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#### Chapter

## **Teacher Perspectives on** Effectiveness of Assistive Technology in Supporting Children with Dyslexia Learning Disabilities in Ogun State, Nigeria

Obafemi Ayodeji Olayemi and Ishola Ayodele Oluwaseun

#### Abstract

Assistive Technology for Children with Learning Disabilities (ATCLD) was developed in response to language and math challenges faced by dyslexic students at Adeola Odutola College. This development follows a needs assessment and focuses on upper secondary schools 1–3. As explained above, assistive technologies (ATs) are commercially available, adapted, or modified to improve, maintain, or enhance the functional abilities of children with disabilities. Unlike many schools in Nigeria, Adeola Odutola College enrolls students diagnosed with learning disabilities and trains them in a mainstream teaching and learning environment. Similarly, the Ministry of Education notes that the Nigerian classroom has diverse students with different abilities and students with special educational needs are often enrolled in mainstream schools. In response to the described dilemma, this study developed a tagged ATCLD with text-to-speech skills that enable compensatory learning that emphasizes repetition. The ATCLD effort followed the following methodology. This means that younger children can create new schemas of information. In addition, text-to-speech and text-to-speech assistive technologies widely used for input and output in this research will be expanded in the future.

Keywords: assistive technology, dyslexia, dyscalculia, text – to speech, english language, mathematics, secondary schools

#### **1. Introduction**

Dyslexia is a commonly transmitted disorder in nursing [1]. Moreover, it is a defect related to the process of visual input [2]. Students with this condition struggle with language and mathematics because of the way they organize pictures, text and sound [3]. Difficulties related to dyslexia are recognized by the UN All Learners, among others. This is often achieved through an inclusive lens that emphasizes the use of ICT and versatile learning strategies [4]. Comprehensive Education by Ministry of Education, Federal Republic of Nigeria [5] could be a method to address and respond IntechOpen 1

to the diverse needs of all children, youth and adults by increasing participation, culture and community and reducing exclusion within and even outside the education system. This recognition is supported by the National Institute for Academic Development's Handbook for Academics in Support of Learning (NIED, 2014), which focuses on serving students who are moving through the essential core competencies in a cross-curricular style and skills [6].

Dyslexia is often an inherited neurological disorder; it leads to problems with reading, writing and spelling [1]. ATCLD will also be implemented for children affected by the above problems; the etymology of the word dyslexia comes from the Greek DYS-disorder and the language LEXIA. A diagnosis of dyslexia does not mean an intellectual disability, people with dyslexia are fully capable, but this can only be improved through proper identification and appropriate training [7]. Instead, dyscalculia is a math-specific learning disability that can cause difficulty understanding number concepts or using symbols or functions necessary to succeed in math [8]. In recent years, researchers have become increasingly interested in studying the use of technological devices to improve the performance of children with specific learning disabilities in inclusive classrooms [9–11]. These studies have shown that assistive technology is a potential help in improving the educational needs of children with SLD and that the integration of technology is important to increase the learning effectiveness of children with learning disabilities [9, 11]. However, little information was gathered from teachers about how technology devices would benefit children with specific learning disabilities [10–12]. The successful implementation of technology in the classroom depends to a large extent on teachers' knowledge and attitudes towards the use of technology in the teaching and learning process [13]. Therefore, it is important to focus on how teachers perceive the effectiveness of assistive technologies for children with specific learning disabilities.

Learning is the acquisition of new knowledge and skills. In the early developmental years, children begin to learn to read, write, and count according to their age and intellectual abilities. However, despite normal intellectual abilities and normal visual, auditory or physical abilities, some children appear to be particularly unable to acquire mathematical and language skills, even when provided with adequate learning opportunities [14]. Children with learning disabilities lag behind in cognitive acquisition but have average or above average IQs, meaning they do not have low intelligence issues [15]. The term learning disability covers a very wide range of characteristics. Due to the impact on cognitive processes, students with learning disabilities may experience difficulties in various academic areas as well as social and emotional development; however, the main problems most often lie in specific areas such as reading, writing and arithmetic, which are the basic foundations of education.

Inclusive education is the process of responding to the diversity of children by improving participation in the classroom and reducing exclusion from education [16]. Inclusive education ensures a quality education for all students by effectively meeting their diverse needs in a sensitive, respectful and supportive manner in mainstream schools. Mainstream schools accept children with special needs in the classroom with their typical peers and strive to meet the needs of all children with a quality education. The United Nations Convention on the Rights of the Child [17] states that every child has the right to education regardless of disability and without any form of discrimination. Children with special needs are therefore effectively educated in special or mainstream schools to promote their independence and sense of well-being through maximum inclusion and active participation in the communities in which they live [18].

According to the Individuals with Disabilities Education Act [19], any device that is used to improve the performance of individuals with disabilities is considered assistive technology. This could include any program or product system used to increase, maintain, or improve the useful abilities of individuals with disabilities [15]. In addition to aids as part of the curriculum, teachers can facilitate children with special needs in solving known learning problems and can encourage independent study. However, the selection, acquisition and use of useful technology depend on an assessment of the child's needs as well as the suitability of professionals working with students with learning disabilities [20].

Assistive technology allows students with disabilities to improve their access to courses and the quality of their professional knowledge [21]. Several useful technological devices are available to help teachers improve their students' useful abilities by increasing their participation in learning opportunities and engagement in activities [9]. Computer powered directions include numerous code applications to help children improve their learning activities and reach their potential. These technologies vary from simple spell checks to more advanced speech recognition (systems, teaching and learning software). Among them, software such as voice recognition, word prediction, spell checking and scientific software have been found to be effective in meeting the requirements of children with specific learning disabilities [12]. When students with learning disabilities are unable to meet academic and behavioral goals in school, teachers should recognize the need to create usable technology tools and supports that can modify them to successfully complete assigned tasks. AIDS is therefore an integral part of education and a necessary half in the design and development of teaching programs for university students with disabilities [22].

As stated by the Ministry of Education (2009), children at Adeola Odutola College (AOC) receive teaching that is applicable to graduates in mainstream settings. In response to the above, Assistive Technology for Children with Learning Disabilities (ATCLD) was developed for SS.1 to SS3. It deals with English and math programs by allowing text input, displaying colored text and images, and outputting sound to the user.

Adeola Odutola College (AOC) is a mixed school (boys and girls) that prepares students with special business needs as it offers WASSCE levels including structured modules and business subjects. ATCLD is designed for beginners and can prepare students at this level. Qualitative methods; In the initial phase of the study, case studies of dyslexic students from Adeola Odutola College (AOC) were used followed by quantitative methods; An experiment was conducted during the ATCLD test. The combination of these techniques is known as a hybrid approach. The waterfall model guides the development of a search engine, as requirements gathering is the initial stage. Research focuses on improving maths and English, as people with dyslexia have problems understanding language and arithmetic. A pilot study on the adoption and use of iPads for active reading demonstrated improved academic performance [23]. The work in this study focuses on earlier technologies, so ATCLD is based on the same improvements in academic achievement as earlier technologies.

The main objective of this study was to develop an assistive technology, namely ATCLD, for better understanding of Mathematical and English concepts for students with dyslexia at Adeola Odutola College, Ijebu Ode, Ogun State. The main objective of this study was achieved by implementing the following secondary objectives:

- 1. Identify system requirements for assistive technologies
- 2. Development and implementation of assistive technology
- 3. Evaluate the effectiveness of assistive technologies in improving understanding of mathematics and English concepts

#### 2. Facilitating student achievement with assistive technology (world perspective)

The compensatory nature of assistive technology creates opportunities for students with disabilities [24]. Coincidentally, Currie and Drewry [25] added that assistive technologies are often promoted to schools, parents, and educators as tools to support students with special needs. Create a balance to address learning disabilities and promote individual independence. The use of assistive technology can provide a compensatory alternative and, when incorporated into quality writing instruction, can lead to improved performance, as in the case of MacArthur (cited in [26]). ATCD is a compensating AT, so it can provide these parameters.

In improving the realm of unique education, it has turned into an unusual place to view assistive technology as a resource provided to people with physical, sensory (auditory and visual), and communication impairments [24]. The response from education specialists has usually been to offer assistive technology that offers physical right of entry to academic and network packages and services. A key function of assistive technology in facilitating the right to enter academic experience is as a means to achieve core curriculum outcomes [24]. Most children with special knowledge disabilities have reading problems known as dyslexia. It commonly affects a child's ability to understand and manipulate the sounds of spoken speech, in addition to having problems interpreting and recognizing new words. Children who are affected by this problem have difficulty acquiring knowledge that they can explore properly and fluently [6]. Writing disability (dysgraphia) is another educational bottleneck for college students with learning about disabilities. Children with dyslexia have trouble organizing and writing down their thoughts and ideas. It affects the primary writing skills of handwriting, typewriting and spelling. Another learning disability is an inherent difficulty remembering and effectively using the steps of a math problem (dyscalculia). Specific problems consist of length and spatial relationships, orientation, region values, decimals, fractions, problems understanding time-related concepts, and problems remembering math facts [14].

#### 3. Teacher perspectives

To facilitate educational opportunities for children with SLD, teachers should use appropriate teaching strategies and materials to reduce or eliminate children's deficits in specific learning areas. The primary responsibility of teachers is to provide children with and without disabilities a successful learning experience that will help them achieve their goals for a bright future [15]. Therefore, educators need to identify the right technologies for these students to use their resources and how those resources can be used most effectively, with whom, where, and when. They may have knowledge of how to teach and how to design curriculum to meet students' needs,

which is an important part of children's academic success [27]. However, inadequate information and educational strategies for integrating assistive technologies into the mainstream curriculum continue to plague educators. To illustrate this, a research study [28] revealed concerns among teachers that their education programs did not provide enough courses and field experiences to enable them to become teachers and support students with special educational needs.

Despite the knowledge and training of teachers, the use of technology in school varies according to children's preferences and their interest and disposition towards it Use of technology [29]. The Individualized Education Plan (IEP) can identify the child's strengths and weaknesses, likes and dislikes, and what strategies help deal with the child [20]. In addition, through learning, the teacher can improve students' motivation and engagement by increasing their autonomy and self-direction. Bronfenbrenner's bioecological model [30] is useful in its application to personalized learning as it explains the interactions borne by the children. That supports their development and learning. The bioecological model consists of major environments inhabited by children and teachers and is organized and conceptualized in separate systems including microsystem, mesosystem, exosystem, macrosystem, and chronosystem [31]. The microsystem, the deepest layer, includes a child's relationships and interactions in their immediate environment (family, peers, school, or neighborhood). The Mesco system establishes the connection between the structures of the child's microsystem "family - school, partner - family, neighborhood - partner". The exosystem consists of connections and processes between environments that the child does not directly execute. However, the structure of this layer can influence the child's development by interacting with some structures of the microsystem. The macro system is the outer shell of the child's environment and is linked to cultural values. It consists of customs and laws. Finally, the chronosystem is also relevant to the child's environment. This can be internal or external [31]. Urie Bronfenbrenner's theory of child development describes how important social situations in a child's life interact and influence important outcomes, including social and emotional adjustment, academic achievement, and engagement. Provides a comprehensive conceptual foundation [30]. A teacher's perception of assistive technology can determine the extent to which technology is used in the teaching and learning process [32]. To improve the use of assistive technology as an intervention, teachers should ask what techniques and strategies are useful in different types of learning situations and how children become more strategic and effective lifelong learners. We need to know how to use the technique as an effective intervention that allows [33]. However, what teachers do and what they know about assistive technology depends on their level of skill, experience, knowledge, and competence in inclusive practice [13]. For example, teachers who think of learning as the accumulation of information tend to think of teaching as the transmission of information. In contrast, teachers who view learning as a conceptual shift are more likely to be facilitators, always encouraging children to learn independently. Their perceptions and attitudes greatly influence the acceptance, implementation, and outcome of using assistive technology to teach children with learning disabilities.

#### 4. Specific learning disability

Learning is acquiring new knowledge and skills. Depending on their age and intellectual ability, children in early development learn to read, write and do arithmetic. However, despite normal intellectual ability and normal visual, auditory, or physical abilities, some children fail to master language and mathematics, especially when appropriate learning opportunities are available. Yes [14]. Children with learning disabilities lag behind in acquiring cognitive skills but have average or above average IQs. However, the bigger problems are more common in specific areas such as reading, writing and mathematics, which are central to education. Most children with certain reading disabilities have reading and writing problems known as dyslexia. In general, it affects a child's ability to recognize and manipulate sounds in spoken language, as well as problems deciphering and recognizing new words. Children who suffer from this problem have difficulty learning to read directly and easily [19]. Writing disability (dysgraphia) is another academic area of concern for academics with learning disabilities. Dyslexic children find it difficult to study, organize their thoughts, and write. Affects rudimentary writing skills of handwriting, typewriting and spelling. Another reading disability is the intrinsic problem of remembering and correctly using exact math problems (dyscalculia). Specific issues include size and spatial connectivity, exposure, location values, numbers, fragments, difficulty understanding time-related generalities, and difficulty flashing fine-grained data [14].

#### 5. Inclusive education

Inclusive Education Inclusive education is the process of addressing the diversity of children by enhancing their participation in the classroom and reducing educational rejection [16]. Inclusive education ensures quality education for all students by meeting diverse needs in a responsive, caring and evidence-based manner in mainstream schools. Mainstream schools aim to enroll children with special needs alongside common peers in the classroom and to meet the needs of all children with quality education. United Nations Convention on the Rights of the Child [17] states that every child, regardless of disability, has the right to an education without any form of discrimination. Children with special needs can therefore be effectively educated in special or general schools, and through maximum complement and active participation in the communities in which they live. It can build dependencies and foster happiness [18]. The Salamanca protest calls for general education institutions to be regarded as places of child development open to all children, regardless of their physical, emotional or intellectual disabilities [16]. Inclusive seminars are expected to focus on the differences between different orders and to have unique characteristics that distinguish individuals from each other.

The United States Individuals with Disabilities Act (IDEA) states that an Individualized Education Program (IEP) should be developed if a child is associated with participation in a special education setting [34]. Each child's IEP is created by a team comprised of the child's teacher, parent, child, and outstanding special education. IEP trains are required to create an Individualized Education Plan (IEP) to meet the specific needs of children with special needs in mainstream schools. The United Nations Convention on the Rights of Persons with Disabilities [20] emphasizes the right of persons with disabilities to lifelong literacy education without discrimination and on an equal basis with others, without exclusion from general education on the basis of disability. The main task of educating children with disabilities is to provide all children with disabilities the most stylish education possible in the most suitable environment, with the aim of obtaining the highest possible educational status in mainstream schools [23]. However, the literacy development of children with learning disabilities in general education classrooms depends on the successful

implementation of educational methods and facilities to support the literacy of these children [28]. Teachers must be responsible for organizing, implementing and evaluating classroom adjustments according to the needs of children. Interventions such as tutoring, supportive and educational methods, peer training, collaborative literacy and metacognitive strategies have been developed to optimize classroom effectiveness for children with specific literacy disorders [32].

#### 6. Factors impacting teacher perspectives

Several factors can influence teachers' perspectives on the effectiveness of technology. The papers used for this methodological review slightly reflect factors stated for different perspectives on assistive technology for children with specific literacy disabilities.

#### 6.1 Training/experiences

A teacher's perception and understanding of assistive technology depends on the effective instruction they receive during the preparation program and professional development. Most articles point to a lack of training programs and teacher experience [31, 35, 36]. As an example, the researchers reported that a teacher's prior experience and knowledge determined how effectively her AT was used in teaching literacy and how well it supported the child's learning development. [31]. Teachers with more experience and more AT-related training activities (coursework, workshops, in-service programs) reported more positively about the effectiveness of the technology [31]. However, 30% of teachers who participated in the study said they were not ready or confident to use technology and did not know how to effectively implement, integrate and evaluate assistive technology. Similarly, another research study found that teachers currently using computer-based instruction claimed it was an effective tool for improving student learning, while teachers are new to technology, we found that users reported using something they were not familiar with [35]. Additionally, 60% of teachers reported lack of training or experience in assistive technology, and were reluctant to integrate different activities for children with learning disabilities of different ages [36].

#### 6.2 Level of confidence and knowledge

Of the six articles, three revealed teachers' perceptions of confidence and knowledge when using technology in the classroom [31, 35, 37]. Teachers have shown that certain assistive technology skills influence self-confidence., know how to set up assistive technologies and how to adapt them into effective tools. A particular child developmental impact is instruction [31]. Similarly, teachers who reported low confidence indicated a need for additional training and knowledge of TA, including its educational objectives and functions [35]. Teacher confidence is related to their perception of their ability to use and integrate AT into the educational process. To illustrate this, most knowledgeable teachers show confidence in their ability to support children, saying that assistive technology can promote children's independence and encourage active learning. However, less confident and less knowledgeable teachers view TA as a complementary rather than an integral aspect of the curriculum [37].

#### 6.3 Unavailability of devices and technical support

To integrate technology for children with learning disabilities, the availability of appropriate learning programs and software is essential in classrooms. Of the six studies, three explored teachers' concerns about the absence of equipment, lack of technical support, and the high cost of different software [31, 35, 36]. Teachers report that low-tech ATs are used more often than high-tech ATs, possibly because they are cheaper and easier to use without technical support [31]. In this study, 75% of teachers reported being uncomfortable using high-tech devices, such as the high cost and lack of availability of technical services [31]. In addition, teachers are concerned about the low availability of appropriate technology devices in the classroom to support children with special needs [36]. Similarly, they point to a lack of access to technology, such as insufficient computers, software costs, and lack of IT technicians [35].

#### 6.4 Time constraints and unique needs of children

The availability of appropriate learning programs and software in the classroom is critical to the integration of technology into children with learning disabilities. Of the six studies, three investigated teachers' concerns about lack of equipment, lack of technical support, and high costs of various software [31, 35, 36]. Teachers report that low-tech ATs are used more often than high-tech ATs, probably because they are cheaper and easier to use without technical support [31]. In this study, 75% of his teachers reported being uncomfortable using high-tech equipment, including its high cost and lack of access to technical services [31]. Additionally, teachers are concerned about the lack of appropriate technical equipment available in the classroom to support children with special needs [36]. They also point to a lack of access to technology, including a shortage of computers, software costs, and a shortage of IT personnel [35].

#### 6.5 Time constraints and Children's special needs

Research papers show that time constraints are a major barrier to promoting the use of educational technology [35–37]. To use computer-based teaching as a teaching tool, teachers need more time to prepare computer programming programs [35, 36]. The introduction of ATs in the classroom and the time it takes to teach children how to use them [37]. Additionally, two articles point to individual differences in children, autonomy, learning motivations, and preferences for using learning apps [31]. Effective use of assistive technologies depends on supportive policies from teachers and children's willingness and interest in using them as effective tools.

#### 7. Assessing the effectiveness of assistive technologies

Adebisi et al. [38] explored the effects, benefits, and reasons why the use of assistive technologies for children with learning disabilities can close achievement gaps. Did. This article describes different types of assistive technologies that have been developed and used to help children with learning disabilities solve written, literate, listening, and math problems. He emphasizes the need to select appropriate

technical aids for children with learning disabilities and to ensure that children with learning disabilities get the maximum benefit from the use of assistive technology in the classroom [22]. We've highlighted educational guidelines for teachers to do or at home with technology to make the teaching and learning process fun and effective. The study design of Adebisi et al. [38] is consistent with ATCLD's considerations in solving literacy and numeracy problems.

#### 8. Methodology

The study population consisted of 20 teachers and 44 students from SS 1 to SS 3 out of 2 teachers and 73 students of Adeola Odutola College, Ijebu-Ode. The cost-effectiveness and feasibility of the study was ensured by purposive population sampling of 5 teachers and 10 students, as warranted; this was done for the desired sample size. In addition, the credibility of the questionnaires used during the study was achieved through careful scrutiny by the researchers' supervisors, for which a sample of the participating teachers was provided. During the two weeks of the course, the participating teachers returned the questionnaires; instead, students were asked about their difficulties in reading and understanding the language. The interview questions come from the survey questionnaire. Content analysis, including the classification, synthesis, and tabulation of linguistic and behavioral data, was the qualitative data analysis used in this study. Quantitative data were statistically evaluated using Microsoft Excel, in which numerical data were plotted. Visual impairments, neurological disorders, and physical disabilities are among the barriers to effective computer use [39]. In the study, participants were asked to assess their own needs by a school counselor affiliated with Adeola Odutola College in Ijebu-Ode. Test results show that students with dyslexia at Adeola Odutola College, Ijebu-Ode need assistive devices, such as when students have vision or hearing problems, and these recommendations are part of the system requirements.

#### 9. Results

Each learner took four tests, namely; the language proficiency pre-test (a), posttest (b), arithmetic proficiency pre-test (c), and post-test (d) denoted by (a), (b), (c), and (d) respectively. Besides, distinction in post and pre-test/s are symbolized by (b) Sub (a) and (d) Sub (c) while proportion (%) increase or decrease is expressed by ((b-a) /a) x 100). Additionally, the letters E, F, G, and H represent the test taker. The subsequent is an example of information manipulation for learner G. 10 students took half within the interview; however, the testing was scaled down to six candidates because it may be deduced from the analysis (**Table 1**).

Test trial out of 16 Marks for learner E, F, G and H Grade 5 learners brought to book low marks in comparison to their grade 6 counterparts. This is evidential as illustrated on the above **Figure 1**.

Series 1 and 2 represent language and mathematics correspondingly. Though grade 5 learners demonstrate a lower performance in **Figure 1**, they hold a record of most improved marks in **Figure 2**. Most improved marks associated with pupils of fifth grade signify the concept of younger children being better learners. This means the teaching of basics should not be done at any later stage to avoid complications as older children may be prepared for other activities in life (**Table 2**).

Learner name	Language proficiency pre – test (a) 16 marks	Language proficiency post – test (b) 16 marks	Mathematics proficiency pre –test (c) 16 marks	Mathematics proficiency post –test (d) 16 marks	(b) Sub (a)	(d) Sub (c)	% (Language) increase/decrease	% (Math) increase/ decrease
E	5	8	6	9	3	3	60	50
F	3	5	4	7	2	3	67	75

**Table 1.** *Test marks for SS1 students in based on proficiency.* 

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**Figure 1.** *Test trials for learners.* 



#### Figure 2.

Percentage increase/decrease in language and mathematics.

Rumelhart's (quoted in [10]) Schema idea is a proof of the way readers use earlier information to apprehend and research from text. Improving fifth-grade scholar success means; Young youngsters can broaden new diagrams that summarize units of information. This look at simulated and carried out Graham and Richardson's [34] idea of know-how the connection among the function of AT and consumer desires. Thus, within the improvement of the ATCLD, the necessities took place. In contrast, Culèn and Gasparini [23] performed a case look at, that's much like the technique used on this look at. Coincidentally, each research confirmed improvement. Goal; Improving the studying and writing of youngsters with studying disabilities is the

Learner name	Language proficiency pre- test (a) 16 marks	Language proficiency post- test (b) 16 marks	Mathematics proficiency pre-test (c) 16 marks	Mathematics proficiency post-test (d) 16 marks	(b) Sub (a)	(d) Sub (c)	% (Language) increase/decrease	% (Math) increase/ decrease
G	9	11	10	12	2	2	22	20
Н	8	10	10	13	2	3	25	30
<b>Table 2.</b> Test trials for SS	52 learners.							

intention of Culèn and Gasparini [23], further to the experimental technique of Rello et al. [39] concerning the usage of publish and pre-check accompanied with the aid of using this look at..

#### 10. Teachers' knowledge of assistive technology

Technology Regarding instructors' focus of the advantages of the use of assistive technology, 89% of respondents agree with that instructors aren't completely aware about the advantages however they agree with that instructors understand the significance of assistive technology. The biggest percent of members agreed that colleges must offer assistive generation for college students with disabilities because academic companies are answerable for instructing college students and investment is your responsibility. However, they 10 agree with that colleges do not have any responsibility to offer assistive generation and no reason for this perception has been stated.

#### 10.1 Availability

In reaction to the subsequent declaration: "The availability of assistive technology within the lecture room offer possibilities for college students with disabilities to get right of entry to the mainstream curriculum", 92% agreed and emphasized that scholars with disabilities want to be taught to apply ATs, even as 7% disagreed with the preceding declaration due to the fact college students with such issues can also additionally have problems within the trendy curriculum. Participants diagnosed many advantages of the use of assistive generation within the lecture room. For example, numerous humans stated that assistive generation can assist have inclusive lecture rooms for all college students, no matter their disabilities. Participants stated that AT may want to by hook or by crook assist college students to satisfy their instructional responsibilities and that AT enabled college students with disabilities to be unbiased and take part within the curriculum. However, respondents additionally suggest that AT would possibly have a few disadvantages, such as: For example, the bad labeling of college students with disabilities, which also can purpose emotional damage.

#### 11. Recommendations

The consequences of this suggest the want for reinforcing ATCLD or a relative application, consequently, Adeola Odutola College and different colleges in Nigeria must reply to this name with the aid of using availing human and capital assets to amend consumer necessities and supply of facts for populating the assistive generation. The implementation of ATCLD must amplify to trainer and learner schooling so as to make certain green use of Assistive Technology. Moreover, the Ministry of Education and the National Institute for Educational Development must make certain the enforcement of ICT because that is in accord with the Inclusive Education policy.

### 12. Conclusion

Every Nigerian baby has the proper way to a simply and nice education (Human Rights Constitution, Nigeria, 1990). However, a few instances exclude positive people

from diagnosed countrywide education, such as: According to assistive technology, ATCLD desires to move similarly to serve a good broader institution of students at Adeola Odutola College, Ijebu-Ode, and elsewhere. In addition, teacher schooling guides associated with helping youngsters with studying problems and in trendy must be introduced. It could be extra beneficial if the Ministry of Education inculcate the problems associated with studying disabilities and collaborate with other countries. Assistive generation may be a beneficial and supportive device for college students with disabilities; it facilitates each instructors and college students to create an unforgettable studying experience. The researcher strongly believes that everybody can research and enhance academically, however humans want to study the surroundings to attain those desires of spans instructors, parents, families, and the network can paintings collectively to offer a success studying surroundings. In present day societies, generation has end up an essential a part of existence and social progress. Part of the function of educators is to make assistive generation to be used by humans with disabilities and permit them to gain from it and enhance their essence of existence through the use of the pleasant assistive generation to be used.

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