Inclusive Practices and Their Effects on Learners' Academic Performance in Public Primary Schools within Buea Municipality

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

Original Research Article

ABSTRACT

Persons with disabilities face diverse challenges in educational institutions which greatly affect their access and full participation in academic programmes. The purpose of this study therefore is to find out the Effects of Inclusive Practices on the Academic Performance of Learners with disabilities in public primary schools within Buea municipality. This study was guided by three objectives. To investigate the extent to which teachers' acceptance of persons with disabilities has been implemented in public primary schools; To find out how far curriculum adaptation for persons with disabilities has affected learners' academic performance; and To assess the effects of environmental adaptation on the academic performance of learners' with disabilities in public primary schools within Buea municipality. A survey research design was used to gather data from two public primary schools. The sampled population of the study included 20 teachers. Purposive sampling was used to select the two public primary schools that admit persons with various special educational needs. The research instrument used for collecting data was the questionnaire. This questionnaire was structured under a yes/no format. Collected data was analyzed using mean standard deviation and findings obtained indicated that teachers' acceptance, curriculum and environmental adaptations have greatly affected the academic performance of learners with disabilities. Thus, this study recommends, there should be action plans to guide and direct the implementation of inclusive educational practices to the entire primary school settings and/or systems. Primary institutions should be constructed with ramps, large classroom space, wash

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rooms and toilets to ease movements and maneuvering of persons with disabilities. This finding also will help policy makers and educational authorities make better decisions as concerns primary educational pedagogy. With all these archived, it further will enable learners with disabilities to be confident in themselves, learn freely like their peers and many persons with disabilities will be enrolled in public primary schools.

Keywords: Inclusive practices; learners; academic performance; public primary schools; Buea municipality.

1. INTRODUCTION

Education is a very important instrument of change. It is an essential right that should be accorded to all human beings. Education is a primary indicator for economic, social advancement and the development of any country. One of the greatest challenges facing the world today is the increasing number of persons who are uneducated. Education For All (EFA) strategy appears to provide a reliable means for responding to the challenges as cited in the Jomtien Declaration of 1996 in Thailand. The world today is advocating for inclusion in schools which is a major challenge in the educational system of most countries especially in Africa of which Cameroon is not left out. The Centre for Study of Inclusive Education (CSIE) asserts that there is a growing consensus that children have the right to be educated CSIE, [1].

To the United Nations Educational Scientific and Cultural Organization (UNESCO) recently, the appropriateness of separate systems of education have challenged both the human right perspectives and from the point of effectiveness. Following the UNESCO [2] declaration, such perspective advocate for Inclusive education which is the process of increasing the diversified needs of all learners through increasing their participation and reducing the rate of exclusion within educational processes. The need for inclusive education has influenced Cameroon's education policies as there is a gradual progress towards the implementation of inclusive practices in schools. Inclusive practices such as Socialization, Tolerance, Trained and Specialized teachers, adaptation of a curriculum, acceptance, implementation of Individualized Education Plan (IEP), stigmatization eradication, large classroom space, proper use of didactic materials and the environment must be friendly to all learners (with or without disabilities) no matter their sex, age, race or language.

Some of the above-mentioned inclusive practices will be used as indicators to measure/assess their effects on learners' academic performance in public primary schools within Buea municipality.

2. BACKGROUND

Inclusive practices in education are fast becoming a daily routine in the world, Africa and Cameroon is not an exception. Inclusive practices are approaches to teach that recognizes the diversity of students, enabling all to access course content, fully participate in learning activities and demonstrate their knowledge and strengths at assessment. IDEA (2004) supports inclusive practices by requiring that to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are non-disabled and special classes, separate schooling, other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes, with the use of supplementary aids and services cannot achieved satisfactorily. That is why the right to education has been recognized as a basic human right by various international and national conventions through declarations. Article 26 of the universal declaration of human rights of 1948, proclaimed that everyone has the right to education, article 28 of the same convention on the right of the child (1998) declared that all children have the right to primary education. At the Education for All (EFA) campaign of 1994 at the Salamanca conference, special emphasis was given on the educational needs of persons with disabilities. A functional framework was adopted in this conference which recommended that every school should be made open to all regardless of physical, intellectual and emotional conditions of the learner. For learners with special educational needs, schools were encouraged to find ways to meet the demands of all and to develop a child-centered pedagogy capable of successfully educating every child including

those who have serious disadvantages and disabilities.

Contextually, in the case of Cameroon, since 1975, Cameroon has made a lot of strides in special education when the ministry of social affairs was tasked to oversee the education of persons with special needs. The term inclusive education and regulation herein mentioned focuses on inclusive education theories and practices which together are new to many Cameroonians together with the assumed educated ones including teachers. On the 1st of October 2008, Cameroon signed the United Nations Convention on the rights of persons with disabilities within the framework of Harmonizing National Laws with new international legal instruments, the president of the Republic of Cameroon enacted law No 2010/002 of 13 April on the protection of persons with disabilities, rehabilitation and psychological, social and economic, insertion of persons with disabilities. This law therefore repels previous provisions, particularly those of law No 83/013 of 21 July 1983 on the protection of persons with disabilities. This law ensured that persons with disability will receive education in specialized classes, integration in ordinary schools and training in specialized institutions. The above law stipulates the further implementation of the joint circular that was signed with MINESEC to facilitate the admission of students with disabilities and those born poor into government educational institutions and their participation in public examination. Another area of implementation is observed within the ongoing diagnostic study of inclusive education in Cameroon with about 60 pilot schools; Despite the fact that it is not new, few students with disability and special needs were found in regular schools even though these children were taught in regular schools, those schools were not transformed to meet their needs like adaptation of the environment and curriculum. This resulted in a higher dropout rate for children with disabilities causing them to become street beggars as many forget the fact that disability is not inability; therefore, the teachers have an idea on integration but not quite knowledgeable about implementing inclusive education practices due to a series of factors ranging from lack of training and in service training on special education, types of disabilities and class size.

The public primary school teacher in Cameroon is a holder of CAPIEMP. This diploma is obtained from the Government Teacher Training College

(GTTC) a public primary teacher educational institution that trains general primary education teachers to teach in primary school. The entry qualification into the school is a pass in ordinary level certificate of education or its French equivalence (BEPCES) whose duration is three years or at least GCE advanced level whose duration is one year. Courses offered include educational psychology and child development. Teaching methods are courses on subjects like history and philosophy of education with the revision of the higher education curriculum in 2007, introductory courses in special education in some teachers training institutions gave trainees knowledge of different kinds of disabilities and not pedagogic strategies to meet the needs of those categories of children. Some teachers in lay private schools are just holders of GCE advanced level certificate without even going to training schools. Therefore, most teachers have little knowledge about persons with disabilities thereby making it difficult for teachers to totally accept these learners and their needs are not actually met in the classroom.

Conceptually, Sangi et al. [3] inclusive practice is an approach to teaching that recognizes the diversity of students, enabling all students to access course content, fully participate in the learning activities and demonstrate their knowledge and strength at assessments. Inclusive practice values the diversity of the student body as a resource that enhances the learning experiences. Inclusive education refers to educational designed to ensure access for all groups that have been marginalized in society and in schools. Notes that a "process that allows expansion of the scope of inclusion so as to include delivery in individual education target for inclusion is primarily diversity. Before the introduction of the National education strategy, various efforts were made to ensure the success of the implementation of inclusive educational practices. Haki [4], Tungaraza & Lyakirwa, (2006); explained perception, attitude and lack of pedagogical skills to influence the implementation and affects the efficacy of the implementation of inclusive educational practices. Education is a public responsibility in which teachers have important roles to play in realizing the right to education UNESCO, [5].

Teachers' acceptance towards inclusive education practice has been influenced by the following factors First of all, we have training

which is the process of learning that you need to do a job. Many studies have shown that training received by teachers affect their attitude towards the implementation of inclusive education programs. Scruggs & Mastropieri [6] assert that when teachers receive support, like going through training they become more positive and confident about inclusive education. There are personal qualities such as imagination and courage that helps you deal with difficult situation. Erns & Rogers (2009) found out that a teacher who has taken at least a course in special education and with several in service training sessions feels positive towards the implementation of inclusive educational practices.

Secondly, we have observation; which is the process of gaining knowledge or skills over a period of time through seeing and doing things. Findings from some studies show that, younger teachers are more accepting to inclusive education than their older counterparts. In a research conducted by Clough & Lindsay [7] & Kuester & Thompson [8] it was discovered that, older teachers with many years of teaching experience are often demoralized by lack of enthusiasm, fatigue and conservatism in their view regarding teaching children with special needs. On the other hand, Udai [9] explained that sometimes an era predicament affects the efficacy of the implementation of inclusive education.

2.1 Historical Evolution of Special Education Legislation

Despite compulsory education laws that have been put in place since 1918, many children with disabilities were excluded from public education during the twentieth century [10]. In most instances, parents were given two options for children with disabilities: keep them at home or have them institutionalized. As early as 1933, parents began forming special education advocacy groups and these groups became the primary voice for students with disabilities [11]. Eventually, laws that were put into place for minority students during the Civil Rights Movement would create the framework for special education laws that would soon follow [10].

Before Public Law 94-142 of 1975 (which guaranteed a free appropriate public education to each child with a disability.) was enacted, only 20% of all children with disabilities were educated in public schools (National Council on Disabilities [NCD], 2000). During the second half of the twentieth century, the public-school system in America was commissioned by the court system to educate all students regardless of race, ethnicity, or disability in an equitable and consistent manner. As a direct result of these sanctions, services were provided to special education students in three major ways: self-contained classroom, mainstreaming, and inclusion. Although the frameworks have beginnings that can be described as ascending with time, each is still used in some form or fashion in today's educational systems throughout the United States (NCD, 2000).

Inclusion is considered to be the general education classroom where students with and without disabilities are served together. In most instances, an inclusive classroom is supposed to have one regular education teacher and one full time special education teacher. Other terms typically used synonymously with inclusion are co-teaching, collaboration, and team teaching [12]. Some researchers have argued that the terms co-teaching, collaboration, and inclusion should not be used synonymously.

2.2 The Importance of Inclusive Education (IE)

Providing learning opportunities for students in the public-school system has changed exponentially in the past 50 years. While most disabled students were not allowed to enter public schools before 1950, educators today have found themselves including these students in the regular education settings for the majority of the school day [13]. This inclusion of special education students into regular education setting has often been mistaken for mainstreaming.

However, there are distinct differences between inclusion and mainstreaming. First, students who are mainstreamed are sent from the special education classroom to the regular education classroom at some point during the day for a determined period of time. On the other hand, inclusion focuses on keeping the special education student in the regular classroom for nearly the entire day. Teacher's responsibility also differs between mainstreaming and inclusion. In mainstreaming, the regular education teacher plans and delivers primary learning activities while the special education teacher consults with the regular education

teacher in order to indirectly influence plans for the mainstreamed student. In an inclusive setting, the inclusion teacher should collaborate with the regular classroom teacher to develop and implement cooperatively a broad range of learning activities and teaching strategies within the classroom. Finally, the special education teacher is usually not a part of the mainstreamed classroom. In an inclusive classroom, the special education teacher should function with joint responsibility in the classroom setting with the regular education teacher [14].

Research has shown definite advantages to inclusion programs for special education students found in the literature. Inclusion facilitated a more appropriate social behavior because of higher expectations in the general education classroom (British Columbia Teachers Federation [BCTF], 2006). The inclusion classroom also offered a higher circle of support including social support from classmates without disabilities (Shultz, 2001). The more a child was included in the general school population, the less likely the child would miss important social events going on in the class, after school and on the weekends. Finally, inclusion improved the ability of students and teachers to adapt different teaching and learning styles (BCTF, 2006). Research has shown that regular education students may also find advantages in the inclusive setting. Inclusion offers the regular education student the obvious advantage of having an extra teacher or paraprofessional to help them with the development of their own skills. In addition, inclusion led to a greater acceptance of students with disabilities and promoted better understanding of the similarities among students with and without disabilities [15].

The research provided three barriers to educating students with disabilities in an inclusive setting: attitudes, knowledge, and organization (BCTF, 2006). The attitudes of both the special education teacher and the regular education teacher could have had a negative impact on inclusion. Both parties must be willing to work together and the collaboration that comes with inclusion calls for a shift in control of the learning environment. Perceived lack of knowledge was also shown to be a barrier to inclusion. Regular education teachers were found to feel inadequately trained to work with special students, while the special education teacher had common feeling towards the content knowledge of the regular education teacher [16].

Finally, school administrators were found to have organizational problems when using the inclusion approach in the school setting. Administrators found staffing, managing, evaluating, and scheduling for inclusion created barriers that forced negative feelings towards inclusion of special education students in the regular education classroom [16].

One must understand that social and academic barriers may exist in any collaborative classroom. However, the most current language of the federal mandate concerning inclusive education comes from the 1997 Amendments to the IDEA [13]. These federal regulations included rulings that guide the regulation. The IDEA required that children with disabilities be educated in regular education classrooms unless the nature and severity of the disability was such that education in the regular classes with the use of supplementary aids and services could not be achieved satisfactorily. This meant that schools had a duty to include students with disabilities in the regular general education classes [13].

3. THEORETICAL FRAMEWORK

3.1 The Classical Liberal Theory of Equal Opportunities by John Locke

This study is backed by the classical liberal theory of equal opportunities advanced by Sherman and Wood [17] cited in Orodho [18] who expressed the view that there should be equal opportunities in education for all. This theory asserts that each individual is born with a given amount of capacity. According to this theory, educational systems should be designed with a view to removing barriers of any nature for example, barriers based on socio-economic factors, socio-cultural factors, geographical factors, school-based factors which prevent learners who have a learning disability to take advantage of their inborn talents since disability is not inability.

The education offered to such groups of learners will accelerate them to social promotion since education is a great equalizer which enhances life chances of the children with special needs [18]. The theory demands that opportunities be made available for individuals to go through all levels of education (primary, secondary and tertiary) to which access will not be determined by the disability of the learners but on the basis of individual's capability.

The theory further states that social mobility will be promoted by equal opportunity for all citizens to education. Many economists have supported the policy on free primary education (FPE). This policy makes education free and compulsory for all. Through acquiring quality education by all children of school-going age on an equitable basis and the children's right to education. The leadership provided by the United Nations (UN) initiatives and the commitment of nearly all governments to EFA and the Salamanca declaration and framework for action have undoubtedly helped to strengthen these programmes. The local communities, parent groups, associations of disabled persons, churches and community leaders have tirelessly worked for the inclusion of disabled children into local schools in partnership with the government and professionals. By enhancing the implementation of inclusive education in all public primary schools in Buea, it's hoped that the factors that hinder the access to education for such children will be reasonably reduced or completely eradicated.

3.2 Social Constructivist Theory of Lev Vygotsky (1896-1934)

Vygotsky's sociocultural theory of development underlines that children learn through social interactions and their culture. These factors stimulate and boost children's development thorough social activities learning cultural values which determine the shape of children's cognition. Vygotsky insisted that cultural setting plays a crucial role in human development and no any human activity occurs out of culture. For Vygotsky, social interactions, which he named also as interpersonal processes, lead to internalization (an intrapersonal process) on later stages. The transaction from interpersonal processes to intrapersonal process consequently results in independent thinking. This transaction takes place with the help of more knowledgeable others within a child's zone of proximal development (ZPD). With more knowledgeable others Vygotsky refers to teachers, parent or peers who know more and help children learn new skills and information. Vygotsky proposed ZPD for the period of learning in which a child is not ready to develop on his/her own but is able to learn with the help of more knowledgeable others. In other words, ZPD is the distance between real and potential knowledge of children. Solo performance now comes in when the child has been scaffolded, assisted at the zone of proximal development.

3.3 Social Learning Theory by Albert Bandura [19]

Social learning theory by Bandura [19] states that observation, modeling and imitation are important means for cognitive and behavioral learning. Social learning theory suggests that academic and behavioral learning happens through four steps: attention, retention, reproduction, and motivation. The implications of this theory for IE propose that children with special needs can observe other children and teachers, and learn and develop both academically and behaviorally by imitating them. Learning takes place through observation, modelling, and imitation of models.

3.4 Statement of the Problem

For total inclusion to actually take place in an educational institution, the following inclusive practices must be carried out or practiced; socialization which is the interaction between learners with or without disabilities and teachers. There must be tolerance /acceptance of every learner no matter the sex, race, age and language. The institution must have trained teachers in the different disabilities such as braillists for the visually impaired, sign language teachers for the hearing impaired. Furthermore, the teachers must be able to adapt the curriculum to suit every learner no matter the disability gravity. Individualized education plan must be implemented for effective teaching and learning, where there must be no stigmatization and labeling of persons with disabilities. Classrooms and toilets must be large enough to ease movements of persons with disabilities. The environment must be inclusive friendly with ramps and stairs for every learner to access. And if all the above practices are not implemented in public schools, then we will turn to experience stigmatization, discrimination, segregation, labeling and unconducive environment.

But during my practicum exercise and visits to the pilot public schools within Buea municipality, it was realized that just a hand full of practices are being implemented and they do not meet all the needs of learners with disabilities. So these prompted thoughts on what could be the problem if it's said inclusive education is actually important; why is it that pilot schools are not implementing most if not all of the inclusive practices? All of these put together, will surely affect the academic Performance of children with special needs. Based on the afore mentioned

interest to find out why these practices are rare in our schools was developed. For the purpose of this research, three of the above practices will be used as the indicators to measure their effects on learners' academic performance in public primary schools within Buea municipality.

3.5 Objectives

- ☐ To investigate the extent to which acceptance of persons with disabilities has been implemented in public primary schools.
- ☐ To find out how far curriculum adaptation for persons with disabilities has affected learners' academic performance.
- ☐ To assess the effects of environmental adaptation on the academic performance of learner's disabilities in public primary schools.

3.6 Research Questions

- ☐ How far has the acceptance of persons with disabilities been implemented in public primary schools?
- ☐ What are the effects of implementing curriculum adaptation on persons with disabilities in public primary schools?
- ☐ To what extent has environmental adaptation affected persons with disabilities' academic performance in public primary schools?

4. METHODOLOGY

The researcher used the survey research design. It was employed in this study because it was affordable to explore the parameters that the study permitted. The survey research design was also good for generalizing the study. Its techniques gave equal chances to each respondent of the sample population to contribute adequately, in response to the questionnaires. The area for this study was Buea sub-division in the south west region of Cameroon.

The population for this study consisted of teachers in public primary schools within Buea Municipality, South West Region of Cameroon.

The sampled population of the study consisted of teachers from public primary schools (Government Bilingual Practicing School Buea town and Kingston Memorial Nursery and Primary school, Bokwango-Buea).

The sample size consisted of 20 teachers randomly selected from two public primary schools within Buea Municipality (Government Bilingual Practicing School Buea town and Kingston Memorial Nursery and Primary school, Bokwango-Buea) and a total of 20 teachers were issued with questionnaires to respond for this study.

The convenience sampling technique was used in the selection of respondents. From the population of 40 teaches used in the study, a sample of 20 was used.

Due to the relatively large size of the studied population, random sampling technique has been used. Sampling technique specifies how elements were drawn from the population. Sample is a portion of the population selected for the study. Sample size is the method of selecting the sample from the population. It is a sub-unit of the population or total group which was used to compose then investigate as part of the study.

Moreover, this sampling technique was chosen because it was the purest and the most straight forward probability sampling strategy as the use and accuracy of representation was ensured. The teachers were selected randomly from both schools.

The instrument used to collect data was the questionnaire. The Likert scale was used in which respondents were expected to tick ($\sqrt{}$) from four different options or give short answers where necessary that best suits their opinion. Feedback from the respondents obtained from the questionnaires served as the research instrument in collecting the data. A sample of 20 copies was administered to the sample population. The questionnaires had closed and opened ended questions.

Questionnaires designed for teachers; copies were taken to the selected schools. The researcher went to the field with the questionnaires and a letter of authorization that was issued from the faculty of Education by the supervisor of the research. The researcher sought permission from the school's head teachers in order to administer the questionnaires. From there, distribution and administration of questionnaires to the aforementioned schools. Respondents answered on the spot (either to tick or give shot answers) and returned all sheets.

The data obtained from the questionnaires was analyzed using the basic statistics such as frequency tables, charts and mean standard deviation.

5. FINDINGS AND DISCUSSION

This section provides findings on the Effects of Inclusive practices on learners Academic Performance in Public Primary Schools in Buea sub-division. The findings are presented descriptively on frequency distribution tables with frequency and standard deviations calculated. Lower case "n" stands for the number of questionnaires under Yes or No; % is the percentage per number of questionnaires answered and upper case "N" for the total number of questionnaires answered per research question.

Research questions 1: How far has the acceptance of persons with disabilities been implemented in public primary schools?

The findings here bring out teachers' acceptance of persons with disabilities as an inclusive practice in public primary schools as indicated on Table 1.

The findings on Table 1 indicates that the majority (80%) said yes to have persons with disabilities in their classes while some few (20%) said no. Still, some (40%) of the respondents said Yes they think persons with disabilities are in the right classroom setting and majority (60%) of the respondents said No they are not in the right classroom setting. Also, some (60%) respondents are comfortable with the presence

of persons with disabilities in their classrooms and 40% are not comfortable. 80% of respondents said they treat persons with disabilities positively while 20% of respondents said they treat them negatively. Furthermore, 70% of respondents said yes to learners being comfortable with their teachers' treatment while 30% said no.

More so, the multiple responses set indicated that the majority (66%) of respondents answered yes that teachers accept persons with disabilities in their classrooms and 34% said no. The findings here show that teachers' acceptance of persons with disabilities as an inclusive practice in public primary schools is very positive.

These findings were in line with those conducted by Waldrian C. Boyd (2017) and Martin [20] who emphasized that every student including those with disabilities should feel safe in their school environment; they must feel accepted by their teachers and peers. Developing respect for differences implies this need for all students. Ratner (2016) suggested that teacher's first model an altitude of respect for individual differences. Equality involves words and actions presented by the teacher. Directly discussing various types of human diversity, as well as the individual strengths and weaknesses that we all have, can be used to develop a sense of acceptance and understanding (Ratner 2016). In order to be valued, all students need to be encouraged to participate in all classroom activities. The rules of the classroom should reflect a positive learning environment that exhibit respect, cooperation and acceptance (Shin, Hyunjo and McKenna, 2014).

Table 1. Distribution of respondents according to teachers' acceptance as an inclusive practice in public primary schools

Indicators	Yes		No		N
	N	%	n	%	
Do you have persons with disabilities in your class?	16	80.0	4	20.0	20
Do you think they are in the right class setting?	8	40.0	12	60.0	20
Are you comfortable with their presence in your class?	12	60.0	8	40.0	20
How do you treat persons with disabilities in your class?	16	80.0	4	20.0	20
Are the learners comfortable with your treatment as a class teacher?	14	70.0	6	30.0	20
Multiple response set (MRS)	66	66.0	34	34.0	100

Table 2. Distribution of respondents according to the effects of curriculum adaptation on learners' academic performance

Indicators	Yes		No		N
	N	%	N	%	
Have you any idea about curriculum adaptation?	19	95.0	1	5.0	20
Do you implement it to suit the different learners in your class?	13	65.0	7	35.0	20
Do you think persons with disabilities follow up during lessons?	15	75.0	5	25.0	20
Can curriculum adaptation affect learners' academic performance in terms of extra time and the use of mnemonics to teach persons with disabilities?	17	85.0	3	15.0	20
Do you use didactic materials/teaching aids to teach?	19	95.0	1	5.0	20
Multiple response set (MRS)	83	83.0	17	17.0	100

Table 3. Distribution of respondents according to environmental adaptation in schools

Indicators	Yes		No		N
	N	%	N	%	
Can your school environment be accessible by persons with disabilities?	6	30.0	14	70.0	20
Are there ramps to ease the movement of persons on wheel chairs/ crutches upstairs?	0	0.0	20	100.0	20
Do you have large classroom space for free movement for persons with disabilities?	7	35.0	13	65.0	20
Can persons with disabilities use the toilets and washroom without difficulties?	5	25.0	15	75.0	20
Are the corridors/pavements wide enough for persons using white cane, crutches, wheelchairs and tricycles to easily move in and out of the school compound?	3	15.0	17	85.0	20
Multiple response set (MRS)	21	21.0	79	79.0	100

Research question 2: What are the effects of curriculum adaptation on the academic performance of persons with disabilities?

The findings here reveal the effects of curriculum adaptation on learners' academic performance in public primary schools in the Buea municipality.

The findings on Table 2 indicate that the majority (95%) of teachers said yes to have an idea about curriculum adaptation and just 5% said no. 65% said yes to the implementation to suit the different learners their classes and 35% said no they do not implement it. As concerns follow up during lessons 75% of teachers said yes while just 25% said no. 85% of teachers said yes to curriculum adaptation and having an effect (positive) on learners' academic performance and 15% said no. And majority (95%) of teachers in public primary schools use didactic materials during teaching. Findings on the multiple responses set indicate that 83% of teachers said yes to the fact that curriculum adaptation has an effect on the academic performance of persons with disabilities. And just a handful of teachers (17%) said no that curriculum adaptation has no effect on their academic performance of persons with disabilities. This shows that there is a huge positive effect of curriculum adaptation on the academic performance of persons with disabilities in public primary schools in Buea sub division.

There are numerous studies that have demonstrated how curriculum adaptation

affected the performance of persons with disabilities [21]. Odom, Buysse and Soukakou (2012) observed that the individualized education programme is an essential component of inclusion. Differentiated instruction needs teachers to change their practices from a programme-based pedagogy to a learner-based pedagogy. Teachers endeavor to adapt pedagogical interventions to the needs of each learner, admitting that each learner varies in interests, learning profile and learning of functioning. Differentiated instruction may facilitate high levels of both learner engagement and curricular achievement (Reis et al. 2011).

Research question 3: To what extent has environmental adaptation affected the performance of persons with disabilities in public primary schools?

The findings here indicate the extent to which environmental adaptation has affected the performance of persons with disabilities in public primary schools in Buea-sub-division.

The findings on Table 3 indicate that only 30% of the respondents answered yes to school environment being accessible by persons with disabilities and majority of 70% said No to the fact that persons with disabilities cannot access the school environment. For availability of ramps in schools to ease the movement of persons with disabilities using crutches and wheelchairs upstairs, 0% of respondents said yes and 100% of respondents said no to the fact that there are no ramps in public primary schools. On the part of large classroom space for free movement of persons with disabilities, 35% answered yes and 65% said no they do not have large classroom space. Furthermore, for using the toilets and washrooms without difficulties by persons with disabilities 25% said yes they can use the toilet without difficulties and 75% said no to the fact that the persons with disabilities cannot use the toilets and washrooms without difficulties. Lastly, 15% of the respondents said yes to the fact that their corridors and pavements are wide enough for persons using white canes, crutches, wheelchairs and tricycles to easily move in and out of the sound compound but a majority of 85% said no to their corridors/pavement being wide. Therefore, findings on the multiple responses set indicate that just few (21%) said yes on environmental adaptation and 79% said no. This shows that persons with disabilities still face a lot of problems concerning environmental

adaptation as this practice does not favour them.

Many studies have found a relationship between effects of environmental adaptation and the academic performance of persons with disabilities. According to Hart and William (1995) persons with disabilities on average express concern related to the school environment. Johnson et al. [22] goes on to elaborate that persons with disabilities often encounter physical barriers in their school environment which remains a concern that has not been addressed by most institutions. All these barriers turn to make them experience negative effects on the performance.

6. CONCLUSION

The Local administration of Buea Municipality should initiate an excellent program for the purpose of removing educational barriers so as to include the excluded learners as one of the strategies for remedial monitoring of education for all by 2035. The study found that, the current school environment is not conducive at all to accommodate persons with disabilities thereby leading to their negative academic performance as all respondents (100%) said environmental adaptation is not been done in their schools. Mohanty & Berry [23] pointed out that good planning generates a system and climate that avoids failure. Okumbe [24] argues that school is an open system in which community participation is important for achieving pre-determined goals in this case of inclusive practices in education. Our leaders' lack of skills and ability to influence some educational stakeholders' behaviors specifically in constructing of conducive and peaceful environment for the teaching and learning for all.

Furthermore, the findings show that management of enrolled persons with disabilities in schools faced some inequalities. These included the ratio number of girls and boys enrolled in the studied schools. This differ from the argument of Education and Training Policy (ETP) (2014) which states that gender parity (equality) in enrollment must be in a ratio of 1:1. Perhaps this had been caused by lack of good plan in enrollment and attendance. Also, the research carried out by WHO [25] shows that good plan in enrollment guidelines results into educational excellent achievement for pupils with disabilities. Moreover, the problem of communication among leaders, schools and classrooms produced

incorrect statistics record keeping specifically to total number of persons with disabilities.

CONSENT

As per international standard or university standard, participant's written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Author has declared that no competing interests exist.

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