

ACADEMIC ACHIEVEMENT OF REGULAR AND SPECIAL NEEDS STUDENTS IN INCLUSIVE AND NON-INCLUSIVE CLASSROOM SETTINGS

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Abstract

This is an ex post facto research designed to determine the extent to which regular (normal) pupils and special needs pupils (visual and hearing impaired) in inclusive and non inclusive classrooms differ in their academic achievement. It was carried out in Port Harcourt, Rivers State of Nigeria. The population of the study consisted 206 primary 5 pupils (63 special needs pupils and 95 regular pupils from two privately owned inclusive schools, one government owned special school and one public (regular) primary school. A sample of 158 pupils made up of 63 special needs pupils (27 from inclusive schools and 36 from special school); and 95 regular (Normal) pupils (39 from the inclusive schools and 56 from the regular (non-inclusive) public primary school was used for the study. Purposive and simple random sampling techniques via balloting were used to draw the sample. Three research questions and three null hypotheses guided the study. Data of the study were obtained from the 2010/2011 promotion examination scores records of students, as maintained in the schools under study. Mean (\bar{x}), Standard deviation (SD) and t-test were used to answer the research questions and test the null hypotheses respectively. Results got after data analysis indicated that significant difference existed in the academic achievement of regular and special needs students in inclusive classroom setting, in favor of the regular pupils; significant difference existed in the academic achievement of special needs pupils in inclusive and non-inclusive classrooms, in favor of those raised in inclusive classrooms; regular pupils raised in inclusive and non-inclusive classrooms differed significantly in their academic achievement, in favor of those in inclusive classrooms. Based on these results, recommendations were made including that regular and special needs students should be

brought together in inclusive classrooms; regular and special education teachers should be employed to teach students in inclusive classrooms and workshops and trainings should be organized for academic and non-academic staff in inclusive schools.

Keywords: Inclusive Education, Inclusive classroom, Non-Inclusive classroom, Students with Special Needs students, Regular Students, Academic Achievement

Introduction

Education is a process of developing an individual into a responsible, purposeful, innovative, creative and useful being. It aims at developing the innate potentials of an individual to the optimal level which makes him useful to himself and the society where he finds himself. It is also regarded as a means of transmitting knowledge and culture from one generation to the other. Education can either be formal or informal. Informal education is one that is structured and done within the four walls of a classroom through trained teachers and other personnel to bring about overall development of the child. Informal education is one that is not structured and can be acquired at home or through apprenticeship. Special schools also exist alongside regular ones for learners with one form of challenge/impairment or the other (special needs learners) This category of learners include the hearing impaired; visual impaired, learning disabled, physical and health impaired, the gifted and talented; mild mental retardation, pastorials and nomads, etc).

Experience in the past had shown that this category of learners were usually managed and educated in special schools; specifically meant for people with various disabilities; while normal learner (learners without disabilities) were and are still usually educated in normal or conventional schools. In recent years however, and especially in the wake of the Salamanca Declaration of 1994, the idea of establishing inclusive schools has been projected the world over.

Inclusive education is that type of Education in which regular (normal) and special needs learners are brought together in the same academic environment and classroom for the purpose of learning. The adoption of this system of education could be in realization of the importance of the Universal Declaration of Human Right (United Nations, 1948) which stipulated that education is a fundamental human right. The Convention on the Rights of the Child (United Nations, 1989) also declared that children with or without disabilities have the same right to educational opportunities.

This new approach to education (inclusion) comes with several challenges which behoove the school authorities and teachers to ensure that meaningful and intentional engagement of regular and students with special needs is done in a way that provides learning opportunities/activities and ensures that the environment is conducive to all students. Weiner (2003) is of the view that the teachers' moral obligation to be committed to expecting all students meet high standard of achievement and to provide an excellent learning environment is paramount in inclusive schools.

Inclusion should also ensure equal participation of all learners in a differentiated curriculum, and intra-curricula activities. Implementation of instructional strategies and methods that increase regular and special needs students Participation and progress in the differentiated curriculum is very essential for success in an inclusive setting.

Special needs students who are included in regular education classrooms are expected to be active participants in classroom instruction and to be challenged academically at the same level with the regular students. It is obvious that in inclusive classrooms, students learn in different ways. This is a challenge to teachers with diverse group of learners (MacLean, 2001). Ayres and Hedeem (1996) recognized that teaching the special-needs child requires a team approach with pre-determined common goals. However, Mostert (1996) found that although the theory is that administrators and teachers will collaborate with parents and students, the reality is that these expectations are too high given time constraints.

According to MacBeath, Galton, Steward, BacBeath and Page (2005), "While there are many examples of social benefits both for children with special needs and their regular peers, there is much less positive evidence that learning needs are being met across the whole spectrum of ability". In the same vein, Upchurch (2007) is of the view that inclusion has a negative relationship with satisfactory learning and a positive relationship with unsatisfactory acting-out behaviors. He further stated that teachers may be unable to meet the variety of needs presented by both regular and special needs students in inclusive classrooms; as students who do not understand what is being taught or who need to be challenged more, could become bored and frustrated. In line with the foregoing discourse, Campbell (2009), was of the view that students with special needs may affect the academic achievement of their regular classmates as demands on teachers' attention made by students needing extra help might have a negative impact on the regular students. Again, it is anticipated that the academic achievement of students with special needs may be undermined if more emphasis is placed on academic curriculum as against life coping skills for them to be able to effectively function well in the society.

While there is some evidence of positive effects of inclusion of students with disabilities, opponents of this idea maintain that there is less evidence of the overall benefit of inclusion on the classmates of students with disabilities (Fletcher, 2010). In the light of the above arguments, one may be tempted to ask the question: who gains more academically in an inclusive classroom; the special needs learners or the regular (normal) ones? The need to provide answers to this question led to the conduct of this research.

Note that for the purpose of this study, the category of special needs learners studied were the visual and hearing impaired; who are not completely blind or deaf, but have serious difficulty with their sight and hearing, which makes learning difficult for them. They are referred to as **special needs pupils** in this study.

Purpose of the Study

The purpose of this study was to determine whether regular (normal) pupils and special needs pupils (visual and hearing impaired) raised in inclusive and non-inclusive classrooms will differ in their academic achievement.

Specifically, the study was also designed to:

- a. Determine how regular and special needs pupils raised in inclusive classroom settings differ in their academic achievement.
- b. Determine whether special needs pupils in inclusive and non-inclusive classrooms differ in their academic achievement.
- c. Determine the difference in academic achievement of regular pupils in inclusive and non-inclusive classrooms.

Research Questions

1. What is the difference in academic achievement of regular and special needs pupils raised in inclusive classroom settings?
2. How do special needs pupils in inclusive and non-inclusive classroom settings differ in their academic achievement?
3. What is the difference in academic achievement between regular pupils in inclusive and non inclusive classrooms?

Hypotheses

1. The difference in academic achievement of regular and special needs pupils in inclusive classrooms is not significant.
2. There is no significant difference in the academic achievement of special needs pupils in inclusive and non-inclusive classroom settings.
3. The difference in academic achievement of regular pupils in inclusive and non inclusive classrooms is not significant.

Method

This is an ex post facto research designed to determine the extent to which regular (normal) pupils and special needs pupils (visual and hearing impaired) in inclusive and non inclusive classrooms differ in their academic achievement. It was carried out in Port Harcourt, Rivers State of Nigeria. The population of the study consisted 206 primary 5 pupils (63 special needs pupils and 95 regular pupils from two privately owned inclusive schools, one government owned special school and one public (regular) primary school. A sample of 158 pupils made up of 63 special needs pupils (27 from inclusive schools and 36 from special school); and 95 regular (Normal) pupils (39 from the inclusive schools and 56 from the regular (non-inclusive) public primary school was used for the study. Purposive and simple random sampling techniques via balloting were used to draw the sample for the study. Three research questions and three null hypotheses guided the study. Data of the study were obtained from the 2010/2011 promotion examination scores records of students, as maintained in the schools under study. Mean (\bar{x}), Standard deviation (SD) and t-test were used to answer the research questions and test the null hypotheses respectively.

Results

Results got after analysis were presented in the tables below.

Table 1: Mean (\bar{x}) and Standard Deviation (SD) of difference in academic achievement of Regular and Special Needs pupils in inclusive classrooms.

SUBJECTS	ENGLISH LANG			MATHS			INTER SC			SOC STDS			GRAND (X)
	N	X	S.D	N	X	SD	N	X	SD	N	X	SD	
Regular Pupils	95	72.90	14.35	39	60.87	10.93	39	58.67	11.24	39	61.59	11.87	63.51
Special Needs Pupils	63	58.89	10.76	27	60.89	11.48	27	59.30	12.51	27	58.74	11.67	59.45

Table 1 showed that the grand academic achievement mean (\bar{x}) score of 63.51 for regular pupils in inclusive classrooms was higher than the grand achievement mean (\bar{x}) score of the special needs pupils in the same inclusive classrooms who score 59.45. This implied that the regular pupils performed better than the special needs pupils in the inclusive classrooms.

Table 2: Mean (x) and Standard Deviation (SD) of difference in academic achievement of special needs pupils in inclusive and non-inclusive classroom settings.

SUBJECTS	ENGLISH LANG			MATHS			INTER SC			SOC STDS			GRAND (X)
	N	X	S.D	N	X	SD	N	X	SD	N	X	SD	
Special Needs Pupils Inclusive	27	58.89	10.76	27	60.89	11.48	27	59.30	12.51	27	58.74	11.67	59.45
Special Needs Pupils non-inclusive	36	52.11	5.83	36	56.44	8.72	36	57.17	9.82	36	54.58	11.86	55.08

Table 2 showed that academic achievement grand mean (x) score of special needs pupils in inclusive classroom settings (59.45) was higher than the grand achievement mean (x) score of 55.08 for special needs pupils in non-inclusive classrooms. This implied that special needs pupils in inclusive classrooms performed better academically than the special needs pupils in non-inclusive classrooms.

Table 3: Mean (x) and Standard Deviation (SD) of difference in academic achievement of Regular pupils in Inclusive and non-inclusive classrooms.

SUBJECTS	ENGLISH LANG			MATHS			INTER SC			SOC STDS			GRAND (X)
	N	X	S.D	N	X	SD	N	X	SD	N	X	SD	
Regular Pupils Inclusive	39	72.90	14.35	39	60.87	10.93	39	58.67	11.24	39	61.59	11.87	63.51
Regular Pupils non-inclusive	56	61.86	11.82	56	60.71	11.82	56	59.93	8.59	56	58.27	8.51	60.19

In Table 3, regular pupils in inclusive classrooms performed better academically with a grand mean (x) score of 63.51 than their counterparts raised in non-inclusive classroom with a grand mean score of 60.19.

Table 4: t-test analysis of academic achievement of regular and special needs pupils raised in inclusive classroom settings

Subjects	N	X	S.D	Df	Cal t	Crit t	Remark
Regular Pupils	39	63.51	13.27	64	2.58	1.96	Rejected
Special Needs Pupils	27	59.45	11.49				

Result of Table 6 showed that the t-test analysis of the difference in academic achievement of regular and special needs pupils raised in inclusive classroom settings gave a t-calculated value of 2.58 which is greater than the critical t-value of 1.96 at 0.05 level of significance and df of 64. The null hypothesis two was therefore rejected. This implied that the difference in academic achievement of regular and special needs pupils raised in inclusive classroom settings is significant in favor of regular pupils.

Table 5: t-test analysis of academic achievement of special needs pupils in inclusive and non-inclusive classrooms.

Subjects	N	X	S.D	Df	Cal t	Crit t	Remark
Special Needs Pupils (Inclusive Setting)	27	59.37	11.47	61	3.32	1.96	Rejected
Special Needs Pupils (Non-Inclusive Setting)	36	55.08	9.10				

Result of Table 5 showed that the t-test analysis gave a t-calculated value of 3.32, which is greater than the critical t-value of 1.96, at 0.05 level of significance and df of 61. The null hypothesis 2 was therefore rejected. This implied that there was a significant difference in the academic achievement of special needs pupils in inclusive and non-inclusive classroom settings, in favor of those in inclusive classrooms.

Table 6: t-test analysis of academic achievement of regular pupils in inclusive and non inclusive classrooms.

Subjects	N	X	S.D	Df	Cal t	Crit t	Remark
Regular Pupils (Inclusive)	39	63.51	13.27	93	2.80	1.96	Rejected
Regular Pupils (Non-Inclusive)	56	60.19	9.83				

Table 6 indicated that the t-test analysis produced a t-calculated value of 2.80 which is greater than the critical value of 1.96 at 0.05 level of significance and df of 93. The null hypothesis 3 was rejected. This implied that regular pupils in inclusive and non inclusive classroom settings differ significantly in their academic achievement, in favor of regular pupils in inclusive classrooms.

Summary of Findings

From the findings of this study, it was concluded that:

- Significant differences existed in the academic achievement of regular and special needs pupils in inclusive classroom settings in favor of regular pupils.
- Significant differences existed in the academic achievement of special needs pupils in inclusive and non-inclusive classrooms, in favor of those raised in inclusive classrooms.

- Regular pupils raised in inclusive and non-inclusive classrooms differed significantly in their academic achievement in favor of those in inclusive classrooms.

Discussion

Academic achievement of regular and special needs pupils raised in inclusive and non-inclusive classroom settings were investigated in this study. Findings indicated that regular pupils in inclusive classroom settings obtained higher academic achievement scores than the special needs pupils in inclusive classroom settings (see Table 1). Consequently, the findings indicated a significance difference in academic achievement of regular and special needs pupils raised in inclusive classroom settings, in favor of regular pupils. This finding corroborates with that of Fareo (2011) which indicated that regular students performed better than pupils with special needs in an inclusive setting. This author posited that this might be as a result of challenges of inappropriate instructional strategies and materials, large class sizes, teachers' expertise in dealing with special needs pupils which may be lacking, school curriculum which may not serve the purpose of special needs pupils., inadequate facilities, lack of supportive services and specialists for students with special needs. The author therefore concludes that if the barriers to teaching and learning are removed and adequate attention and supportive services are given to pupils with special needs, their academic achievement might be at par or surpasses that of regular pupils in the same classroom setting.

In the same vein, the study found that special needs pupils raised in inclusive classroom settings had higher academic achievement scores, compared to their counterparts raised in non-inclusive classrooms (Table 2). These differences in academic achievement among special needs pupils in inclusive and non-inclusive classrooms were found to be significant in favor of those raised in inclusive classrooms. The result corroborates with the finding of Peestma et al in Signor, LeBlanc and McDougal (2010), and Banerji and Dailey in Signor, et al (2010) which indicated that special needs pupils in inclusive classroom settings made some academic and affective gains than their peers in non-inclusive classroom settings. This according to the authors was due to extra attention paid to pupils with special needs by regular teachers and pupils, adequate facilities, improved academic environment and good instructional materials in inclusive schools, as against what might obtain in non-inclusive schools.

The study found that regular pupils raised in inclusive classrooms setting had higher academic achievement mean (x) score compared to their counterpart raised in non-inclusive classroom settings (see Table 3). The difference in their academic achievement scores was significantly in favor of those in inclusive classrooms. This result is in line with Cole,

Waldron and Majd (2004) and Demeris, Childs and Jordan (2008) who found that regular pupils raised in inclusive classroom had better academic achievement scores than those in non-inclusive classrooms; and that inclusive education did not have a negative impact on the academic achievement of regular pupils, but a small positive increase in their scores. This might be as a result of individual attention given to learners in inclusive classrooms which places them at an advantage over their counterparts in non-inclusive classrooms. Also, it is possible that regular pupils in inclusive classroom are challenged to work harder in the midst of the special needs pupils, so as to prove their physical superiority.

Recommendations:

Based on the following findings, it was recommended that

1. Special needs pupils should be placed in inclusive schools by their parents; with encouragement from the government, since the settings seem to bring about improvement in their academic achievement.
2. Regular and special education teachers should be employed by government to teach pupils in inclusive classroom settings.
3. Workshops and trainings should be organized by school administrators and for academic and non-academic staff in inclusive schools, so that best practices in the running and management of pupils in inclusive schools are imbibed.

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