



Making e-learning Comfortable and Joyful for CwSN

Dr. Bharti Kaushik,

Associate Professor, DEGSN

NCERT

Email : tarubharti1@gmail.com

&

Ms. Akshita Saxena,

JPF, DEGSN

Abstract

Amidst the situation of Coronavirus (Covid-19) whole world is dealing with inevitable changes and a shift from physical classroom setting to virtual classrooms is among one of the major change people are facing. This sudden shift squared up many challenges in front of teachers, parents, students and especially for Children with Special Needs (CwSN). This article explains the challenges being faced by CwSN in e- learning and effective measures/suggestions for all school stages as well as for specific school stages that could be adopted by teachers, parents, special educators and educational administrators to help CwSN with virtual learning.

CwSN are confronted with challenges like arrangement of technological inputs, lack of knowledge and skills for using virtual space, lack of availability of content in accessible formats among various other problems. The Rights of Persons with Disabilities (RPwD) Act, 2016 has recognized 21 disability conditions each of which have different associated symptoms and interventions. Students must also be experiencing disability specific problems during online classes. For example, it must be difficult for a hearing-impaired child to listen what is being taught during an online class and it must be difficult for a visually impaired child to complete an online assignment or assessment. However, it is impossible to escape from this situation therefore, some effective steps are required to be taken to help CwSN confront these challenges and not let their learning suffer.

This article lists many suggestions, which if implemented in the right spirit could benefit the CwSN and make their e-learning experience joyful and comfortable.

Keywords: Coronavirus (Covid-19), Virtual Learning, Children with Special Needs (CwSN), Rights of Persons with Disabilities (RPwD) Act, Augmentative and alternative communication (AAC), Information and Communications Technology (ICT)

Making e-learning Comfortable and Joyful for CwSN**Dr. Bharti Kaushik,**Associate Professor, DEGSN
NCERT

Email : tarubharti1@gmail.com

&

Ms. Akshita Saxena,

JPF, DEGSN

Introduction

Coronavirus (Covid-19) pandemic is an unavoidable and unfortunate situation that abruptly became a part of our lives. Covid-19 is an infection that is spreading across the globe and affecting the masses. As it is a communicable disease, its widespread has led to forceful shut-down of all organizations, institutions, shops and public places. The field of education could not escape the effects of it. Closing of schools and universities has forced government and other educational institutions to make a drastic and abrupt shift from physical classroom set up to online mode of learning-teaching and assessments. This uncertain change is becoming cause of a lot of challenges being faced by students as well as teachers. However, the technology supported teaching has helped to facilitate the learning of students but as every coin has two faces, the other face of the coin depicts the challenges posed by this change to the disadvantaged section of the society.

As we know that many of our students belongs to economically weaker section of the society, arranging for technological inputs like laptop, smartphone, strong internet connection is a big challenge to them. Also, lack of knowledge and awareness about the process and method of e-learning is leading to stress and anxiety. These challenges are affecting Children with Special Needs more along with other challenges they are coming across. E-learning is difficult for CwSN due lack of content available in an accessible format. For example, it is difficult for a child with visual impairments to complete assessments given online. A low-vision child finds it difficult to sit in front of screen for longer durations. A child with hearing impairment who used to understand with the help of lip reading and visual aids will not be able to listen to teacher speaking in an online class, unless the teacher is taking class using video chat. The uncertainty and unavoidable chaos of online classes creates anxiety in children with disabilities like mental illness and autism. The student who was dependent on one-on-one learning or required special attention of teachers finds it very difficult to learn and understand

via virtual mode. These are some common challenges that CWSN must be facing along other specific and individual problems.

Given below are some suggestions for teachers' parents and educational administrators to mitigate the challenges mentioned in the paragraphs above, so that learning may continue for CWSN, in joyful and comfortable manner.

Generic suggestions applicable to all school stages

For Teachers

- As far as possible do not create separate group for students with special needs. This will enhance the feeling of belongingness within the group
- Treat CWSN at par with peers without special needs. Do not provide special attention to them during group teaching in virtual mode.
- CWSN should be encouraged to follow the same theme/concept may be with modified activities and flexible schedule
- Provide thoughtfully planned group activities with opportunity for active and effective participation of CWSN along peers without special needs. For example the group members may discover the ability of their peer with special needs to focus on one thing at a time extremely useful while collecting information for project work.
- Keep in touch with the special educators for enhancing participation of CWSN attending your classes in virtual mode
- Advise parents to continue the therapy strategies suggested by the therapists at home and also to stay in constant touch with their child's therapist
- Prepare chapter briefs in advance so that same may be shared with the CWSN prior to actual group teaching in virtual mode. Care should be taken to prepare these briefs in multiple formats such as plain text (typed) or pdf of handwritten, audio (Voice recorded), audio with visual support (speech with main points/vocabulary words conveyed using flashcards with or without visuals)
- Allow flexible ways of responding or turning in of the completed tasks, projects, homework etc. Be prepared to accept written (digitally, typed), verbal (recorded), collage, drawing, theatre based (audio visual with gestures), adult or sibling supported completed task. Allow this flexibility to all students irrespective of special needs
- Involve the parents in the learning of the child with special needs. Provide suggestions for supporting learning at home by using the resources available at home

EduInspire-An International E-Journal

- Be available to handhold the parents in case they need support or are facing difficulties
- Prepare a video or audio describing the method of use, functions and operations of the application/platform used for virtual learning
- Maintain discipline and set norms for the same during virtual learning
- Prepare and communicate an outline for online classes, projects and assignments beforehand

Parents

- Be actively engaged in the teaching learning activities of your child
- If possible attend the virtual session taken by the teachers as passive participant. Observe the activities done by the teachers and follow the suggestions given and if needed repeat the activity with the child so that learning gets internalized
- Do not interfere in the process of virtual class taken by the teachers in group setting
- Be in constant touch with your child's special educator and therapist
- Facilitate the filling of gap in the skills of your child in the areas of daily living skills and academic skills
- Involve the child in all activities of the house hold as much as possible. Many house hold activities provide ample opportunities for learning of functional academics and daily living skills

The table below presents the suggestions for stakeholders of education for making e-learning experiences of CwSN comfortable and at par with their peers without special education needs. The suggestions are made with the assumptions of gradual removal of the scaffolding and making the learner independent. Further the suggestions are specific to the age and school stage.

Pre-primary	Primary	Elementary
<ul style="list-style-type: none"> • Involve parents actively in the teaching learning • Plan and share activities for strengthening the daily living skills • Focus more on communication, study 	<ul style="list-style-type: none"> • Divide the duration of virtual teaching learning for learning different curricular areas. Have a daily timetable just like we have for face to face traditional school • Attempt theme based teaching 	<ul style="list-style-type: none"> • If possible, parents should also be included in the online learning process, so that during online learning, if the child has difficulty in understanding the necessary guidelines,

<p>habits, self-expression</p> <ul style="list-style-type: none"> • Language classes should include aspect of Braille or sign language or cued speech depending on the presence of children with particular disability and their needs • In mathematics classes try making children with visual impairments familiar with Braille slate and types • Involve lot of activities for strengthening the tactile sensations, lip reading skills, eye hand coordination, tracing etc. these will later prove beneficial for learning of sign language, Braille script reading, writing and attention building • Provide lot of suggestions for parents to keep children meaningfully engaged at home 	<p>wherein daily living skills, curricular areas merge/blend into each other</p> <ul style="list-style-type: none"> • Focus on functional aspect of curricular areas; say for example in mathematics money matters, estimation, measuring material for food recipe, volumes, and shapes and so on. • In language classroom the focus should be on self-expression, social etiquettes, acquiring proficiency in chosen mode of communication i.e. sign, Cued speech, AAC • Work in collaboration with parents and special educators • Plan group activities wherein students with and without special needs gets opportunity to work as a team • As far as possible attempt team teaching and interdisciplinary teaching learning • Provide chapter briefs in advance as per the need and context of the CWSN. This maximizes the chances of participation of CWSN during e- teaching session in groups • Before starting a new concept share vocabulary words in advance with parents and 	<p>then they can work to establish better harmony between the teacher and the child.</p> <ul style="list-style-type: none"> • Whereas possible set the online learning schedule according to the school schedule, so that children do not have any difficulty in following the daily routine. • If possible, organize an online meeting with the parents as well so that there can be discussion regarding child's learning progress, home support and daily living skills. • SMC members may be included , they may provide the necessary tech support if needed • Encourage and support the efforts of students to be independent learners • Share weekly plan in advance so that CWSN is pre-oriented with the concepts • Work in close collaboration with educational administrators, therapist,
--	--	--

	<p>children. Advice parents for supporting the learning of new concepts</p> <ul style="list-style-type: none"> • Prepare small chunks of the entire syllabus and place them in logical sequence • Become familiar with Assistive Technology such as live captioning apps, vocabulary enhancers, audio notes • Match the color of the illustrations with the text discussed, say for example if the text is about green chilies than make sure the picture you are showing is of green chilies or better still show the actual green chilies • Make use of day to day material easily available at kitchen, bathroom and surroundings so that children and parents need not to take stress for arranging the learning support material 	<p>counselor, parents and special educators</p> <ul style="list-style-type: none"> • Encourage learning of the curriculum without adaptations and if this is not possible than make adaptations or modifications in close collaboration with special educators • Take regular feedback from students and parents • Keep each session for not more than forty minutes and the duration of entire virtual schooling for about four sessions a day. Each session followed by at least fifteen minutes break
parents		
<ul style="list-style-type: none"> • Do not leave the child without supervision during virtual session with the teachers. Handling gadgets independently at 	<ul style="list-style-type: none"> • Prepare your child for virtual classroom with use of ICT gadgets • Supervise the child during the virtual classes • Encourage maximum on task time 	<ul style="list-style-type: none"> • Allow the child independent usage of ICT gadget for virtual classroom • Supervise the activities of the child during

EduInspire-An International E-Journal

<p>such tender age will be difficult</p> <ul style="list-style-type: none"> • Encourage physical play • Encourage eye exercise. It would be better if parents and children do the eye exercise together • Discuss with teachers and school authorities and limit screen timings to not more than one hour with constant breaks. Each session should not be more than ten minutes duration 	<ul style="list-style-type: none"> • If possible attend the classes with child or encourage siblings to attend the class so that required learning support may be provided at home • Ensure revision of concepts on the daily basis • Support the child in completing and submitting the homework regularly • Teach organization skills so that child is able to organize the learning material and manage his/her time fruitfully • Blend daily living skills in learning activities. Seek suggestions from special educators, counselors and therapist for this. Follow the advice received 	<p>virtual/online classes</p> <ul style="list-style-type: none"> • Make sure the child is following teacher's instructions • Be in constant touch with the teachers for feedback, and support • Make children familiar with cyber safety • Be alert and sensitive towards any undesired activities or indulgence in social media • Support the learning efforts by volunteering to prepare audio notes, sign language briefs etc
<p>special educators</p>		
<ul style="list-style-type: none"> • Provide suggestions to regular teachers for maximizing the participation of children with 	<ul style="list-style-type: none"> • Be available for help and providing need based support to children, parents and teachers • If required provide 	<ul style="list-style-type: none"> • Help the children in becoming independent learner. Provide suggestions to parents for the same

<p>disabilities.</p> <ul style="list-style-type: none"> • Keep in touch with parents of CWSN and if possible provide plan for strengthening daily living skills 	<p>suggestions to teachers for communicated with CWSN , enhancing their participation in classroom activities and preparing extra practice sheets</p> <ul style="list-style-type: none"> • Help teachers in modifying or chunking of the curriculum 	<ul style="list-style-type: none"> • Encourage parents and children to engage in physical activities • Take virtual session with child in the presence of the parents
<p>Educational Administrators</p>		
<ul style="list-style-type: none"> • Map special educators with the group of identified CWSN • Advise parents and special educators to be in touch with each other • Provide support to teachers and parents • If possible organize services of therapist 	<ul style="list-style-type: none"> • Engage parents and community members in discussion and encourage parents to provide the desired learning support at home • Act as mentor to the teachers • Ensure availability of resources such as virtual therapy service and counselor service based on the need 	<ul style="list-style-type: none"> • Supervise and provide the support on need basis • Be in regular touch with the parents and teachers

Secondary and Senior School

Students in the secondary and senior secondary school are either in preteen age or in teenage that demands cautious planning of educational interventions and appropriate channelizing of their energies. Irrespective of presence or absence of disabilities the challenges of teenage affects all teenagers in the similar manner, however the presence of disabilities adds another shades to these challenges. Keeping this in mind the suggestions for the comfortable and

joyful e-learning experiences of CwSN studying in secondary and senior secondary stages are mentioned below.

Teachers

- If possible use video calling with proper lighting so that children with hearing impairments can do lip reading
- Convey the main points using the same sentences and vocabulary for better retention
- Prepare and share advance notes in the preferred mode as per the need and context.
- Use voice modulation and articulation techniques
- Show visual to support text
- The pedagogy may be modified to suit the individual needs, say for example In biology class, while teaching 'digestive system', if teacher is planning that all children will draw the diagram of human digestive system and explain the process of digestion then, for a child with visual impairment, the individual teaching goal may be that- the child will explain the digestion process verbally on the given model or embossed diagram of digestive system. Similarly, individual goal for a child with hearing impairment attending the same class may be to draw the diagram of human digestive system, explain the process in written form (if she/he cannot communicate verbally), whereas a child with intellectual disability will tell the function of at least 5-parts of the digestive system, when indicated on the model or diagram of digestive system.
- Make connection of curricular concepts with daily life.
- Use ICT and multimedia. Provide internet links related to concepts discussed for enrichment and revision of the concepts

Parents

- Act as friends. Have trust in child's abilities
- Be actively engaged in child's life
- Be aware of social media engagements of child
- Discuss safe use of internet and social media

The RPwD Act 2016 recognizes 21 types of disability categories. Each category of disability has its own specific signature symptoms and corresponding intervention strategies. However closer look at the special educational needs across disability categories will lead someone to arrive at learning needs, common not among the children with disabilities but also existing for children without disabilities. Children may have special needs related with reading of text,

EduInspire-An International E-Journal

comprehension of the text read, spelling, vocabulary words, organizing learning material, remembering the due dates, difficulty in written expression despite having clear verbal expression, solving mathematics problems systematically and avoiding distractors while reading online, using ICT equipment.

There exist inbuilt accessibility solutions within the devices (mobile and laptops), we use in our day to day life. The Microsoft apps like immersive reader provide the much desired help in more than fifty languages to readers across ages and disabilities. The main features include, control of reading speed, control of text displayed on the screen, vocabulary help and color contrast. The immersive reader can also read the mathematical equations. The to-do list, calendar and one note aid in keeping the material at one place, stay on task, remember the due dates for submissions and stay organized. The live caption feature, if used appropriately have the potential to benefit children with hearing impairments, children with different linguistic background, and also children having difficulty with pronunciation.

Conclusion

During the pandemic the decision to observe lockdown, resulted in education institutions to suddenly start functioning in distance mode using internet and various learning management systems. The students, teachers and parents struggled to get adjusted quickly to the online mode of learning. Sustaining the learning of children with special needs in online mode demands little extra efforts on the part of teachers, active involvement on the part of parents and providing constant need based support on the part of special educators, educational administrators and therapists. Online mode of education has opened new dimensions in the delivery of education.

Paper Received	: 28 th December, 2019
Paper Reviewed	: 10 th March, 2020
Paper Published	: 1 st July, 2020