

# SHIKSHA SAMVAD

International Open Access Peer-Reviewed & Refereed  
Journal of Multidisciplinary Research

ISSN: 2584-0983 (Online)

Volume-1, Issue-2, Oct-Dec- 2023

[www.shikshasamvad.com](http://www.shikshasamvad.com)



## Teaching learning aids for Childre with Special Needs (CWSN) for equal and quality education

**Prankur Anand**

Asst. Prof. Department of B.Ed.  
K.B.P.G. College, Mirzapur, U.P

### Introduction:

*Teaching and learning aids are assets of classroom to providing quality education, for children with special need it's a boon as it invigorates their learning. This is an adage that strengthening of inclusive education an urge of global world. In earlier times children with disability (CWD) were not included in normal schools, rather admitted to special schools those well equipped with experts, technology and environmental condition needed for their learning but this step seems anomalous because after completion of their schooling they need to live with so called normal people in job market which exasperated CWD students. Later the education world realize about this condition and considered human rights so that opted for integrated education where CWD students are enrolled by the schools though admission was totally dependent upon mercy of the school Principal, with no stringent guidelines by the governments. Further with the RPWD act 2016 inclusive education became right of the CWD students that they can take admission in normal schools (RPWD act 2016).*

This development poses concern over pedagogical practices to be included in class where children with disabilities accompanied by normal students. Thus responsibility of school increased to provide equal quality of education to CWD as provided to normal children. So here teaching learning aids made for the CWD students are playing important part in their learning, though there are different other factors which can be considered like teacher skills to use those materials in accordance with normal students, school infrastructures with budgets, environment of inclusive

classroom and school management for tackling obstacles comes on the way. Whereas literature shows that CWD students face lots of problem in inclusive classroom like in one of the study Beckett (2009) highlighted that challenge of normal students' attitudinal change towards CWD students and concluded even adopting different methodology the system is failed to sensitize normal students towards disabilities this must be because their lack of knowledge and awareness of different disabilities. Ring & Travers (2005) did case study on learning disables in inclusive classroom of Ireland school and in one of the findings stated teachers who were not with expertise in teaching disables failed to utilize teaching learning material meant for learning disables.

Hence educationist has to consider these aspects of inclusive classroom which would more beneficial for CWD students. Further providing equal and quality education to these students is quite a challenging task but not impossible task, the problem is with the execution of learning in inclusive classroom as in teacher education curriculum 'inclusive education' has been already included, pupil teachers are now trained with inclusive classroom with making them aware about different disabilities and teaching materials to be used for teaching them though they did not able to well equipped hand with the particular disability teaching but provided sufficient knowledge to integrate and learn when this kind of situation arises. Else in their inservice period it becomes their responsibility to enrich inclusive classroom, whereas there is need of more training and at least 2-3 special education teacher posts in every schools

### **Teaching learning aids for visually impaired students in inclusive classroom:**

Teaching visually impaired in inclusive classroom needs the help of different teaching learning aids out of which some are easily available but some of them need special skills to carry teaching learning process. Teaching learning aids for visually impaired are the following:

- **Braille script based books-** NCERT is now making tactile featured book with thick pages so that visually impaired child will able to use the textbook, these types of books are not specially for visually but also included normal words which a normal children will also able to read. So it is considered as one of the material which provide quality education and equal opportunity to CWD students same as the normal students. Even UNICEF, RPWD act 2016 has already recommended this initiative of making textbooks with tactile features for supporting visually impaired students (RPWD act 2016).
- **Audio recordings of NCERT textbooks:** One of the most interesting works is done by NCERT that they made audio recordings of all the chapters of textbooks. This learning material is

very much helpful for visually impaired children, now they are able to access text in audio form so this is also providing equal opportunity to them as normal getting to access textbooks.

- **HvPro advance daisy player:** Apart from the NCERT there are some devices available specially made for different disability as this is a audio device which contains recording books.
- **Biblus:** Christensen & Stevns (2012) in their article highlighted Denmark project for inclusive education which was Biblus a digital library to support integration of visually impaired in mainstream education. In Denmark government made provisions with section 17 corporate law which stated that materials are to be made available in alternative form for children with special needs, so in this regard Biblus project was adopted in whole country that made available all the books in audio and in Braille. Further in their article they also indicated that in 2012 out of approx 2000 blind and partially sighted students only 100 were going to special schools rest were enrolled in mainstream of education and concluded that this is because Biblus and other similar projects which provided equal and quality education to visually impaired. On contrary in India after making PWD right still there is not this kind stringent rules, even with sarva shiksha abhiyan, RPWD act NPE 2019 draft it was only indicated to include different materials in mainstream of education.
- **ALVA 544 Traveler:** It is a satellite which controls personal computer to display Braille script, it consists of device Braille voyager which directly connects through USB port and with help of satellite visually impaired can us Braille script based computer or laptop. This type of material helps to learn computer as well as it enables them to access different materials which is available in audio form.
- **Aria Personal Digital Assistant cum Notemaker:** It is also a device which connects with laptop or computer, basically it's a braille keyboard whcih produce voice input enables visually challenge to use technology. Thus including this in normal classroom is very much helpful for the visually impaired student and ultimately provides equa and quality education likewise normal students.

#### **Teaching learning aids for speech impaired students in inclusive classroom:**

Speech impaired student do not able communicate with teacher direct questioning, sharing their feelings etc. Teacher in that class have to know sign language which normally these child use, further they are easier to include them in normal class in compared with other disability and accordingly teaching learning aids for them is usually utilized by the teachers. Some of them are the following:

- **BARKHA:** A NCERT books and videos are very much helpful speech impaired students, learning material enables speech impaired to develop interest towards learning as they feel sometimes marginalized in classroom.
- **Delayed auditory feedback (DAF1000):** It is a device which is for the speech improvement, it repeats the sentences spoken and later with listening the same helps to improve speaking, further it is utilized in schools for improving pronunciation, language disorders etc of the speech impaired with providing quality and equal opportunity for including them in mainstreaming of education.
- **Vaneeshree:** It is a device which helps to talking, actually this device consists of words and sentences memory with switches user can select from those words and sentence which produce voice through speaker connected to it. Hence this device provided voice to speech impaired and nowadays most of the country adopted this device for the mainstreaming these students Denmark is the example of including this type of device in their educational institution (Christensen & Stevns 2012).
- **IGest:** IGest is another communication which person can wear on wrist and with the help of movement of hand (using sign language) provides predetermined words and sentences which can be selected accordingly and likewise Vaneeshree using speaker produces sound. Else including this in classroom definitely enrich students with speech impairment.

#### **Teaching learning aids for Hearing Impaired:**

- **Sign language based videos:** One of the best teaching learning material for hearing impaired is audio – video and sign language based lessons for teaching learning process in inclusive classroom. To provide equal and quality education to hearing impaired NCERT with the help of CIET developed sign language video programmes based on different chapters of textbooks including science, social science, mathematics, English etc. This material is easily available on NCERT website which teacher can access and enrich teaching learning environment in inclusive classroom.
- **Air Conduction:** Air conduction is a device which is very useful for children who are hard of hearing not fully impaired, it basically amplifies weak sound and reduces loud adjust according to the need of the person who is wearing this.
- **841-BTE:** This are the products which basically used in ear called behind the ear products, this is very common product used may old age people too who are hard of hearing, nowadays it is used by the hearing impaired students in class.

- **ALPS Digital Delayed Auditory Feedback System:** It is the device which is slow down the speaking speed of a person who is talking and through later output voice system produces sound so that hard of hearing impaired person can easily listen the sentences and takes part in communication as interlocutor. Else it is used in daily teaching learning transaction in inclusive classroom.
- **Flash cards:** In teaching training course pupil teacher are trained with using many different types teaching learning material aids, flash cards are one of them which is generally used by language teachers, though this material can be utilized in other subjects also. This material contains different sentences and pictures which are shown by the teacher to all the students, hence using this hearing impaired enrich their learning likewise normal children.

#### **Teaching learning aids for children with loco motor disability:**

Loco motor disability is related to motion of body parts, hands, leg sometimes full body get paralyzed and person may not be able to speak also, so in that case providing them education in mainstream is quite difficult even RPWD act 2016 categorized disability with degree these kind of the cases are may go for home based education, but it is the right of the person to take education in normal school if he wanted, however there teaching learning material and assistive devices are available with the help of that these students can be included in normal classroom. If we talk about mild cases then they are with the help wheel chairs, rods, ramps in school easily accommodated for severe and moderate it is a matter of concern which can be addressed by the following:

- **Senze - An Eye Tracking Assistive Technology:** It is a device meant for learning severe loco motor disability whose body is totally paralyzed and even not able to speak. This device attached to that person wheelchair with high quality video camera which observe movement of eye and enable that person to select words and sentences which with speaker user can speak. Similar kind of technology was used by renowned cosmologist Stephen Hawking with the help of his cheek movement he was able to select words and sentences to speak, even he written many books, given lectures and even researched the concept of black hole. Now you can imagine with the help this kind of device loco motor disables can be provided equal and quality education like normal children in inclusive classroom.

### Teaching learning material for mentally retarded children:

Mentally retarded child is need more caring than other disability, providing them equal and quality education is challenging task for teacher in inclusive classroom because they need more effort to grasp the concepts. Although we developed different teaching and learning material which can be integrated in normal classroom that also helps mentally retarded children, some of them are the following:

- **Visual imagery:** It is a teaching material in which words are taught with the help some images which is related to that particular word. Christiansen (1969) did experimental study on the 24 mentally retarded children and found that teaching with visual imagery card for language teaching is much effective further he also asked to the students to visualize the words relating pictures which were also found effective. So including this teaching learning material is very helpful for mentally retarded as well as normal child simultaneously learn better, thus we can say that this method easily included in inclusive classroom.
- **Puzzles:** Teacher can make image different puzzles to teach days, weeks, and month stc. Even for teaching other subject teacher can easily make it depends upon at which grade teacher is teaching, as well as h/she have to consider simplicity and creativity to teach mentally retarded, it is said that as simple the teaching learning material is as fast these children can grasp the thing.
- **Calendar of seasons:** This is a material to teach different seasons winter, summer, rainy, basically it is based on 3 picture cards depicting seasons. \
- **All around me:** Picture cards describing things present in surroundings like table, chair etc. It can include both picture and words cards.
- **Help them learn:** It is a video tutorial which helps teacher to teach mentally retarded, this tutorial provides strategies, different aids etc. to teach these children in inclusive classroom.
- **Number Land:** Again with help of cards teacher can teach simple mathematics to mentally retarded children, it consists of different numbers with picture story which describe addition, numbers, subtraction etc.

### Teaching learning material for cerebral palsy:

- **GUPSHUP:** It is for making better communication a device of voice output communication aid.

- **Sanyog:** Sanyog provide audio visual learning material in multiple language Hindi, English, and Bengali.
- **Switches:** It is basically to enable e cerebral palsy student use computer as they find some difficulty in using normal mouse so these switches are based images to select component of computer. This device provide opportunity to access different material available on internet platforms.s

### **Teaching learning material for learning disable children:**

Teaching learning disable needs as possible to use multisensory approach though this approach helps in every disability not only in this. Learning disability consist of dyslexia in which child gets confuse with similar kinds of words, face problems in judging the speed of the ball when it comes for the catch, problem in wearing shirts with buttons, sometimes they feel letters are dancing. Other learning disabilities are dyspraxia, disgraphia, and dyscalculia. So here teacher in inclusive classroom have to identify this child and provide relevant teaching learning material for their learning like:

- **Audio Visual aids:** To provide video based lesson in story forms, learning disable can easily catered.
- **Hands on activity:** Learning based hands on activity able to utilize multisensory approach, like in Taare zameen par movie Aamir Khan used to teach addition and subtraction to the dyslexic child while writing numbers on stairs and with climbing stairs taught addition. This kind of activity can be organized in inclusive classroom which make classroom environment lively and all students enrich their learning.
- **Playing cards for teaching different subjects:** Picture story book based different subjects is one of the best learning material for learning disable, it actually makes learning interesting and easy which help everyone.
- **BARKHA series of NCERT:** This learning material; is panacea for teaching disabled because it include different videos, picture books etc.

### **Policies recommendations for inclusion of teaching learning material for CWD:**

There are many policies which talk about children with disabilities starting from the NPE 1968, 1986, PWD 1995, RPWD act 2016, Sarva Shiksha Abhiyan, RMSA, Samagra Shiksha Abhiyan and now NEP 2019 draft. As earlier discussed inclusion in India is started from

RPWD act 2016 so we will discuss from that period what policies said about teaching learning material of CWD to including in mainstreaming of educations.

### **RPWD act 2016:**

This right at very first highlighted the need of the teaching learning material for CWD should be included as pointed out of providing different learning materials, books and assistive devices on free of cost till the age of 18, though it included the word 'benchmark disability' which means not for all disability but for some specific disability. Else it also pointed out the how the teacher of normal school will be able to teach CWD so recommended training of teachers and appointed of teachers, who are able to use sign languages, Braille scripts etc. However act stated need of ICT based material to be available for CWD including telecom, web, digital and virtual based services to make available for these students. These includes sign language based progrmmes, tactile features books, and other alternative assistive devices (RPWD act, 2016).

### **Samagra Shiksha Abhiyan:**

Samagra Shiksha Abhiyan have provision for developing teaching and learning material for CWDs, providing them different teaching learning aids, assistive devices & equipments. Further provision is for training of special educators and general teachers for the curriculum adaptation for teaching CWD in inclusive classroom. They also given financial assistance of 300 crore for resource person teacher (CWSN ) working at BRC, CRC levels.

### **NEP draft 2019:**

Draft policy recommended for the teacher training at both the level pre-service and in-service, also recommended for certificate courses by universities on topics related to equity and inclusiveness. Further likewise RPWD act 2016 and Samagra Shiksha Abhiyan it is also poses need of including assistive device, Braille textbooks, Sign language based audio video programme etc. and in addition recommended employment of special educator and therapist in every school for assisting general teachers.

### **Conclusion:**

So far we have discussed about different teaching learning materials used in teaching children with disability, some these materials are expensive like eye synthesizer for loco motor disability so to include all teaching learning material in inclusive classroom is quite expensive task but on some



extent devices can be purchased and some materials can be made like flash cards etc. by the respective teachers, though referring to different policies, schemes it can be inferred that provision are made to provide teaching learning material and assistive devices free of cost suggested in RPWD act 2016, Samagra SHiksha Abhiyan and also in NEP 2019 draft. RPWD act pointed out followed by the Samagra Shiksha Abhiyan and NEP draft 2019 that till the age of 18 every disable should be provided assistive devices and teaching learning materials, however for benchmark disability those didn't specified. Second concern was arises for how general teacher will be able utilize different teaching learning material meant for CWD. Thus RPWD act 2016, Samagra Shiksha Abhiyan and NEP draft 2019 talked about training of general teachers for inclusive classroom and NEP draft 2019 even stated recruitment of Special Educators and therapist in every school but these do not clarifies the training of general teachers as it is observed that in practice including teaching for inclusive classroom in teacher education programme doesn't provide training of the pupil teacher for using of teaching material aids developed for CWD. Hence this became the responsibility of every in-service teachers to learn the things by themselves. At last we can say that these teaching learning material which is basically uses multisensory approach provide equal and quality education to CWDs in inclusive classroom.

#### Reference:

- Beckett, A. (2009). 'Challenging Disabling Attitudes, Building an Inclusive Society': Considering the Role of Education in Encouraging Non-Disabled Children to Develop Positive Attitudes Towards Disabled People. *British Journal of Sociology of Education*, 30(3), 317-329. Retrieved May 15, 2020, from [www.jstor.org/stable/40375431](http://www.jstor.org/stable/40375431)
- Christensen L.B., Stevns T. (2012) Biblus – A Digital Library to Support Integration of Visually Impaired in Mainstream Education. In: Miesenberger K., Karshmer A., Penaz P., Zagler W. (eds) Computers Helping People with Special Needs. ICCHP 2012. Lecture Notes in Computer Science, vol 7382. Springer, Berlin, Heidelberg  
DOI [https://doi.org/10.1007/978-3-642-31522-0\\_6](https://doi.org/10.1007/978-3-642-31522-0_6)
- Christiansen, T. (1969). Visual Imagery as a Factor in Teaching Elaborative Language to Mentally Retarded Children. *Exceptional Children*, 35(7), 539–541.  
<https://doi.org/10.1177/001440296903500704>

- Emer Ring & Joseph Travers \* (2005) Barriers to inclusion: a case study of a pupil with severe learning difficulties in Ireland, *European Journal of Special Needs Education*, 20:1, 41-56, DOI: 10.1080/0885625042000319070
- MHRD (Ministry of Human Resource Development). (2016). *The Rights of Person With Disabilities Act 2016*. New Delhi: Ministry of Education, Government of India. Retrieved from <http://www.tezu.ernet.in/PwD/RPWD-ACT-2016.pdf>





## Certificate Of Publication

*This Certificate is proudly presented to*

**Prankur Anand**

*For publication of research paper title*

**“Teaching learning aids for Childre with Special Needs  
(CWSN) for equal and quality education”**

Published in ‘Shiksha Samvad’ Peer-Reviewed / Refereed Research Journal and  
E-ISSN: 2584-0983(Online), Volume-01, Issue-02, Month December, Year- 2023.

Dr. Neeraj Yadav  
Editor-In-Chief

PASSION TOWARDS EXCELLENCE

Dr. Lohans Kumar Kalyani  
Executive-chief- Editor

**Note:** This E-Certificate is valid with published paper and the paper  
must be available online at [www.shikshasamvad.com](http://www.shikshasamvad.com)