

**USE OF TECHNOLOGY FOR STUDENTS WITH EMOTIONAL- BEHAVIORAL –
DISORDER (EBD) FOR ENHANCEMENT OF JOB OPPORTUNITIES**

Obiyo, N.O. Ph. D

Department of Educational Foundations, University of Nigeria, Nsukka

Igbo, J. N. Ph. D

Department of Educational Foundations, University of Nigeria, Nsukka

Onu, V. C. Associate Professor

Department of Educational Foundations, University of Nigeria, Nsukka

ABSTRACT: *Students with emotional behavioral disorder (EBD) have recorded the highest incidence of school dropout without any gainful employment. This study was designed to find out the use of technology to enhance their overall improvement and help them have good job opportunities. The study was carried out in Nsukka urban in Enugu State of Nigeria using descriptive survey design. Two research questions were used to guide the study. One hundred and fifty teachers were randomly sampled to respond to the instrument which was titled Technology for Students with EBD (TSEBD). The instrument was validated and computed for internal consistency. Data collected was analyzed with mean and standard deviation. The major findings indicated that teachers are not very aware of technology that students with EBD can use to make them learn and be gainfully employed. As such, it was recommended that teachers incorporate it into their everyday teaching and learning for such students so that they can learn, have good interpersonal relationship and have good job opportunities.*

KEYWORDS – Emotional-Behavioral-Disorder, Technology, Job Opportunities.

INTRODUCTION

Some students do not conform to parental, teachers and community expectations due to the behaviors they manifest. Emotionally, these students have little or no control over their behaviors. Some people by their very nature might be greatly disadvantaged. They may never be gainfully employed, except for such jobs as bouncers in night- clubs or touts in the motor parks or even as bodyguards or worst as suicide bombers or any of such dastardly acts. One of such disadvantaged people is students with emotional – behavioral – disorder (EBD).

It is a bit difficult to define EBD (Smith, 2010). This may be because it involves a heterogeneous group of students. In fact, some authors think that students are labeled as having this disability when adults say so (Hallahan and Kauffman, 2006). The term is however used to describe students in the special education category whose behavioral or emotional responses are not typical (Individual with Disability Act, 2010). Their negative behaviors affect their performance in school, are unwelcome to their peers and constitute problems to parents. Such behaviors can alienate them from employers of labor if they are even able to finish school. The Council for

Children with Behavior Disorders (2010) describes it as a disability characterized by behavioral or emotional problems in school programs so different from appropriate age, cultural or ethnic norms, that they adversely affect educational performance. For Mangal (2009), these students with emotional problems are often referred to as emotionally handicapped, emotionally disturbed, or behaviorally disordered.

In a study by Bower cited in Forness (2010), students with EBD are known for their inability to learn which cannot be explained by intellectual, sensory or health factors. They are unable to build or maintain satisfactory interpersonal relationships with peers or teachers. They exhibit inappropriate types of behavior or feelings under normal circumstances. They manifest a general pervasive mood of unhappiness or depression and a tendency to develop physical symptoms, pains, or fears associated with personal or school problems.

They are hyperactive, aggressive and impulsive (Minnesota Administrative Rules, 2004). Forness (1999) and Obiyo (2006) found that these students are disobedient, quarrelsome, destructive, exhibit temper tantrums, live solitary existence, tease others, bully, have disturbed relationships and engage in sexual misconduct. They are rude towards those in authority, engage in fights and are malicious. Many of them may have deficit in fine muscle control, eye- hand coordination and perceptual disabilities. Learning disorder may accompany, cause or aggravate emotional conflicts. They are often abused students, constantly beaten and appear dirty. At home and in school, they are suspected for anything that goes wrong.

In another study carried out by Mangal (2010), students with EBD tend to experience enormous frustration, intrapsychic conflicts, poor self esteem, emotionally disturbed, feelings of failure and high anxiety levels. Zwozdiak- Myers (2008) found that adolescents with behavioral inhibition, are more afraid, constant shyness, difficulty in adapting to social situations, are over – vigilant, hesitant in nature and equally react strongly to new knowledge.

If these students are not properly handled they might not benefit from the school system. They hardly come out of school to be of productive relevance to themselves and the society (Adedokun, 2010). They might never be gainfully employed and might end up as social misfits. Research has shown that the presence of EBD is a very accurate predictor of school failure, delinquency, adult psychiatric problems, and substance abuse (US Department of Education, 1998b). Walker, Colvin and Ramsey (1995), found that youths with EBD are at a very high risk of psychiatric hospitalization, incarceration and under and unemployment. They are at a great risk of negative long – term outcomes as well. Statistic has shown that 55% of students with EBD leave school before graduation (Worthington and Gargiulo, 2003). The evidence indicated that this is the highest dropout rate among all categories of students with special needs. U. S. Department of Education (1998b) found that 58% of young adults with EBD had been arrested, compared to 19% of those with other special needs. Also, 10% of youths and young adults with EBD were living in a correctional facility, halfway house or drug treatment center or were on the street as compared to 5% of students with other special needs. The response of schools to students with EBD has been ostracism, segregation (Worthington and Gargiulo, 2003) and

corporal punishment (Ikoh, in Obiyo, 2006) which had not been effective. Students with EBD need intervention and help. Use of technology can enhance their learning potentials and reduce inappropriate behavior which will result to subsequent meaningful adult life and enhance their job opportunities.

Technology is a combination of network of software and hardware as well as a convergence of information and communication technology (Etonyeaku, 2009). It can provide meaningful learning experiences to develop problem solving and higher thinking skill and to function in the world beyond the classroom (Shikden, 2012). Research has shown that the quality of learning can be significantly enhanced when technology is used as an intellectual multi tool (Pollway and Patton in Onu, 2006). Burgstahler (2003) noted that technology can help students with special needs to maximize their independence in academic and employment, succeed in work based learning experiences, prepare for transition to university and career, work side by side with peers and enter high technology career fields. Madani in Shikden 2012) found that it can help to increase ones' ability to gain employment and be independent in life. Orukokan, Olaleye and Odumosu (2009) found that it has become an indispensable asset for teachers in schools. However, as in other impairments, most educators do not normally consider technology for students with EBD. Hughes (2013) noted that while many educators use technology for other impairments, they are less likely to consider it for students with EBD.

Some technologies for students with EBD include wrist counters, golf counters and beads –in-pocket. Wrist counters are like watch reminders which help to remind students about behaviors so that they can self monitor themselves throughout the day. These are used to record student performance in terms of task completion or in-seat behavior. It takes into account minimal disruption of teaching process in an inclusive classroom. Student behavior can be taped and subsequent engagement of students in self evaluating their behavior. It can be used to reduce aggressive and disruptive behavior, social skills deficit and attention problems. It is very effective when used with self management strategies such as self instruction or self application. It can be used to view demonstrations of appropriate student behavior. The strategy had helped a great deal in helping students express more appropriate behavior in the classroom (Worthington and Gargiulio, 2003).

Another technology that can be used is internet access. Youths like to go to the NETT to face book, twitter, 2go, among others. A lot of time is spent on these and they may not learn any academic information and they may be wrongly influenced. For this, there is the need to monitor what they are doing in the NETT and channel the actions appropriately. It can be as reinforcer for students to exhibit appropriate behavior. Students are allowed to access only approved sites. Educators and parents can incorporate the use of computer software in their intervention plans in the form of learning games and instructional software to increase on- task behavior. Word processing program and voice recognition software are invaluable devices for students who have difficulty getting their thoughts on paper. Others are hand held computers or palm pilots with calendar. Ear plugs or ear muffs can be used for those easily distracted.

Electronic pager may be used to send messages to remind students with EBD about behavior expectations as well as positive reinforcement messages. Shikden (2012) noted these positive effects of technology on students with EBD. But, studies have shown that it had not been in use (Roblyer in Shikden, 2012). There is therefore need to incorporate it in everyday teaching and learning process in the classroom so that the students can learn and be able to compete in the job market. Research has shown that when technology is used on children with behavior problems, they can have increased attention span, stay in their seats longer, develop improved fine motor skills and show greater ability to generate skills across various environments (Cutter, 2010). Adaptive hardware for computer use is instrumental for reducing excess behavior such as agitation, perseveration and self stimulating behavior. These are behaviors that if not addressed on time and handled decisively would not allow the student to learn and maximize his potentials. He may drop out of school due to frustration, will not be gainfully employed and will be a social menace.

Statement of the problem

Students with EBD are not easily handled in the classroom. Naturally, they make the teachers' day full and uninteresting. Majority of them have difficulty establishing good, cordial and lasting interpersonal relationship with peers, teachers, parents and authority figures. If the behaviors go unchecked, these can lead to school dropout, lack of gainful employment and adult criminality. The problem may lead to a new generation of children with EBD and the cycle continues. For them to have good job opportunities, students with EBD need to be given social skills training which will help increase their social acceptance that can help them during job interviews. Alarmingly, a good percentage of them drop out of school before graduation. There is therefore a great need to stop this very trend. In the past, teachers' competence, and punishment of such students have been used to curb their behavior problem and help them to learn to no avail. In developed countries technology is now being used to enhance their academic performance and teach them skills required to help them have good interpersonal relationship. They can also have employment training through vocational rehabilitation services in the school. The big question then is how aware are teachers in Nigeria of these technological devices and the extent they had been in use in inclusive classrooms?

Research questions

1. What are the technological tools available for teachers to help students in schools and prepare them for job opportunities?
2. To what extent have teachers been using available technological tools to help students with EBD maximize their potentials and be gainfully employed?

METHOD

Design: Design of the study was descriptive survey.

Population: The population of the study was all the 420 teachers in secondary schools in Nsukka urban, Enugu State of Nigeria (Planning Research and Statistics Unit, PPSMB, 2012).

Sample and sampling technique: Proportionate random sampling technique was used to get teachers from the secondary schools. The sample was 150 teachers.

Instrument for data collection: This was a questionnaire titled Technology for Students with EBD (TSEBD) developed by the researchers. It has two parts. The first was on availability of technological tools for students with EBD and the extent to which teachers are using them. It was structured rating scale of highly aware (HA) (4), fairly aware (FA) (3), little aware (LA), (2) and not aware (NA), (1). Part 2 that dealt on extent of use of technology also had 4 scales. They are very great extent (VGE) (4), great extent (GE) (3), little extent (LE), (2) and very little extent (VLE), (1). The instrument was face validated by three experts from Special Education, Educational Technology and Measurement and Evaluation, all from the Faculty of Education, University of Nigeria, Nsukka. The internal consistency of the instrument was determined by the use of Cronbach Alpha. The first part of the technology available to students with EBD had reliability coefficient of .80, while the second part on the use of such technologies had reliability coefficient of .79. An estimate overall reliability score of .81 was obtained for the two parts.

Method of data collection: Data was collected through direct administration of the questionnaire by the researchers.

Method of data analysis: Data from the study were collated and analyzed using mean and standard deviation to answer the research questions. Mean rating of 2.5 and above were considered as positive responses while below 2.5 were considered as negative responses.

RESULTS

The results of the study are presented in tables 1-2 below

1. **Research Question 1:** What are the technological tools available for teachers to help students in schools and prepare them for job opportunities?

Table 1: Mean and standard deviation (SD) of teachers' responses on technology for students with EBD.

S/N	Technology for EBD students	Mean	SD	Decision
1	Wrist counters	2.41	1.08	Disagree
2	Golf counters	2.15	1.09	Disagree
3	Beads- in-pocket	2.42	1.17	Disagree
4	Videotapes	3.47	.91	Agree
5	Tape recorders	3.39	.93	Agree
6	Internet access	3.13	1.03	Agree
7	Computer software	3.21	1.05	Agree
8	Visual representation system	3.49	.68	Agree
9	Real objects	3.55	.87	Agree

N -150

Data from Table 1 show that teachers are not very aware of some technology that can help students with EBD to learn and develop good interpersonal relationship and be able to have gainful employment. This can be seen from the mean in items 1, 2, 3. The other items showed that teachers agree on items 4-9.

Research Question 2: To what extent have teachers been using available technological tools to help students with EBD maximize their potentials and be gainfully employed?

Table 2: Mean and standard deviation (SD) of teachers' responses on the extent they had been using technological gadgets on students with EBD.

S/N	Use of technological gadgets	Mean	SD	Decision
1	Communicating using computer keyboard.	2.96	1.04	Agree
2	Using visual document displayed on a computer screen or print out.	3.07	1.01	Agree
3	Use of internet.	2.99	1.13	Agree
4	Games for learning social skills.	3.02	1.04	Agree
5	Computer simulation in a known environment to learn basic skills.	2.79	1.11	Agree
6	Word processing programs to enable errors be corrected.	2.24	1.07	Disagree
7	Use of wrist pointers to record student performance.	2.29	1.05	Disagree
8	Use of video tape with self management strategies.	2.71	1.01	Agree
9	Limiting student access to only approved internet sites.	2.76	.92	Agree
10	Use of internet with behavior modification strategies.	2.63	1.03	Agree
11	Use of computer software as reinforcer.	2.28	1.07	Disagree
12	Learning games with instructional software programs.	2.67	1.02	Agree
13	Use of computer to increase on- task behavior and enhance academic learning.	3.00	1.04	Agree
14	Using video tape to view demonstration of appropriate behavior.	2.55	1.31	Agree
15	Use of golf counters to record student performance for task completion.	2.23	1.14	Disagree
16	Using beads- in- pocket to record student performance for task completion.	2.51	1.04	Disagree
17	Incorporating computer into intervention plans.	2.21	1.12	Disagree

N- 150

Data from Table 2 showed that, teachers had been using technological gadgets to teach students with EBD. This is deduced from the response to some items such as items 1-5, 8-10, 12-14 and 16. On the other hand some of the items were not in use by teachers. These include items 6, 7, 11, 15, 16 and 17 respectively.

DISCUSSION

Based on the findings of the study, it can be deduced that teachers in Nsukka urban are not very aware of some technologies that students with EBD can use which will make them to learn, have good interpersonal relationship and help them have better job opportunities. Such will make them to be productive and relevant to themselves and the society. This is in line with the findings of Adedokun (2010). Walker and Ramsey (1995), noted that students with EBD are at a very high risk of psychiatric hospitalization, incarceration and under and unemployment. On the other hand, the present study found that teachers are not very aware of some of the technological gadgets. These are wrist counters, golf counters and beads- in- pocket. The reason could be that they are not familiar with such gadgets. This may be environmental or due to the level of development or lack of access to these gadgets. They are useful in recording student performance as it pertains to completion of task and takes into account minimal disruption of teaching process in inclusive classrooms. All these will help students with EBD learn and reduce incidence of school dropout (Worthington and Gargiulio, 2003) and arrests (US Department of Education, 1998b).

Further findings from the study showed that some teachers had been using some of the technology to a large extent. The implication is that students with EBD will start having better job prospects. This further buttresses the findings of Cutter (2009). On the other hand, studies have shown that technology has not been in use for students with EBD (Roblyer in Shikden 2012 and Hughes, 2013). The problem may be lack of availability of the tools. The present study also found that some of the technological gadgets were not in use to a large extent. Available evidence showed that teachers had not been able to incorporate computer into intervention plans. To a large extent, they had not been using video tape to view demonstration of appropriate behavior. This may be attributed to some factors such as availability or lack of power supply. Moreover, they were not using golf counters and beads – in – pockets. This may be that the tools were not available. Yet, these are indispensable assets for teachers in schools (Orukokan, Olaleye and Odumosu, 2009). The aim of these technologies is to help students with EBD learn, have good interpersonal relationship and gain meaningful employment in life. So, they should be used.

IMPLICATIONS OF THE RESEARCH

The implications of the current research will contribute to existing body of knowledge. If students with EBD are not properly handled, they may never benefit from the school program, may drop out of school and not be gainfully employed. The worst is that they may become social misfits. Teachers and even parents can start using technology to help them learn, have good interpersonal relationship and gain employment. Teachers had been teaching and managing their behavior as other children with no tangible result. They still dropped out of school. Based on the present study, the students concerned will benefit from the school program, and contribute their quota to the society and useful to themselves.

CONCLUSIONS

Students with EBD do not have good interpersonal relationship, may drop out of school and not gain employment. This may be as a result of how they had been handled in the schools. In developed countries, they had involved technology to teach them. There is then need to use such technologies in schools in Nigeria.

Findings from the study show that teachers in secondary schools are not very aware of technological tools to make students with EBD learn and have good interpersonal relationship with people they come in contact with. Moreover, they are not using all the tools to a large extent. They need to use them extensively to help the students not to drop out of school but to finish up and gain job opportunities.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made:

1. Technology should be integrated into behavior intervention plans by teachers.
2. Educators should incorporate the use of computer software for students with EBD to increase on task behavior and enhance academic learning.
3. Parents should integrate such computer software in their intervention plans at home.
4. They should be used in everyday teaching and learning so that students with EBD can learn and be able to compete in the job market.
5. On regular basis, teachers should be sponsored to in- service training to expose them to use of technology to enhance all round development of students with EBD.
6. Workshops should also be organized for teachers to be provided with workable solutions on use of technology for students with EBD.
7. There is need for further research on cultural adaptability on the technology on ground for students with EBD.

REFERENCES

- Adedokun, J. A. (2010). Rebranding special needs education with ICT for sustainable development of exceptional children: A clarion call. *Journal for the National Center for Exceptional*. 12 (1). 132-141.
- Burgstahler, S. (2003). The role of technology in preparing youth with disabilities for post secondary education and employment. *Journal of Social Education Technology* 18 (4)7- 19.
- Cutter, D. (2010). Help children with autism build skills with adaptive hardware for computers. <http://www.brighthub.com/education/special/articles/330.aspx>. Retrieved 12th April, 2013.
- Etonyeaku, E. A. C. (2009). Incorporating information and communication technology into business education curricula in Nigerian tertiary institutions. *International Journal of Education Research* 9 (2), 234-240.
- Forness, S. R. (2010). School characteristics of children and adolescents with depression. In .R.B. Rutherford (Jnr.), C. M. Nelson & Forness, S. R. (Eds.). *Bases of severe behavioral disorders in children and youth*. Boston: Little Brown.

- Hallahan, D. P. & Kauffman, J. M. (2006). *Exceptional children. Introduction to special education*. NY.Englewood Cliffs: Prentice Hall.
- Hughes, M. (2013). Assistive technology for students with behavior disorders. Retrieved from www.ehow.com/about_7219566-assistive-technonolgy-students-behavior-disorders.
- Individuals with Disability Education Act (2010). Retrieved from www.ogahomaparaitcenter.org/Dictionary.html
- Mangal, S. K. (2009). *Educating exceptional children. An introduction to special education*. New Delhi: PHI Learning Private Limited.
- Mangal, S. K. (2010). *Essentials of educational psychology*. New Delhi: PHI Learning Limited.
- Minnesota Administrative Rules (2007). Retrieved 29th April, 2013 <http://www.revisor.mn.gov>
- Obiyo, N. O. (2006). Effects of self- application strategy on socio-psychological behaviors of pupils with emotional – behavioral – disorder. Unpublished Ph. D thesis of University of Nigeria, Nsukka.
- Onu, W. C. (2006). *Practical tips to successful education and wealth creation strategies*. Enugu: Great Ap Express publishers Ltd.
- Orukokan, A. F., Olaleye, B. O. & Odumosu, M. O. (2009). Evaluating the compliance of present secondary school curriculum with ICT. *Journal of Curriculum Organization on Nigeria (CON)*. 16 (1), 66-72.
- Post Primary School Management Board (2012). *Planning research and statistics unit handbook* Nsukka: Education Zone.
- Shikden, A. G. (2012). Understanding the role of technology in the education of persons with Disabilities in the inclusive classrooms: Implication for teacher preparation in Nigeria. *The Exceptional Child*. 14 (2),71-77.
- Smith, D. D. (Special education guidelines, behavior disorders, anxiety, child and adolescent depression, eating disorders. Retrieved from <http://www.education.com>
- The Council for Children with Behavior Disorders (CCBD) (2010). *Emotional and behavior disorders concept*. Pearson Ed. Inc. Retrieved from <http://wps.prenhall.com>
- U. S. Department of Education (1998b). *Twentieth annual report of Congress on the implementation of the Individuals with Disabilities Education Act*. Washington DC:Author.
- Walker, H. M., Colvin, G., & Ramsey, E. (1995). *Antisocial behavior in school: Strategies and best practices*. Pacific Grove, CA: Brooks/Cole.
- Worthington, L. A. & Gargiulo, R. M.(2003). *Persons with emotional or behavioral disorders*. In R. M. Gargiulo (ed). *Special education in contemporary society. An introduction to exceptionality*. USA: Thompson Learning Inc.
- Zwozdiak- Myers, P. (2008). *Childhood and youth studies*. Southernhay East: Learning Masters Limited.