives will be taken:

- Preschool education for children in the age group of 4 to 5 years will be implemented.
- To strengthen the pre-school education in *Anganwadis*, steps will be taken in consultation with States to frame curricula and develop learning materials.
- State governments will prepare cadres of preprimary teachers.

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➤ All primary schools will cover pre-primary education.

➤ Appropriate regulatory and monitoring rules and mechanisms will be designed for private preschools.

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➤ The policy aims to deliver quality early childhood care and education for all children between 3 to 6 years by 2025.

➤ Special attention will be given to early language and mathematics in Grades 1 to 5.

➤ The committee proposes an equal emphasis on all the subjects - science, social sciences, art, languages, sports, mathematics with the integration of vocational and academic streams in school.

➤ There is an aim to achieve 100% Gross Enrolment Ratio for all school education by 2030

➤ The recruitment of teachers will be transparent and promotions will be based on merit.

➤ Separate bodies will carry out the regulation and operations of schools to eliminate conflict of interest.

Learning Outcomes in School Education

● Norms for learning outcomes will be developed and applied uniformly to both private and government schools.

● Within the parameters prescribed by the RTE Act, States will have the flexibility to design and plan for the infrastructure keeping in view the local conditions.

● The present provisions of no-detention policy will be amended, as it has seriously affected the academic performance of students. The no-detention policy will be limited up to class V and the system of detention will be

restored at the upper primary stage.

● Effective steps will be taken to improve teaching standards in schools.

Protection of Rights of the Child & Adolescent Education

● Framework and guidelines for ensuring school safety and security of children will be developed.

● Every principal and teacher will be made aware of the provisions of the relevant Acts, Rules, Regulations, etc.

● The Adolescent Education Programme and National Population Education Programme will be integrated into the curriculum of schools in a phased manner.

● Adolescent Education will be included in pre- and in-service training programs of secondary school teachers.

● Self-learning online programs on child rights will be developed for the benefit of students, teachers and parents.

● Schools will engage trained counselors to confidentially advise parents and teachers on adolescence problems faced by growing boys and girls.

Higher Education

❖ The committee proposes 15,000 excellent institutions across the country instead of current 800 universities and 40,000 colleges.

❖ A proposal for the broad-based liberal arts education at the undergraduate level.

❖ The institutional governance will be based on autonomy (academic, administrative and financial). Each higher education institution will be governed by an independent board.

National Research Foundation

Research and innovation are the two main pillars to drive the country's economy and uplift society. To make the research system strong, the

committee proposed an autonomous body National Research Foundation (NRF). The primary function of the foundation is to fund research in all disciplines. The NRF will have four major divisions, namely, Sciences, Technology, Social Sciences and Arts and Humanities.

High-Quality Liberal Education

All undergraduate education will be broad-based liberal education that integrates the rigorous study of sciences, arts, humanities, mathematics and vocational and professional fields, with choices offered to students. Imaginative and flexible curricula will develop critical thinking, creative abilities and other fundamental capacities. Multiple exit and entry points will be offered, with appropriate certification after one, two, three and four years of study. There will be a four-year undergraduate program available in addition to three-year programs.

Technology in Education

The committee observed that technology plays an important role in: (a) improving the classroom process of teaching, learning and evaluation, (b) aiding in preparation of teachers and continuous professional development of teachers, (c) improving access to education in remote areas and for disadvantaged groups, and (d) improving the overall planning, administration and management of the entire education system. It recommends focused electrification of all educational institutions as electricity is a prerequisite for all technology-based interventions

Regulatory Structure and Accreditation

The committee noted that the current higher education system has multiple regulators with overlapping mandates. This reduces the autonomy of higher educational institutions and creates an environment of dependency and centralized decision making. Therefore, it proposes setting up the National Higher Education

Regulatory Authority (NHERA). This independent authority would replace the existing individual regulators in higher education, including professional and vocational education. This implies that the role of all professional councils such as AICTE and the Bar Council of India would be limited to setting standards for professional practice. The role of the University Grants Commission (UGC) will be limited to providing grants to higher educational institutions.

Drawbacks in the Draft National Education Policy

- The draft policy is silent on the Institutions of Eminence and agencies like the Higher Education Funding Agency
- The policy does not address with sufficient clarity curricular, pedagogical and teacher education-related issues that plague the teaching and learning of early literacy in many Indian classrooms
- The policy proposes largely oral activities for the preprimary grades, reading hours for Grades 1-3, with an additional hour for writing starting only in Grades 4 and 5. It contradicts evidence suggesting that young children be taught listening, speaking, reading and writing simultaneously and not sequentially
- It lacks discussion about what it takes to prepare teachers to successfully teach foundational literacy in a multilingual country. Instead, the document recommends recruiting volunteers and community members to support the acquisition of early literacy. Volunteers can be used, but cannot be a primary mechanism to deliver foundational literacy to students
- With the democratization of knowledge and availability of technology for easy access to information, the draft should

have focused more on how to teach and not only on what to teach

- The National Research Foundation (NRF) is tasked with “permeating the culture of research and innovation” and addressing societal challenges. But, there is no mechanism, such as innovative curricula or extension units, for tier II or tier III institutions to work on local problems. It has no access or accountability to people or their representatives
- In promoting the study of regional languages, the importance of English is neglected. Those who are fluent in the English language live in households with three times higher income than those without any knowledge of English. By ignoring this, the Draft NEP19 has laid out a “language trap”, which will create social inequality and impede economic growth due to loss of the demographic dividend
- The report does not emphasize enough the role and importance of state governments in imparting education to the masses.

Challenges in Implementation

- Draft NEP recommended doubling of public funding to 6% of the GDP and increasing overall public expenditure on education to 20% from the current 10%. This is desirable but does not appear to be feasible in the near future, given that most of the additional funding has to come from the States.
- Expanding coverage under the RTE Act to include preschool children is extremely important, but should perhaps be introduced gradually, keeping in mind the quality of infrastructure and teacher vacancies. Amendment of the Act can perhaps wait for a while.
- The idea of regulation being brought under the *National*

Higher Education Regulatory Authority, standard setting under the General Education Council and funding under the Higher Education Grants Council may require a revisit so that there is synchronization with the current Bill for the Higher Education Commission of India.

- The idea of setting up the Rashtriya Shiksha Aayog is crucial in order to integrate the approaches and programs of multiple departments. However, bringing medical or agricultural or legal education under one umbrella is likely to be met with stiff opposition.
- Language issues have to be handled sensitively in view of their emotional overtones, as witnessed recently.

Conclusion

Suggestions of the Draft National Education Policy will play a critical role in the transformation of the Indian education system. It is expected to help India in reaping its demographic dividend. However, the Draft National Education Policy has certain sore points that need to be relooked at for the benefit of teachers and students alike.

References

- Draft National Education Policy 2019
- Radhakrishnan, Akila (16 September 2020). "Draft New Education Policy and Schools for the Skilling Age". The Hindu Center. Retrieved 31 July 2020
- "भारतीय स्कूल डेवलपमेंट यूनिवर्सिटी (बीएसडीयू) ने 'रिसर्च ओरिएंटेशन इन प्रोजेक्ट वर्सेज प्रोजेक्ट ओरिएंटेशन इन रिसर्च' विषय पर किया वेबिनार का आयोजन" News Track (in Hindi). 2 May 2020. Retrieved 29 September 2020.
- Rajeev, K.R. (31 July 2020). "Teacher education set for major overhaul". *The Times of India*. Retrieved 31 July 2020.●