



Availability and Utilization of Assistive Technology for Learning among Students with Special Needs in Ilorin, Kwara State

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ABSTRACTS

The availability and use of technological devices to aid students with special needs in education and training are driven by the changing nature of work. This study investigated the Availability and Utilization of Assistive Technology for Learning among Students with Special Needs in Ilorin, Kwara State. A descriptive research design of survey type was employed for this study. Multi-stage sampling techniques of simple random sampling and purposive sampling were used to select 100 respondents for the study. The questionnaire was used for the study. Descriptive and Inferential statistics were used to answer the research question and test the stated hypotheses with the aid of statistical product and service solution (SPSS) version 20.0 at a 0.05 level of significance. The findings from this study showed that assistive Technology devices are available for assimilation of students with special needs in Ilorin, Kwara and there is no significant influence in the utilization of assistive technology for students of special needs based on the gender of the students. It was recommended that the Government should provide adequate funding to improve the availability of assistive technology.

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1. INTRODUCTION

It is an undeniable fact that every society recognizes the importance of developing its human resources, especially the young ones who have diverse needs. Thus, education is globally acclaimed as the critical engine that drives the vehicle of development in any nation (Nabasa, 2004). As a consequence, a plethora of attempts have been made by different countries and international organizations to legalize, appropriate and harness the developmental potentialities of education for the benefit of all citizens of the world. For instance, Article 26 of the 1948 Universal Declaration of Human Rights states specifically that “everyone must have the right to education”. In a like manner, at the World Education Forum held in 2000, the Dakar Framework for Action was adopted and as a consequence, the Education for All Agenda was declared. Based on these internationally recognized documents, it is therefore a truism that education remains a viable and indispensable means of developing human capacity regardless of individual differences and abilities (Mull and Sitlington, 2003).

The role of technology in the transition to postsecondary education of students with learning disabilities indicated that special education is for special needs in a way that addresses the students’ differences and needs. He added that ideally special education as a process should involve individually plan and systematically mentioned arrangement of teaching procedures, adaptive equipment, and materials accessible settings, and other interventions designed to help learners with special needs achieve a higher level of personal self-sufficiency and success in school and community that would be available. Towards this end, it is clearly spelled out in Section 2 (c) of the Nigerians with Disabilities Decree of 1993 that “disabled persons are provided equal and adequate education”. Hence, in a bid to effectively meet the educational needs of People Living With Disabilities (PWLDs), it is stipulated in Section 7 sub-section 99 of the National Policy on Education (Mull and Sitlington, 2003) that the goal of special education is to “equalize educational opportunities for all children irrespective of their physical, sensory, mental, psychological or emotional disabilities; provide adequate education for all people with special needs so that they may fully contribute their quota to the development of the nation. In substantiating the foregoing, Alnahdi, (2014). Defined special needs education as a special education training given to the people children and adults with special needs, who fall into two categories: the disabled and the gifted.

The disabled include children and adults with hearing impairment, visual impairment, physical and health impairment, intellectual disabilities, learning disabilities, multiple handicaps, emotional and behavioral disorders. On the other hand, the gifted are students with outstanding talents, intelligence, and level of comprehension that are above the normal level for their contemporaries (Alnahdi, 2014). Assistive technology is thus a generic name for a wide array of technological devices that can be used to help students with special needs surmount the challenges of learning quickly, easily, or independently in the cognitive, affective, and psychomotor domains. Assistive technology (AT) is an umbrella term that includes assistive, adaptive, and rehabilitative devices for people with disabilities and also includes the process of selecting, locating, and using them (Ministry of Education 2012).

The availability of teachers and other personnel in the Nigerian educational system may not necessarily imply the successful training of special needs students unless teachers are supplied with the appropriate technology that could be leveraged to cater to the special needs students. Technology is a defined combination of a network of software and hardware as well as a convergence of information and communication technology (Nkechi, 2013). Technology plays an integral role in education because it provides a meaningful learning

experience in the teaching-learning process (Shikden, 2012). Thus, technology has been globally recognized as a *sine qua non* for teachers and students in special needs schools.

The form of technology that enables special needs students to benefit maximally from the goals of education in Nigeria is called assistive technology. Assistive technology refers to virtual tools that might be harnessed to compensate for the specific inabilities of students in the teaching-learning enterprise (Reed and Bowser, 2005). Assistive technology has also been defined as devices, tools, equipment, and services that engender improvement in the capabilities of special needs students (Bryant and Seay, 1998). Assistive technology as any item, equipment, hardware, software, product, or service which maintains, increases, or improves the functional capabilities of individuals of any age, especially those with disabilities, and enables them more easily to communicate, learn, enjoy and live better, more independent lives. Stodden *et al.*, (2003) reported that some emerging technologies are producing laudable results as assistive technologies in the field of special education. Such technologies include

- (i) iPads with a durable touch screen, that can be used for visual learning, reading and video watching, interaction with programs via web access;
- (ii) Read 180, a software for students with reading disabilities, that creates an individualized program for each student, giving each child goals of fluency and tracking progress; and
- (iii) Photo Vocabulary, a software that uses simple activities such as audio pronunciation and vocabulary flashcards to strengthen the communication skills and fluency of students with disabilities.

Thus, the vast array of assistive technologies that could be used to help students with visual impairment in special educational classrooms include handheld text readers, screen readers, sonar vision glasses, canes and sensor technologies to assist movement, text-braille converters, and Closed Circuit Television (CCTV), magnification systems and built-in computer screen magnification control panels for the blind; onscreen keyboard for people who are unable, for various reasons, to use a standard keyboard (Causton-Theoharis, *et al.*, 2008; Stodden *et al.*, 2003). Others include voice recognition that allows a user to use his/her voice as an input device. Voice recognition may be used to dictate text into the computer or to give commands to the computer, such as opening application programs, pulling down menus, or saving work and screen magnification software which is used by people with visual disabilities to access information on a computer screen.

For learners with learning disabilities, digital books, graphing calculators, talking calculators, computers, talking dictionaries, and a host of other forms of technologies could be used by students and teachers. A simple voice output device, Voice output device with icon sequencing, Voice output device with a dynamic display, and Braille notetaker are other forms of assistive technologies that are suitable for students with speech and communication disorders. Telecommunication Device for the Deaf (TDD), Frequency Modulator (FM) or loop system, the electronic hearing aid is usually utilized in the education of students with hearing impairment while walkers, grab bars and rails, manual and automated wheelchairs cater for the specific needs of students with physical impairments. In the same vein, learning games with the instructional software program, beads-in-pocket are relevant forms of assistive technologies for the specific educational needs of students with emotional and behavioral problems (Bryant and Seay, 1998). The use of emerging technologies such as tablets and iPads as technology in special education classrooms is limitless as they can be used as a computer, an imaging device, a projector, a mouse, a keyboard, and a remote device for whiteboards.

Also, Apple's App Store and Google's Android App market both offer a number of Apps designed to assist in the use of technology in special education classrooms (Copley and Ziviani, 2004).

However, regardless of the benefits of assistive technology in meeting the special educational needs of students in Nigeria, it is no longer news that it is only the available forms of assistive technology that could be used in the teaching-learning process. Thus, the availability of assistive technology implies that various forms of assistive technology tools are present in the school system for students to use outside the school setting. In other words, a form of assistive technology would be said to be available if students with special needs, teachers, and other personnel in the school environment have the benefit of using it for teaching and learning activities as when due without any form of limitation (Opini, 2010).

Given the importance of the availability of assistive technologies in the teaching-learning process, the available forms of assistive technologies must be functional and readily within the reach of special needs students. However, extant research indicates that several forms of assistive technology might not be readily available for special needs students, teachers, and other school personnel to use in Nigeria, due to a plethora of factors, which include the high costs of the imported forms of assistive technology and lack of funds to procure new forms of assistive technology (Wehmeyer, et al., 2008; Yusuf and Fakomogbon, 2012). The utilization of assistive technology implies the extent to which the available forms of assistive technology are actually being used to facilitate the teaching-learning process (Stodden et al., 2003). Thus, assistive technologies could be said to be effectively utilized in the teaching-learning process when the needs of students are being met adequately and students benefit and participate actively in the learning environment.

Given the importance of utilization of assistive technology in the school system, there is no gainsaying the fact that school type remains one of the demographic characteristics of schools that could influence the availability and utilization of assistive technology in the teaching-learning process. In other words, the procurement of the required forms of assistive technology is a function of the type of school, which could be a public or private school. For instance, some public schools in Nigeria, such as the Kwara State School for the Special Needs and a host of others and properly funded and administered by the government. Therefore, assistive technologies might be available and utilized in such schools. In a like manner, some private schools in Kwara State have various forms of assistive technologies to cater to the educational needs of their special needs students (Wehmeyer, et al., 2008; Yusuf and Fakomogbon, 2012).

Stressed the importance of the goals of education, especially at the secondary school level. However, the astronomical increase in the population of public secondary school students has posed some challenges for the managers of the schools. Hence, secondary education has been liberalized by the government to enable private sector participation in its provision. Thus, the private sector participation has brought about an increase in the number of secondary schools to serve the growing educational needs of the teeming populace. In other words, secondary schools in Nigeria could be broadly categorized into two which include public secondary schools and private secondary schools. Towards this end, findings indicate that school type significantly influenced the utilization of assistive technology in education (Okazaki and Renda, 2012). Towards this end, some studies such as Wehmeyer, et al., 2008; Yusuf and Fakomogbon, 2012) have focused on the integration of assistive technologies within the Nigerian context. Thus, to harness the potentialities of assistive technology in special needs schools in Ilorin, Kwara State, it is imperative to investigate the availability and utilization of assistive technology among students with special needs in Ilorin, Kwara State.

In the statement of the problem, to compensate for various disabilities and subsequent challenges, individuals with disabilities have relied on assistive technologies for centuries. To be successful in a technologically advanced society, special needs students must have and effectively utilize diverse forms of assistive technology tools to learn. Several researchers such as Yusuf and Fakomogbon, (2012) and Onivehu, Ohawuiro, and Oyeniran (2017) reported that assistive technologies are not readily available and utilized for learning in some selected special needs schools in the Kwara State and the Osun State, respectively. These studies also submitted that many assistive technologies are not available in special schools though the teachers have a positive attitude towards the use of assistive technologies. It is therefore imperative to research into whether assistive technology tools are being available and being utilized for learning among students with special needs.

The following research questions were raised to guide the conduct of this study.

- (i) What are the available assistive technologies (AT) utilized by students with special needs in the Ilorin metropolis?
- (ii) What is the frequency of utilization of assistive technology (AT) for students with special needs in the Ilorin metropolis?
- (iii) What is the difference in the utilization of assistive technology for special needs students' education in the Ilorin metropolis based on gender?
- (iv) What is the level of assimilation of students with different impairments in special needs in Ilorin, Kwara State?

The following hypotheses are postulated and tested in the study:

- (i) **H₁**: There is no significant difference in the utilization of assistive technology for special students' education based on gender.
- (ii) **H₂**: There is no significant difference in the use of assistive technology for assimilation by special needs students based on their type of impairment.

2. METHODS

2.1. Methodology

Descriptive research of the survey type was adopted for this study. This method was considered the most suitable design for this study because it involves selecting a chosen sample from a large population. This research is targeted at the special needs students in special needs schools in Ilorin Metropolis. Based on the estimated population of 1,350 special needs students in Ilorin Metropolis, the sample was drawn from the population using multi-stage sampling techniques. This involves using stratified random sampling techniques to divide the population into strata. Then, proportional sampling techniques and simple random sampling techniques were used to select respondents from each of the strata. Specifically, 100 special needs students were selected to constitute the sample of this study.

2.2. Research Instruments

The instrument that was used for this study is a questionnaire titled "Availability and Utilization of Assistive Technology for Special Needs". It consisted of three sections A, B, and C: Section A deals with the respondents' demographical data; Section B used a checklist to determine the availability and utilization of assistive technologies for students for special needs in the Ilorin metropolis in which respondents used Available and functional (AF), Available and not functional (ANF), Not Available (NU) as response mode; and Section C addressed the frequency of use of assistive technologies for students for special needs in

Ilorin metropolis in which respondents stated if the available assistive technologies are frequently used, very often, often, rarely used and never used.

2.3. Validity and Reliability of the Instruments

Validity explains how well the collected data covers the actual area of investigation. The instrument was validated for face and content validity by three lecturers within the Department of Educational Technology, University of Ilorin, Ilorin, Nigeria. Following the lecturers' validation reports, some items of the research instrument were corrected, adjusted, and modified as directed to reinforce the validity. Reliability concerns the extent to which a measurement of a phenomenon provides a stable and consistent result. For example, a scale or test is claimed to be reliable if repeat measurement made under constant conditions will give the same result. A pilot study was administered from a specific university in Oyo State for the reliability of the research instrument. The research instrument was reliable at 0.84 for items on perception at 0.05 level of significance, using Cronbach Alpha SPSS statistical tool.

2.4. Procedure for Data Collection

The researcher obtained a letter of introduction from the Head of the department, Educational Technology, University of Ilorin, to seek permission from the acceptable authority within the sampled schools to facilitate easy administration of the questionnaires. The researcher read and explained the aim of the study to the participants. The respondents got sufficient time to answer the questionnaire. After which, the researcher personally collected the answered questionnaire. Ethical consideration was maintained through the period of data collection. The researcher ensured that respondents were not coerced to fill the questionnaire and respondents were allowed to participate voluntarily. Also, utmost confidentiality and secrecy of the respondents were maintained during the administration, collation, and report of research findings.

2.5. Data Analysis Techniques

The respondents' demographic data are presented in **Table 1**. The distribution of students with special needs in the Ilorin metropolis as shown in Table 1, reflecting a difference in gender lines. The table shows that of the ninety-nine (99) that were assessed, forty-three (43) of them representing 42.6% were males and fifty-six (56) representing 57.4% were females. This Table shows that female students with special needs in the Ilorin metropolis are more than males.

Table 1. Respondent distribution based on student's gender.

Gender	Frequency	Percentage %
Male	43	42.6
Female	56	57.4
Total	99	100

3. RESULTS AND DISCUSSION

3.1. Research Question 1: What are The Available Assistive Technologies (At) Utilized by Students with Special Needs in the Ilorin Metropolis?

Table 2 indicated that 74% of respondents chose that the adjustable tables are available while 26% chose that they were not available with the mean score of 1.74; 53.4% chose that wrist rests are available while 46.6% chose that they are not available with the mean score of 1.53; 57.5% of respondents chose that writing frames are available while 42.5% chose that they are not available with the mean score of 1.58; 49.3% of respondents chose that signaling device are available while 50.7% are not available with a mean score of 1.49; Braille and braille embossers were chosen to be available by 52.1% of respondents while 47.9% chose that they are not available with a mean score of 1.52; Stylus was agreed to be available by 45.2% of respondents while 54.8% chose that they are not available with a mean score of 1.45; 58.3% of respondents chose that models and mock-ups are available while 41.7% chose that they are not available with a mean score of 1.58.

Table 3 showed the frequency (N) and percentage of respondents according to their responses to the availability or unavailability of those assistive technologies listed while Table 5 shows the mean scores for each of the items listed. Three assistive technologies signaling devices, stylus, and wheelchairs among the fifteen AT devices listed for this survey are not available for students with special needs in the Ilorin metropolis. Two of the fifteen AT devices, adjustable table, and computers are available in good quantity while the other ten is available on average.

Table 2. Availability of Assistive Technology for students with special needs in Ilorin metropolis.

S/N	Item	Available		Not Available		Total	
		N	%	N	%	N	%
1.	Eye glasses	54	74.0%	19	26.0%	99	100.0%
2.	Optical aids	39	53.4%	34	46.6%	99	100.0%
3.	Talking computers	42	57.5%	31	42.5%	99	100.0%
4.	Braille translation	36	49.3%	37	50.7%	99	100.0%
5.	Braille note taker	37	52.1%	34	47.9%	99	100.0%
6.	Alternate keyboard	33	45.2%	40	54.8%	99	100.0%
7.	Multimedia projector	42	58.3%	30	41.7%	99	100.0%
8.	Screen reader	38	52.1%	35	47.9%	99	100.0%
9.	Hearing Aids	41	56.2%	32	43.8%	99	100.0%
10.	Talking Dictionary	38	52.8%	34	47.2%	99	100.0%
11.	Computer word processor	39	54.2%	33	45.8%	99	100.0%
12.	Electronic hearing	55	75.3%	18	24.7%	99	100.0%
13.	Wheelchairs	31	42.5%	42	57.5%	99	100.0%
14.	Books on Tape/CD	37	51.4%	35	48.6%	99	100.0%
15.	Powered wheelchair with joystick	36	50.0%	36	50.0%	99	100.0%

Table 3. Mean scores for availability of assistive technology for students with special needs in Ilorin metropolis.

S/N	Item	N	Mean
1.	Eye glasses	99	1.74
2.	Optical aids	99	1.53
3.	Talking computers	99	1.58
4.	Alternate keyboard	99	1.49
5.	Braille and Braille Embossers	99	1.52
6.	Screen reader	99	1.45
7.	Models and Mock-ups	99	1.58
8.	Electronic Organiser	99	1.52
9.	Hearing Aids	99	1.56
10.	Talking Dictionary	99	1.53
11.	Speech Input/output	99	1.54
12.	Computer	99	1.75
13.	Wheelchairs	99	1.42
14.	Books on Tape/CD	99	1.51
15.	Adapted Chairs and Tables	99	1.50

3.2. Research question 2: what is the Frequency of Utilization of Assistive Technology (At) For Students with Special Needs in the Ilorin Metropolis?

Table 4. Showed that electronic organizers were chosen to be available by 52.1% of respondents while 47.9% chose that they are not available with a mean of 1.52. Hearing aids had 56.2% of respondents for available while 43.8% chose that they are unavailable with the mean of 1.56; Talking dictionary was chosen to be available by 52.8% of respondents while 47.2% thought that they are not available with a mean of 1.53; 54.2% of respondents chose that speech input/output are available while 45.8% chose that they are not available with a mean of 1.54; Computers, according to 75.3% of respondents are available while 24.7% recorded computers as not available with a mean of 1.75; 42.5% of respondents recorded wheelchairs as available while 57.5% recorded them as not available with a mean of 1.42; Books on tape/CD, according to 51.4% of respondents are available while 48.6% of respondents recorded them as not available with a mean of 1.51; and Adapted chairs and tables, according to 50% of respondents are available while the other 50% recorded them as not available.

Table 5 showed the data for frequency of use of assistive technologies and the mean scores, respectively. Drawing from the above tables, it can be noted that 41.7% of respondents chose that adjustable tables are rarely used with a mean of 2.14; 52.8% chose that wrist rests are rarely used with a mean of 1.97; 45.2% chose that writing frames are rarely used with a mean of 2.05; 44.4% of respondents agreed that signaling devices are not used with a mean of 1.78; 43.8% agreed that Braille and Braille embossers are rarely used with a mean of 1.88; 44.4% agreed that stylus is rarely used with a mean of 1.83; 45.1% chose that models and mock-ups are rarely used with a mean of 2.10; 39.7% chose that electronic organizers are rarely used with a mean of 1.89; 47.9% chose that hearing aids are not used with a mean of 1.79; 50% agreed that talking dictionary is rarely used with a mean of 2.06; 38.0% chose that speech input/output are rarely used with a mean of 1.94; 41.7% agreed that

computers are frequently used with a mean of 2.22; 38.4% chose that wheelchairs are not used with a mean of 1.95; 41.1% agreed that books on tapes/CD are rarely used with a mean of 1.88; and 51.4% chose that adapted chairs and tables are not used with a mean of 1.68.

3.4. Hypotheses Testing

3.4.1. Hypothesis one: There is no significant difference in the utilization of assistive technology for special students' education based on gender

From **Table 6**, $df (97)$, $t = .051$, $p > .05$. This means that the hypothesis is accepted. This was due to the t-value of .050 resulting in a 0.850 significance value which is greater than the 0.05 alpha level. Thus, the hypothesis is accepted. This implies that there is no significant difference in the utilization of assistive technology for special education students based on gender.

3.4.2. Hypothesis two: There is no significant difference in the use of assistive technology for assimilation by special needs students based on their type of impairment

Table 7 is the analysis of variance to check for the significant difference in the utilization of assistive technologies for students with special needs in the Ilorin metropolis based on students' impairment. The table shows that $F (32, 67) = .964$ $P=0.514$ greater than 0.05 alpha level of significance. The hypothesis stated that there was no significant difference in the utilization of assistive technology based on student impairment. Using hypothesis H02 to answer research question 5, it can be noted that the student impairment does not have a very significant influence on the utilization of assistive technologies for students with special needs in the Ilorin metropolis. Based on these findings, it was discovered that there is no difference between the level of assimilation among students with visual impairment, hearing impairment, and physical impairment.

3.5. Discussion of Findings

The research examined the availability and utilization of assistive technology for special needs students in Ilorin Metropolis, Kwara State, Nigeria. The results obtained from the data gathered and analyzed in this study indicated that there are only a limited number of assistive technology devices available in the metropolis. Assistive technology devices available for special education in Ilorin Metropolis include adjustable tables and computers which are available in very good quantity. Also available are wrist rest, writing frame, Braille and Braille embossers, models and mock-ups, electronic organizer, hearing aids, talking dictionary, speech input/output, books on tape/CD, adapted chairs, and tables.

It was further revealed that only a few of the assistive technologies available are being utilized for special education in the metropolis of Ilorin. It was also revealed that very few are being frequently used for the teaching and learning of special needs. Furthermore, a significant difference was not found between male and female learners with hearing impairment towards the use of Assistive Technologies. This implies that students' gender does not influence their Use of Assistive Technologies for learning. This study also revealed that factors such as gender and tribe do not have any significant influence on the utilization of assistive technology devices for special education. That is there is no significant difference in the utilization of assistive technology based on gender.

Table 4. Frequency of use of assistive technology for students with special needs in ilorin metropolis.

SN	Item	FU		RU		NU		Total	
		N	%	N	%	N	%	N	%
1	Eyeglasses	26	36.1%	30	41.7%	16	22.2%	99	100.0%
2	Optical aids	16	22.2%	38	52.8%	18	25.0%	94	100.0%
3	Talking computers	22	30.1%	33	45.2%	18	24.7%	94	100.0%
4	Alternate keyboard	16	22.2%	24	33.3%	32	44.4%	99	100.0%
5	Braille and Braille Embossers	16	21.9%	32	43.8%	25	34.2%	99	100.0%
6	Stylus	14	19.4%	32	44.4%	26	36.1%	99	100.0%
7	Models and Mock-ups	23	32.4%	32	45.1%	16	22.5%	99	100.0%
8	Electronic Organiser	18	24.7%	29	39.7%	26	35.6%	98	100.0%
9	Hearing Aids	19	26.8%	18	25.4%	34	47.9%	99	100.0%
10	Talking Dictionary	20	27.8%	36	50.0%	16	22.2%	99	100.0%
11	Speech Input/output	20	28.2%	27	38.0%	24	33.8%	99	100.0%
12	Computer	30	41.7%	28	38.9%	14	19.4%	99	100.0%
13	Wheelchairs	24	32.9%	21	28.8%	28	38.4%	98	100.0%
14	Books on Tape/CD	17	23.3%	30	41.1%	26	35.6%	99	100.0%
15.	Adapted Chairs and Tables	14	19.4%	21	29.2%	37	51.4%	94	100.0%

Table 5. Mean scores for frequency of use of assistive technology for special education in ilorin metropolis.

S/N	Item	N	Mean
1.	Eye glasses	99	2.14
2.	Optical aids	98	1.97
3.	Talking computer	99	2.05
4.	Alternate keyboard	98	1.78
5.	Braille and Braille Embossers	99	1.88
6.	Screen reader	99	1.83
7.	Models and Mock-ups	99	2.10
8.	Electronic Organiser	97	1.89
9.	Hearing Aids	99	1.79
10.	Talking Dictionary	94	2.06
11.	Speech Input/output	93	1.94
12	Computer	93	2.22
13,	Wheelchairs	99	1.95
14.	Books on Tape/CD	93	1.88
15.	Adapted Chairs and Tables	92	1.68

Table 6. Independent Sample t-test of the utilization of assistive technology for students with special needs based on gender.

Gender	No	\bar{X}	SD	Df	T	Sig(2-tailed)	Remark
Male	43	3.90	0.242	97	0.051	0.850	Accepted
Female	56	4.01	0.251				

Table 7. ANOVA of significant difference in the use of assistive technology for assimilation by special needs students based on their type of impairment.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	8.323	32	.462	.964	.514
Within Groups	21.105	67	.480		
Total	29.429	99			

4. CONCLUSION

It is vital to know the differences in the level of assimilation of the students based on their differences in impairment and knowledge of the available technologies that could support students in their academic tasks. Alnahdi (2014) argued that failure to realize and exposed the usefulness and applications of technology in education in general, and special education specifically, will be more reluctant to use them. It is therefore important to know how to assist each respective student on learning and assimilation. In this way, special education teachers will have the knowledge and experience in using technology that will contribute to the widespread use of technology in special education programs for the students. The study, therefore, recommended that the instructors or teachers at these schools should be well trained to be able to make use of these technologies for the students with special needs to enhance their learning activities.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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