Accommodation Strategies in Teaching of Electrical and Electronics Technology Trades among Technical College Students with Disabilities

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Abstract

The study identified the accommodation strategies needed in teaching of electrical and electronics technology trades among technical college students with disabilities. Four research questions were answered and one null-hypotheses was tested at .05 level of significance. The study adopted cross-sectional survey design to elicit the opinions of a cross-section of 15 Administrative staff in Niger state Science and Technical Education Board (STEB), 17 Electrical and Electronics Trade Teachers in Technical Colleges, and 18 university lecturers on accommodation strategies with regards to how information or lesson should be presented; the manner in which students are asked to respond; the characteristics of the setting; and the timing and scheduling of instruction in workshops and classrooms. The instrument for data collection is a structured Accommodation Strategies Questionnaire (ASQ). Data was collected by administering the ASQ to the research subjects and analyzed using mean and Standard Deviation to answer the research questions, while Analysis of Variance (ANOVA) and Post-Hoc-Test were used to test the null-hypothesis. Findings revealed among others that students need individualized accommodation strategies to be able to cope in learning of Electrical and Electronics Trades in technical colleges. These include audio formats of lessons e.g audio book for students with visual impairments, text-to-speech software for students with speech impairments, as well as advanced organizers for students with Attention Deficit Hyperactivity Disorder (ADHD) that can enable them to access the same instructional presentation as those without disabilities. More so, findings showed that university lecturers are more aware of accommodation strategies needed by students with disabilities in technical colleges than Admin staff and Electrical and Electronics Trade Teachers. It was therefore recommended that stakeholders in technical education such as STEB which is the highest authority in terms of policy formulation and dissemination in technical colleges in Niger state should: (1) Come-up with policies mandating sufficient slot of admission to be given to students with disabilities into technical colleges; (2) Teachers should be trained on accommodation strategies so as to effectively respond to the special needs of students with disabilities in Technical colleges.

Keywords: Accommodation strategies; Students with Disabilities; Technical Colleges

Introduction

Nigeria like most developing countries is still struggling to make adequate provisions of quality education for students with disabilities, especially on mainstreaming basis. Disability refers to physical or mental impairment that significantly limits student's learning activities which include performing manual or practical tasks, walking, seeing, hearing, speaking or caring for oneself in school. Disability may be inherent due to genetic conditions or caused by injury or disease which can create a major disadvantage impacting upon the quality of life of an individual unless if he/she is given the needed support to enable him/her enjoy full inclusiveness in the society. Inclusive education in highly populated countries such as Nigeria is an opportunity to maximize the potentials of every individual irrespective of his/her gender or disabilities. According to Federal Republic of Nigeria (FRN, 2013), education is compulsory and a right of every Nigerian citizen, including persons with disabilities. Whereas this may be true in every theoretical sense, it is pathetic to state that in real life situations, individuals with disabilities are often discriminated educationally as they rarely secure admissions into mainstream schools such as technical colleges where students are prepared for the world of work. One of the causes of this discrimination may be due to stakeholders' inability to utilize possible ways of addressing disabled students' barriers to learning.

Teachers in technical colleges in Nigeria can address these barriers and create better access to learning by employing accommodation strategies. According to Thurlow, Elliott and Ysseldykes (1998) accommodation strategies are adaptations or changes to educational environments and practices designed to help students overcome the challenges presented by their disabilities. Expert in education have opined that in some instances, these barriers to learning can be relatively simple to address. For example, a student who finds it difficult to hold a screwdriver or plier in an electrical and electronics workshop because of poor fine-psychomotor skills might require a special grip to help him/her complete a practical task (IRIS, 2019). In other instances, addressing learning barriers can prove to be more complex, as various categories of students with disabilities require individualized accommodation strategies that can address their specific problems in learning of difficult subjects such as Electrical and Electronic Technology Trade. To this end, barriers to learning can be related to: (1) The type of settings adopted in the workshop/classroom; (2) The timing and scheduling of instruction; (3) The manner in which students are assessed or asked to respond; and (4) How lesson is presented in electrical and electronics class and workshop (Jeremy, 2013).

Lesson presentation accommodation strategies may include provision of artificial limps, audio formats of lessons, (e.g audio book), text-to-speech software, adjustable hydraulic-ladder for electrical installation or advanced organizers that can enable disabled students to access the same electrical and electronics instructional tasks (IRIS, 2019). Response accommodations

strategies allow students with disabilities to demonstrate their learning or practical skills performances by completing instructional assignments or assessments through ways other than typical verbal or written responses. In general, instructional or testing environments should be well organized with a comfortable temperature, good ventilation, and minimal extraneous noise or other interruptions. Even under ideal conditions, however, some aspects of the environment or settings may present barriers for certain students with autism and Attention Deficit Hyper Activity Disorder (ADHD).

Students with autism or ADHD might benefit from setting accommodation strategies by enjoying changes in the original setting of the classroom or workshop in learning of Electrical and Electronics Trades (Zigmond, 2003). Scheduling accommodations strategies involve changes in how time is allocated, scheduled and managed. Students with impairments may need scheduling accommodations to address issues related to effort, rate of performance, attention, and their own ability to monitor and manage time (Florida Department of Education, 2018). Many students with disabilities having overcome some certain barriers in normal day-to-day activities are often highly motivated and hardworking as such they can be able to bring these strengths and seriousness to classrooms and workshops in learning of Electrical and Electronic Technology Trades. However, Beech (2018) has warned that a good accommodations strategy should not change the expectations of learning or reduce the requirements of the tasks that students with disabilities are required to perform in technical colleges.

Technical colleges are vocational training institutions in Nigeria that are saddled with the responsibility of imparting knowledge to individuals in applied sciences, technology and business particularly at craft and technical level. The programmes in these colleges which are equivalent to secondary schools are grouped into related trades. These includes: computer trades, mechanical trades, building trades, wood trades, hospitality trades, textile trades, printing trades, beauty culture trades, business trades and Electrical and Electronic Trades (FRN, 2013). Electrical and Electronic Trade is a general name used to describe trades that have direct bearing with practical skills in servicing/repairs of electrical/electronic equipment and appliances. The trades in this group include: electrical installation and maintenance work, appliances repairs as well as radio, television and electronic work (RTV). According to National Board for Technical Education (NBTE, 2001) minimum standards, these trades are designed to reflect a functional philosophy of education. Hence, trainees are expected to know how to troubleshoot or trace faults and repair electrical and electronic equipment. The graduates of these colleges, including students with disabilities if given the chances through effective accommodation strategies shall secure employment or set their own businesses and be able to employ others instead of begging on the streets.

This is so because, despites governments' agitations and criminalization of discrimination against the disabled in education, healthcare and employment, the population of children with disabilities on the streets, who are out of school in Nigeria have reached alarming level. Even though Nigeria has endorsed several international treaties in support of Special Education Needs Disability (SEND) policies such as the United Nations (1993) Standard Rules on the Equalization of Opportunities for Persons with Disabilities, the Salamanca Declaration (1994), the United Nations Conventions on the Rights of Persons with Disabilities (2006), it has only recently provided the appropriate policy framework for special needs populations in 2015 and the inclusion of persons with disabilities in the school system in 2016. A report by United Nation Children's Fund (UNICEF, 2016) revealed that about 95% of children with disabilities in developing countries are out of school and 90% of them may never gain access to secondary education in their lifetime. More so, Natalie (2011) reported that out of every 1000 individuals with disabilities in Kogi and Niger states, only 20% had primary education, 8% had secondary education and 2% had tertiary education. This poses serious threats to their employability chances, health, mortality rate, security and overall national development. This precarious problem may not be unconnected with negligence from the side of government and lack of public awareness especially among officials, policy makers, professionals, parents, and other stakeholders who have shown low interest and commitment to inclusive and accessible education for students with disabilities.

With these scary statistics in the mainstream educational enrolment of the disabled, concerned researchers become more worried and prompted to further investigate whether there is difference in the opinion of stakeholders such as Admin Personnel in Science and Technical Education Board (STEB) in Niger state who select eligible candidates and give admissions into technical colleges as well as teachers in tertiary institutions and technical colleges on accommodation strategies that can be used to effectively help students with disabilities overcome their barriers to learning. By virtue of higher qualification attained in teaching of Electrical and Electronics courses, university lecturers may be more current concerning accommodations strategies among students with disabilities than their counterparts in technical colleges and admin staff in STEB in Niger state. Oladele, Sani and Adebayo (2018) asserted that most stakeholders are not aware of the 2015 and 2016 SEND policies and that teachers in Nigeria do not adapt accommodation strategies that can address the needs of learners with diverse background and disabilities.

In actual sense, accommodations strategies help students with disabilities to access the same instructional opportunities as students without disabilities, thereby leveling the playing field so as to provide equity among various categories of students. That is, providing each student with what he/she needs to successfully complete a given task or assignment in learning of Electrical and Electronics Trades. Therefore by promoting equity in technical colleges, Electrical and Electronics Trade teachers as well as Admin Personnel in STEB in Niger state can break down

the barriers that interfere with students' opportunities to access learning. Consequently, the present study ask a pertinent question: what are the accommodation strategies in teaching of Electrical and Electronics Trades among technical college students with disabilities in Niger state, Nigeria?

Objectives of the Study

This study sought to investigate:

1. Lesson presentation accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities
2. Assessment accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities
3. Classroom/workshop setting accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities
4. Timing and scheduling accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities

Research Questions

The following research questions were answered:

1. What are the lesson presentation accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities?
2. What are the assessment accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities?
3. What are the classroom/workshop setting accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities?
4. What are the timing and scheduling accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities?

Research Hypothesis: There is no significant difference in the mean ratings of Admin Personnel, Electrical and Electronic Teachers in Universities and Technical Colleges on accommodations strategies in teaching of Electrical and Electronics Trades among students with disabilities

Methodology

The study adopted cross-sectional survey design. The population of the study is 50 subjects consisting of a cross-section of 15 Administrative staff in Niger state Science and Technical Education Board (STEB), 17 Electrical and Electronics Trade Teachers in Technical Colleges, and 18 university lecturers in Federal University of Technology Minna, Niger state. The area of the study is Niger state, Nigeria. The instrument for data collection is a structured

Accommodation Strategies Questionnaire (ASQ). The ASQ was constructed by the researchers and is made up of four sections A, B, C and D with regards to how information or lesson should be presented; the manner in which students are asked to respond; the characteristics of the setting; and the timing and scheduling of instruction in workshops and classrooms. The instrument is based on five response options of Strongly Agree (SA), Agree (A), Undecided (U) Disagree (D) and Strongly Disagree (SD). These response options have corresponding magnitudes of 5, 4, 3, 2 and 1 respectively. The ASQ was validated by three experts in electrical and electronics technology education from the Department of Industrial and Technology Education, Federal University of Technology Minna, Niger state. The experts were requested to suggest modifications on the structure of the items, organization as well as their appropriateness and then rated them according to their suitability for use in the present study. The suggestions made were effected in the final copies of the instruments.

The reliability of the ASQ was established after a pilot test was carried out in Kaduna state using 30 subjects of similar characteristics but different location with the main population of the study. The reliability coefficient was calculated using split half method yielding a Pearson Product Moment Correlation coefficient (r) of 0.78. Data was collected by administering the ASQ to the research subjects and analyzed using mean and Standard Deviation to answer the research questions, while Analysis of Variance (ANOVA) and Post-Hoc-Test were used to test the null-hypothesis. For the purpose of making decisions in answering the research questions, items with the mean scores of 3.00 and above were considered agreed by the respondents while, those with the mean score of 2.99 and below were considered disagreed by the respondents.

Results

Research Question One: What are the lesson presentation accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities?

Table 1: Lesson presentation accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities

N_1 = 15, N_2 = 17, N_3 = 18

SN	ITEMS	$\bar{X}_1$	SD_1	$\bar{X}_2$	SD_2	$\bar{X}_3$	SD_3	$\bar{X}_A$	SD_A	RMK
1	Utilizing text to speech software for students with problem in understanding electronic components colour coding	2.20	.41	2.70	.58	4.83	.71	3.32	.57	Agreed
2	Use of digital text with on-demand electrical dictionary for students who have problems in comprehending electrical and electronics terms and parameters	3.93	.70	3.41	.50	4.11	.58	3.80	.60	Agreed

3	Providing braille electrical circuit boards during practical sessions for students with visual impairments	3.53	.74	3.59	.51	4.17	.62	3.78	.62	Agreed
4	Use of advanced organisers and paraphrasing for students who have difficulties in comprehending oral presentation of information	2.53	.52	3.47	.72	4.61	.92	3.60	.72	Agreed
5	Employing the use of graphic organisers and note-takers for students with challenges in remembering electrical circuit symbols and diagrams	1.07	.59	1.41	.71	2.28	.67	1.62	.81	Disagreed
6	Reducing visual and auditory distractions for students who cannot stay focused or maintain attention in workshops and classrooms	1.67	.72	3.41	.51	3.17	.79	2.80	.71	Disagreed
7.	Provision of large-print on paper base materials or enlarge text on computer-based programs for students with vision impairment who are unable to see regular prints	2.80	.86	3.41	.62	3.89	.68	3.40	.90	Agreed
8.	Allowing students with visual impairments to use magnifying glasses to view and work on electrical and electronics circuits	2.73	.70	3.53	.62	2.72	.57	2.97	.61	Disagreed

Data analyzed in Table 1 shows that respondents agreed with all the items on lesson presentation accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities except items 5, 6 and 8.

Research Question Two: What are the assessment accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities?

Table 2: Assessment accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities

$N_1 = 15, N_2 = 17, N_3 = 18$

SN	ITEMS	$\bar{X}_1$	SD_1	$\bar{X}_2$	SD_2	$\bar{X}_3$	SD_3	$\bar{X}_A$	SD_A	RMK
1	Train students with verbal communication impairment to draw electrical circuits and respond to questions on tablet or computer during tests and examinations	2.33	.48	2.47	.62	3.67	.69	2.86	.60	Agreed
2	Employ trained interpreters or sign language experts to aid communication of electrical and electronic terms to students with hearing impairments during examinations	2.93	.79	3.41	.51	3.61	.90	3.34	.70	Agreed
3	Let students who experience difficulties in grammar and	3.73	.96	2.71	.59	3.61	.70	3.34	.75	Agreed

	punctuation use word-processing devices with grammar-checking features to answer questions									
4	Allow students who experience difficulties in electrical calculations to use sheets of basic maths facts to respond to questions that involve much calculations	3.73	.88	2.65	.91	3.67	.77	3.34	.85	Agreed
5	Provide tools with special grips to students with poor fine-motor skills to complete electronic troubleshooting tasks	2.80	.86	4.71	.79	3.33	.77	3.64	.80	Agreed
6	Supply templates and guides for students with learning disorder to complete electrical and electronic homework and practical assignments	2.73	.69	3.35	.82	3.61	.70	3.26	.73	Agreed
7.	Students who have inadequate pencil grasp should use mechanical pencils during electrical and electronics drawings tests or examinations	3.00	.84	3.65	.61	3.28	.67	3.32	.71	Agreed

Data analysis presented in Table 2 reveals that respondents adjudged all the items as assessment accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities.

Research Question Three: What are the classroom setting accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities?

Table 3: Classroom setting accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities

$N_1 = 15$, $N_2 = 17$, $N_3 = 18$

SN	ITEMS	$\bar{X}_1$	SD_1	$\bar{X}_2$	SD_2	$\bar{X}_3$	SD_3	$\bar{X}_A$	SD_A	RMK
1	Provide pre-requisite setting in workshop/classroom (example, sitting near teacher) to students who have problem in staying focused or maintaining attention	2.53	.74	2.64	.61	4.33	.68	3.22	.62	Agreed
2	Stimulate small-group settings, one-on-one settings and regular procedures to accommodate students who experience difficulties in regulating their behaviour	2.33	.39	2.70	.59	4.00	.68	3.06	.54	Agreed
3	Allow students with visual impairments to seat near whiteboards in learning of electrical and electronics trades	2.63	.81	2.70	.68	4.11	.67	3.19	.74	Agreed

4	Change classrooms settings in favour of students with hearing impairments	2.07	.76	2.64	.61	4.00	.76	3.06	.73	Agreed
5	Allow students with physical challenges such as mobility problem to seat near electrical outlets during practical classes	1.67	.71	2.53	.80	2.11	.88	2.13	.78	Disagreed
6	Provision of adaptive furniture or equipment such as adjustable-height desk for students with physical challenges	2.00	.84	4.77	.66	3.44	.61	3.46	.72	Agreed

Analysis shown in Table 3 reveals that respondents accepted all the items as the classroom setting accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities except item 5.

Research Question Four: What are the timing and scheduling accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities?

Table 4: Timing and scheduling accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities

$N_1 = 15$, $N_2 = 17$, $N_3 = 18$

SN	ITEMS	$\bar{X}_1$	SD_1	$\bar{X}_2$	SD_2	$\bar{X}_3$	SD_3	$\bar{X}_A$	SD_A	RMK
1	Extended time to complete electrical and electronics practical tasks for students who cannot do well under pressure and tight schedule	3.27	.43	3.47	.62	4.32	.92	3.72	7.43	Agreed
2	Providing intermittent breaks and clear tasks schedule on case-by-case basis to electronics students who experience difficulties in staying on tasks until completion	2.40	.63	2.53	.62	3.23	.83	2.74	.72	Disagreed
3	Breaking practical tasks in electrical and electronics workshop into parts for students who experience difficulty in continuous tasks performance	3.73	.79	3.35	.49	3.49	.74	3.51	.57	Agreed
4	Provision of electronic devices such as alarms, timers and organisers for students who experience difficulties in responding to	2.87	.83	3.65	.61	3.56	.65	3.62	.74	Agreed

	schedules and timings in learning of electrical and electronics trades								
5	Allow students on medication that causes behavioural changes such as drowsiness to perform tasks at a more convenient schedule or time	4.80	.77	2.29	.47	2.45	.96	3.57	8.02	Agreed
6	Reinforce time limits for assignments on students who complete assignments quickly but inaccurately in learning of electrical and electronics trades	2.67	.61	3.82	.63	2.90	.86	2.63	.73	Disagreed
7.	Provide visual schedule to students who experience difficulties in remembering what to do during electrical and electronics troubleshooting	2.93	.88	3.29	.47	4.33	.76	3.47	.62	Agreed

Data presented and analyzed in Table 4 indicate that respondents agreed with all the items except 2 and 6 as the timing and scheduling accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities.

Research Hypothesis: There is no significant difference in the mean ratings of Admin Personnel, Electrical and Electronic Teachers in Universities and Technical Colleges on accommodations strategies in teaching of Electrical and Electronics Trades among students with disabilities

Table 5: Summary of Analysis of Variance (ANOVA) on the Mean Ratings of Admin Personnel, Teachers in Universities and Technical Colleges on Accommodations Strategies in Teaching of Electrical and Electronics Trades among Students with Disabilities

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	34.368	2	17.184	394.198	.000
Within Groups	2.049	47	.044		
Total	36.416	49			

The result presented in Table 5 shows F-calculated value for the mean ratings of respondents with a significance of F at .000 which is less than .05. This result shows that there is statistically significant difference between the mean ratings of Admin Personnel, Electrical and Electronic Teachers in Universities and Technical Colleges on accommodations strategies in teaching of Electrical and Electronics Trades among students with disabilities.

Table 6: Post-Hoc-Test on the Mean Ratings of Admin Personnel, Teachers in Universities and Technical Colleges on Accommodations Strategies in Teaching of Electrical and Electronics Trades among Students with Disabilities

(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig.
Admin Staff	Tech Col Teachers	-.66234*	.07396	.000
	Univ. Lecturers	-1.98889*	.07299	.000
Tech Col Teachers	Admin Staff	.66234*	.07396	.000
	Univ. Lecturers	-1.32655*	.07061	.000
Univ. Lecturers	Admin Staff	1.98889*	.07299	.000
	Tech Col Teachers	1.32655*	.07061	.000

The result in Table 6 shows that the mean ratings of the three respondents is statistically different with the University Lecturers scoring the highest at the mean difference (I-J) of 1.32, followed by Technical College teachers with the mean difference (I-J) of 0.67 and then the Admin Staff with the mean difference (I-J) at negative values.

Discussion of Findings

The findings that emerged on research question one show that respondents agreed with all the items on lesson presentation accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities except items 5, 6 and 8. This means that respondents are of the opinion that with use of emergent gadgets such as digital text with on-demand electrical dictionary as well as advanced organizers, students who find it difficult to comprehend terms and parameters related to electrical and electronics can be accommodated to overcome their barriers to learning. This finding is in agreement with the of IRIS (2019) which stated that the use of text-to-speech software, adjustable hydraulic-ladder for electrical installation or advanced organizers can help in presenting lessons to students with disabilities so as to enable them access the same electrical and electronics instructional tasks as those without disabilities.

Findings on research question two indicated that respondents adjudged all the items except number one as assessment accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities. These assessment

accommodation strategies according to this finding include: employment of trained interpreters or sign language experts to aid communication of electrical and electronics terms during assessment of students with hearing impairments as well as use of basic math facts, calculators, and word processing devices for students with calculation difficulties. This discovery is in line with Thurlow, Elliott and Ysseldykes (1998) assertion that accommodation strategies are adaptations or changes to educational environments and practices designed to help students overcome the challenges presented by their disabilities. However teachers must ensure that the assessment accommodation strategies did not place students below the benchmark of the minimum requirement of the subject.

The analysis shown in Table 3 was used to answer research question three. Findings that emerged reveals that respondents accepted all the items as the classroom setting accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities except item 5. The setting accommodation strategies discovered include: Provision of pre-requisite setting in workshop/classroom (example, sitting near teacher) to students who have problem in staying focused or maintaining attention as well as stimulate small-group settings, one-on-one settings and regular procedures to accommodate students who experience difficulties in regulating their behaviour. This concurs with the opinion of Zigmond (2003) that students with autism or ADHD might benefit from setting accommodation strategies by enjoying changes in the original setting of the classroom or workshop in learning of Electrical and Electronics Trades.

Findings on research question four revealed that respondents agreed with all the items except 2 and 6 as the timing and scheduling accommodation strategies in teaching of Electrical and Electronics Technology Trades among technical college students with disabilities. These strategies include: Extended time to complete electrical and electronics practical tasks for students who cannot do well under pressure and tight schedule; breaking practical tasks in electrical and electronics workshop into parts for students who experience difficulty in continuous tasks performance as well as allowing students on medication that causes behavioral changes such as drowsiness to perform tasks at a more convenient schedule or time. More so, the Analysis of Variance (ANOVA) in Table 5 shows that there is statistically significant difference in the mean ratings of Admin Personnel, Electrical and Electronic

Teachers in Universities and Technical Colleges on accommodations strategies in teaching of Electrical and Electronics Trades among students with disabilities. The Post-Hoc-Test further indicated that the University Lecturers scored the highest mean, followed by Technical College teachers and then the Admin Staff in STEB. This means that the university teachers are more aware of accommodation strategies than technical college teachers and Admin Staff at STEB in Niger state, Nigeria. This finding is in line with the assertions of Oladele, Sani and Adebayo (2018) that most of stakeholders are not aware of social and disability inclusiveness policies and that teachers in Nigeria do not adapt accommodation strategies that can address the needs of learners with diverse background and disabilities.

Conclusion

There are several ways of supporting students with disabilities to be able cope with the requirements of the mainstream technical classrooms and workshops through the use of accommodation strategies. This study investigated the accommodation strategies in teaching of Electrical and Electronics Trades among technical college students with disabilities in Niger state, Nigeria. Findings revealed among others that students need individualized accommodation strategies to be able to cope in learning of Electrical and Electronics Trades in technical colleges. These include audio formats of lessons e.g audio book for students with visual impairments, text-to-speech software for students with speech impairments, as well as advanced organizers for students with Attention Deficit Hyperactivity Disorder (ADHD) that can enable them to access the same instructional presentation as those without disabilities. More so, findings showed that university lecturers are more aware of accommodation strategies needed by students with disabilities in technical colleges than Admin staff and Electrical and Electronics Trade Teachers.

Recommendation

It is recommended based on the findings of this study that stakeholders in technical education such as Science and Technical Education Board which is the highest authority in terms of policy formulation and dissemination in technical colleges in Niger state should:

1. Come-up with policies mandating sufficient slot of admission to be given to students with disabilities into technical colleges; and
2. Train Electrical and Electronics Trade Teachers on accommodation strategies so as to effectively respond to the special needs of students with disabilities in Technical colleges.

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