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## ONLINE LEARNING FOR SPECIAL NEEDS CHILDREN IN INDIA: CONCEPT, NEED AND CHALLENGES

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### Abstract

Online Learning is education that takes place over the Internet. It is often referred to as “e-learning” among other terms. However, online learning is just one type of “distance learning” - the umbrella term for any learning that takes place across distance and not in a traditional classroom. In the last 20 years, the Internet has grown from being nearly non-existent into the largest, most accessible database of information ever created. It has changed the way people communicate shop, socialize, do business and think about knowledge and learning. Much more than just a new twist on distance learning, online schooling is changing the face of traditional classrooms and making education more accessible than ever before. Online education is a form of education where students use their home computers through the internet for special children.

**Keywords:** Education, Online Learning, and Special Children.

### Introduction

Teaching machines" redirects here. For the mechanical devices, see Teaching machine.

"E-learning" redirects here. It is not to be confused with online machine learning.

Online learning is considered to be a form of distance learning. Beginning in the 1980s, this method allows a variety of learners to experience connectivity, convenience and interaction. Perhaps a more feedback-oriented version of distance learning, online learning makes use of the Internet to connect students with educational material, as well as instructors and sometimes other students. This personal interaction might not be as readily available as in the other learning modes. A few different types of pacing may be available in online learning: instructor-led, self-directed or self-paced. In line with the traditional classroom model, many of these types of courses are instructor-led. Self-directed learning is the most flexible type of pacing. Students work independently, direct their education and manage their own progress. Self-paced learning allows students to have flexibility in terms of time and place of learning.

While e-Learning (electronic learning) is its own unique mode of learning, it is also a type of distance learning. Though it may have become a term at about the same time as online learning, it can be defined as sometimes including multiple formats and methods of instruction - CD-ROM, the Intranet, the Internet and audio and video formats. This learning methodology may vary the most, since program to program platforms and media differ. As technology continues to evolve, e-Learning also changes. Now that you know what distinguishes these types of learning, make sure to check with prospective programs for further details on learning modes and platforms. Specific terminology may vary by school. Consider how earning an alternative education could benefit you: many learning modes are available for a variety of educational needs.

A learning system based on formalized teaching but with the help of electronic resources is known as E-learning. While teaching can be based in or out of the classrooms, the use of computers and the Internet forms the major component of E-learning. E-learning can also be termed as a network enabled transfer of skills and knowledge, and the delivery of education is made to a large number of recipients at the same or different times. Earlier, it was not accepted wholeheartedly as it was assumed that this system lacked the human element required in learning.

However, with the rapid progress in technology and the advancement in learning systems, it is now embraced by the masses. The introduction of computers was the basis of this revolution and with the passage of time, as we get hooked to smart phones, tablets, etc, these devices now have an importance place in the classrooms for learning. Books are gradually getting replaced by electronic educational materials like optical discs or pen drives. Knowledge can also be shared via the Internet, which is accessible 24/7, anywhere, anytime.

### Concept of E-learning

E-learning has proved to be the best means in the corporate sector, especially when training programs are conducted by MNCs for professionals across the globe and employees are able to acquire important skills while sitting in a board room, or by having seminars, which are conducted for employees of the same or the different organizations under one roof. The schools which use E-learning



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technologies are a step ahead of those which still have the traditional approach towards learning. No doubt, it is equally important to take forward the concept of non-electronic teaching with the help of books and lectures, but the importance and effectiveness of technology-based learning cannot be taken lightly or ignored completely. It is believed that the human brain can easily remember and relate to what is seen and heard via moving pictures or videos. It has also been found that visuals, apart from holding the attention of the student, are also retained by the brain for longer periods. Various sectors, including agriculture, medicine, education, services, business, and government setups are adapting to the concept of E-learning which helps in the progress of a nation.

### Background of the Online Learning

Online Education is a form of distance education that has unlimited participation and interaction with students and teachers from around the world. Use the following sources to learn more about Online Education and the medium, institutional providers, and issues surrounding it. Distance education, Distance learning, Massive Open Online Course, MOOC, cMOOCs, xMOOCs, online education, Open education, Virtual education, Web-based instruction.

### Need and importance of online learning for special needs children

The disability rights campaign saw the introduction of legislation such as the Disability Discrimination Act 1995, the Special Educational Needs and Disability Act 2001 and the Equality Act 2006. These laws sought to address institutional inequalities by making it illegal to discriminate unfairly against individuals because of a disability. In the education system, the onus was now placed on schools and educators to ensure that reasonable provisions were in place to provide disabled students and students with special educational needs with the same opportunities as those without a disability. Section 13(1)(a) of the Special Educational Needs and Disability Act stipulates that 'disabled pupils are not placed at a substantial disadvantage in comparison with pupils who are not disabled' in relation to 'education and associated services provided for, or offered to, pupils at the school'. This calls for the education system to take a proactive approach towards enabling inclusivity and equality for all students. Although the very notion of online teaching through technology such as Google Classroom, Show My Homework and Zoom were not within the realm of possibility for legislators to consider in 2001, they have, as a result of the school closures, become an integral part of the education service provided by many schools and educators today.

### Resources for Online Learning

In general, when taking an online degree program, you might encounter resources like:

**EBooks;** Journals; Videos; Recorded lectures; Quizzes; Discussion forums Live Q&A sessions; and Interviews.

The resources offered to you for learning online will depend on the institution where you take your online program. Some online learning programs may require you to order physical textbooks in advance by in the mail, but these are generally being phased out in favor of eBooks and online-only methods of delivery.

For those institutions that have made the transition to using 100% online resources, students can expect to study using a combination of cutting-edge technological resources with no need to travel to attend lectures, exams or in-person discussion sessions!

Taking an online learning program, you'll be an officially registered student at your institution and have access to the same resources as an on-campus student, like your institution's digital library, learning management system (like Blackboard), student union membership and more! An online degree is similar to taking a degree program on campus, but you have the freedom to direct your own study schedule.

Your school and your course instructor will determine the format for each individual course and will select delivery methods that are best suited to your course or program. What Biology major needs to learn successfully online will differ from what an Art History major needs! Online learning may be a completely new experience for you. If you're coming from a more traditional learning background, read on to discover how to make the most of the resources you may encounter in your online learning journey!

**EBooks, Textbooks & Journals:** These written materials are essential resources in almost every course you'll take when learning online. Using the reading list for each course, or on the advice of your course instructor, you'll need to dedicate the amount of time you need to reading and understanding the topics in the literature. The main advantage of using this medium (particularly eBooks) is the fact that they are completely portable, allowing you to study on the go from your computer, phone or tablet. When you're researching a course or program, remember to check whether your textbooks are included in your tuition fees! You may have to pay extra for your textbooks, or they may be available as eBooks from your institution's library.



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**Recorded lectures:** Essential ways of absorbing a large amount of information in a relatively short amount of time, lectures are a staple of online and campus-based learning. With online learning, you can attend lectures from your bedroom! If you can, make notes throughout your lectures; this will make it easier to review for exams, and any assignments you'll need to complete throughout your course.

**Interactive sessions:** The greatest challenge an online education provider faces is how to replicate the face-to-face interaction and in-person discussions that on-campus institutions can easily provide. The solution? Online degree programs often use a combination of discussion forums and interactive question-and-answer sessions to give you the interaction with other students and instructors you need. Before beginning an online discussion forum or interactive session, make sure you read the rules and requirements; some institutions may require you to create posts that have a minimum word count.

Online students often think that their learning resources will be delivered via email, or even by snail mail! Most online institutions are moving away from this unreliable method of delivery. The course or module's learning resources will be delivered via the institution's online learning environment or platform. The learning platform will vary depending on the software used, but it will usually consist of a central online platform that students can access from their personal PC, mobile or tablet. One of the major benefits of utilizing resources that are hosted entirely online is unending flexibility! As an online student, you can choose to access your course information and complete your assignments at any time. This allows you to fit study time in around your work, family and other commitments. This also means that students who wish to continue working while studying do not have to put their careers on hold. Get the best of both worlds!

### Technology for Special Need Children

The most useful and important Assistive Technology tools and resources for students with disabilities, these are:

- **Assistive Technology Module:** This isn't a tech tool but a short kind of 'course' that offers an overview of assistive technology (AT) and explores ways to expand students' access to it in the classroom.
- **Text to Speech**
  - ❖ One tool to help students with disabilities even in the face of a special education teacher shortage is assistive technology. Today, assistive technology tools can help students with certain disabilities learn more effectively. Ranging in sophistication from 'low' technologies such as a graphic organizer worksheet to 'high' technologies including cutting-edge software and Smartphone apps, assistive technology is a growing and dynamic field. Several areas of assistive technology and sample products may be found in any given classroom, making a difference in how students of all abilities learn.
  - ❖ As an assistive technology, text-to-speech (TTS) software is designed to help children who have difficulties reading standard print. Common print disabilities can include blindness, dyslexia or any type of visual impairment, learning disability or other physical condition that impedes the ability to read. However, other students can benefit from TTS technology, such as children that have autism, attention deficit hyperactivity disorder (ADHD) or an intellectual disability.
  - ❖ The technology works by scanning and then reading the words to the student in a synthesized voice, using a large number of speech sounds that make up words in any given context. With the advances in speech synthesis, TTS technology is more accurate and lifelike than ever.
- **Kurzweil 3000**
  - ❖ The Kurzweil 3000 is a leader in TTS software for individuals that struggle with literacy. In addition to a range of TTS features, the full-featured software program integrates abilities that can help students in other areas, potentially appealing to those who may have a non-print disability or those who may not typically consider a TTS program. Some of the features include:
    - ❖ Multiple TTS voices
    - ❖ Support for 18 languages and dialects
    - ❖ Talking spell-checker
    - ❖ Picture dictionary graphics for more than 40,000 words
    - ❖ Text magnification
    - ❖ Tools for test taking, essay writing, note-taking, reference and more
    - ❖ The Kurzweil 3000 strives to provide students with a multi-sensory approach to literacy learning. It is available for Windows and Macintosh.



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- ❖ Graphic organizers can be effective in helping students to organize their thoughts during the writing process. As an assistive technology, graphic organizers can be a strong choice for students with dysgraphia or disorders of written expressions — particularly the conceptual aspects of writing.
- ❖ Graphic organizers work by helping the student map out a course of action. Depending on the type of writing, the graphic organizer can prompt the writer to describe an object, chart out a course of events or perform some other tasks that can help in planning the piece. Graphic organizers vary by type and technological sophistication.

● **Low Tech Handouts**

- ❖ Graphic organizers do not need to be technologically advanced; in fact, they can exist in simple handout form.
- ❖ Sample handouts can be found at the Houghton Mifflin Harcourt Company. The sandwich chart can assist students with paragraph writing. The sequence chart can help with narrative writing and the ordering of events. The sense chart is designed for descriptive writing, where writers are prompted for terms that characterize and express an item. Dozens of other sample charts exist and can help students with virtually any type of writing.

● **Draft Builder**

- ❖ It is a writing tool that integrates outlining, note taking and draft writing functions to break down the writing process into three steps. Using a graphical organizer, the program helps the student visualize the project and insert information into the appropriate place without having to conceptualize the whole process. It then automates the process of creating the paper, where the student can drag and drop what is written in each note to the rough draft.
- ❖ Other features include a talking spell checker that uses TTS technology, a bibliography tool, a dictionary and the ability for teachers to add locked text into the program for further guidance. Draft:Builder is available for Windows and Macintosh.

● **Assistive Listening System**

- ❖ A variety of assistive listening systems, or hearing assistive technology, can help students who are deaf or hard of hearing, as well as those with other auditory and learning problems. According to the National Association for the Deaf, assistive listening systems can be used to enhance the reach and effectiveness of hearing aids and cochlear implants, or by children who do not need those tools but still need help hearing. Assistive listening systems use a microphone, a type of transmission technology and a device for capturing and bringing the sound to the ear. The specific transmission technology used in the system is typically what contrasts one type of assistive listening system from another.

● **FM Systems**

- ❖ According to the American Speech-Language-Hearing Association (ASHA), FM systems are the best choice for children with sensorineural hearing loss. The most common type of hearing loss for all ages, sensorineural hearing loss occurs when the inner ear (cochlea) or nerve pathways from the inner ear to the brain are damaged.
- ❖ FM systems work using radio broadcast technology. With a transmitter microphone and a receiver, the teacher and student can maintain a consistent sound level regardless of distance and background noise. Additionally, ASHA notes that the hearing aid microphone can be turned off, so the student can concentrate on the teacher alone.

● **Sound Field Systems**

- ❖ Sound-field systems are a strong choice for classrooms that need to assist listening for all children in the class. ASHA notes that these systems benefit not only children that have hearing loss, but those that have other auditory and learning problems, such as language delays, central auditory processing disorder, articulation disorders and development delays. Additionally, sound-field systems can be used for students who are learning English as a second language.
- ❖ Sound-field systems use a microphone that projects sound through mounted speakers around the classroom. In classrooms that have good acoustics, sound is able to travel evenly throughout space, eliminating problems of distance between the speaker and each listener.

**Conclusion**

The rapid advances in assistive technology tools, students, parents, and teachers have a seemingly limitless number of tools at their disposal. As these tools start to appear in the home and in the classroom, parents and teachers can utilize them for students' academic and personal growth. But technology alone is not enough – to successfully use these tools, it's critical to develop a plan for their use and have regular check-ins to ensure the student is gaining the most value possible and not becoming overly reliant on these



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tools. But while assistive tools have become plentiful, the same cannot be said for special education instructors. As previously mentioned, the vast majority of states have reported a need for teachers in special education. And many general education classrooms instruct children with special needs.

### References

1. Cooper, M. (2006). 'Making online learning accessible to disabled students: an institutional case study', *Research in Learning Technology*, 14 (1), pp. 103-115.
2. Berghs, M., Atkin, K., Hatton, C. and Thomas, C. (2019). 'Do disabled people need a stronger social model: a social model of human rights?', *Disability and Society*, 34 (7), pp. 1034-1039.
3. Gallagher, D., Connor, D. and Ferri, B. (2014). 'Beyond the far too incessant schism: special education and the social model of disability', *International Journal of Inclusive Education*, 18 (11), pp. 1120-1142.
4. Habib, L., Berget, G., Sandnes, F.E., Sanderson, N., Kahn, P., Fagernes, S. and Olcay, A. (2012). 'Dyslexic students in higher education and virtual learning environments: an exploratory study', *Journal of Computer Assisted Learning*, 28, pp. 574-584.
5. Kotera, Y., Cockerill, V., Green, P., Hutchinson, L., Shaw, P. and Bowskill, N. (2019). 'Towards another kind of borderlessness: online students with disabilities', *Distance Education*, 40 (2), pp. 170-186.
6. Lambert, D. and Dyer, R. (2018). 'Quality of life of higher education students with learning disability studying online', *International Journal of Disability, Development and Education*, 65 (4), pp. 393-407.
7. McManus, D., Dyer, R. and Henning, M. (2017). 'Barriers to learning online experienced by students with a mental health disability', *Distance Education*, 38 (3), pp. 336-352.
8. Rice, M. and Carter, A. (2016). 'Online teacher work to support self-regulation of learning in students with disabilities at a fully online state virtual school', *Online Learning*, 20 (4), pp. 118-135.
9. Rodrigo, C. and Tabuenca, B. (2019). 'Learning ecologies in online students with disabilities', *Media Education Research Journal*, 62 (28), pp. 53-64.
10. Simoncelli, A. and Hinson, J. (2008). 'College students with learning disabilities personal reactions to online learning', *Journal of College Reading and Learning*, 38 (2), pp. 49-62.
11. Shonfeld, M. and Ronen, I. (2015). 'Online learning for students from diverse backgrounds: learning disability students, excellent students and average students', *The IAFOR Journal of Education*, 3 (2), pp. 14-29.