

# Classroom Curricular Preparedness For Inclusion Of Pupils With Physical Disability Within Public Inclusive Schools For The Pupils With Physical Disability In Bungoma County, Kenya.

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**Abstract:** Since the introduction of Special education in Kenya in 1946, numerous special schools have been established. However, there has been a move toward integration and later inclusion of students with disabilities in regular schools. Inclusion has its own challenges. Kenya, as a rapidly developing country, is undergoing drastic social, economic and cultural changes. Consequently, learners with disabilities in inclusive schools experience a number of challenges. These challenges bring into focus the need of reinforcing various modifications especially in classroom environments in learning institutions to counteract challenges brought about by the change from integration to inclusive education. With this realization, the study sought to examine the classroom curricular preparedness of inclusive schools for the pupils with physical disability. Adaptations that ought to be made under classroom curricular category should ideally aid in lessening these challenges and impact positively on the pupils with physical disability and enhance their learning activities. The study utilized mixed method research approach, where both Phenomenology and Descriptive survey research designs were made use of. The findings indicate that there are adequate classroom curricular adaptations for inclusion of pupils with physical disability

**KEY WORDS:** ADAPTATIONS, CLASSROOM CURRICULAR ADAPTATIONS, FULL INCLUSION, INCLUSION, INCLUSIVE SCHOOLS, PHYSICAL DISABILITY PREPAREDNESS.

## 1 INTRODUCTION

Pupils with physical disabilities in integrated learning institutions face numerous challenges. According to Mugo, Oranga and Singal[8], it has been a concern nationwide and especially by special education specialist on the current state of affairs. However, Education of children with special needs in ordinary schools has received considerable attention in recent years and continues to be a major concern in the field of special education and indeed education in general. This has brought about the practicing of inclusion. Inclusion can be defined as a philosophy which focuses on the process of adjusting the school so that all the pupils with physical challenges can have the opportunity to interact, play, learn, work and experience the feeling of belonging and experiment to develop in accordance with their potentials and difficulties [7]. This practice of inclusion is based on the belief that the ordinary classroom offers the optimal learning situation without segregation, and it is thus the best place to educate learners with or without disabilities. It exposes children with special needs to a broader curriculum which benefits them psychologically and socially since it does not limit their interaction to only other handicapped children [12]. In addition, the Salamanca Statement in 1994 was unequivocal in asking the international community to endorse inclusive schooling when it stated that all children must have access to mainstream schools. This was seen as the most effective means of combating discriminatory attitudes and providing an effective education to the majority of learners with disability and improving the efficiency and ultimately the cost-effectiveness of the entire education system [11].

According to Ingule and Rono [5], learners with physically disability as those who's physical functioning interfere with normal and health performance such as school attendance and learning to such an extent that special services and training, equipment, materials and other facilities are required. Therefore, from this definition, it can be argued out those pupils with physical disability need modifications in relation to how their curriculum is conducted in order to enhance learning activities. These modifications are what the researchers are calling classroom curricular adaptations and they include: accessibility to academic material, extra time for teaching, extra time during exams and specialized mode of instruction. Ideally, if these classroom curricula adaptations are enhanced, the pupils with disability will be on the same footage with those without disabilities in terms of learning in educational institutions. It is for this reason that the study sought to assess how well these adaptations have been enhanced or rather put in place in inclusive schools for the pupils with physical disability in Bungoma County in Kenya with a hope that it will be an eye opener to educators and policy makers to promote the wellbeing and education of pupils with physical disability.

## 2 OBJECTIVE OF THE STUDY

To assess classroom curricular adaptations in place for inclusion of pupils with physical disability

## 3 Research Methods

A mixed research approach was employed to gain insights into the enhancement of classroom curricular adaptations in inclusive public primary schools for the pupils with physical disability in Bungoma County. These investigations were majorly of lived experience of the participants (teachers and pupils with physical disability) in their naturally occurring environments (inclusive schools). Given the focus on multiple stakeholders' views and experiences, it was possible to construe the methodological approach of the study as phenomenological in nature. In general, phenomenological research aims at clarifying individuals' situations in everyday life [3]. Using this approach, the researchers were enabled to

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explore the perspectives of participants and to examine their experiences in the contexts of classroom curricular adaptations in place. Quantitatively, the descriptive survey research design was adopted. According to Creswell [1], mixed methods research approach utilizes in-depth contextualized and natural but time consuming insights of qualitative research coupled with the more efficient but less rich quantitative research. This approach allowed for triangulation of different methods of inquiry, data collection, and data analysis. The target population comprised of four 4 registered inclusive primary schools offering inclusion for the pupils with physical disability, 354 pupils with physical disability, 68 teachers and 4 head teachers. The researcher purposively selected all the 4 inclusive schools catering for pupils with physical disability. Although the classrooms environment of the schools were the main unit of analysis, the opinions of the pupils and teachers were used by the researcher to build on the data collected through observations made. Hence out of the population, the researcher purposively sampled 138 pupils. Using the census method, all the 68 teachers and 4 head teachers were selected. The methods of data collection employed were questionnaires, interviews and observation schedules. Teachers and pupils with physical disability responded to the questionnaires items while the head teachers were interviewed. The researcher also observed the various items under classroom curricular adaptations. Data analysis was done using descriptive statistics and thematic analysis. Findings of the study were presented in narrative form, percentages and by use of photographs as follows.

#### 4 RESULTS OF THE STUDY

Information obtained for this study was from a total of 210 respondents and thus the following sections present the research results and subsequent discussions.

#### 5 BIO-DATA OF RESPONDENTS

The demographic information of the respondents obtained provided parameters that supported the study although some of these parameters were not directly under study. These included class attended by the pupils with physical disability, distribution of the teachers per each inclusive school and the gender of the teachers.

##### 5.1 Distribution of pupils with physical disability by school and class

The study involved four schools in Bungoma County namely A, B, C and D where 138 pupils, 68 teachers and 4 head teachers participated in the study. Table 1 shows demographic information for pupils by school and class attended.

**TABLE 1. DISTRIBUTION OF PUPILS WITH PHYSICAL DISABILITY BY SCHOOL AND CLASS ATTENDED**

Number of pupils with physical disability by school and class attended						
School	Class 4	Class 5	Class 6	Class 7	Class 8	Total
A	15	12	15	22	6	70
B	7	10	8	11	4	40
C	2	6	3	4	3	18
<b>Total</b>	<b>26</b>	<b>29</b>	<b>27</b>	<b>40</b>	<b>16</b>	<b>138</b>

##### 5.2 Distribution of teachers by school and gender

The study assumed that selecting all the teachers to be involved in the study was appropriate as at one point or another they get to interact with all the pupils with physical disability from class four to eight. The teachers' details are as follows;

**TABLE 2. DISTRIBUTION OF TEACHERS BY SCHOOL AND GENDER**

SCHOOL	Gender		TOTAL FREQUENCY
	FEMALE FREQUENCY	MALE FREQUENCY	
A	12	10	22
B	10	8	18
C	9	6	15
<b>TOTAL</b>	<b>39</b>	<b>33</b>	<b>72</b>

As illustrated in table 2, a total of 72 teachers were selected for the study of which the number includes four head teachers. In school A, 22 teachers were selected, 18 teachers were selected in school B, 15 teachers were selected in school C and 21 teachers were selected in school D. Out of the 72 teachers, 39 were female while 33 were male.

#### 6 CLASSROOM CURRICULAR ADAPTATIONS FOR INCLUSION OF PUPILS WITH PHYSICAL DISABILITY

the objective of this study was to examine the classroom curricular adaptations in place for inclusion of pupils with physical disability. to achieve this objective, the following research question was posed; what classroom curriculum adaptations are in place for inclusion of pupils with physical disability in bungoma county? under this objective, the following items were examined: accessibility to academic material, extra time for teaching, extra time during exams and mode of instruction.

##### 6.1 ACCESSIBILITY OF ACADEMIC MATERIAL

The study established that in all the inclusive schools, pupils with physical disability are provided with academic materials which include items like pens, pencils, rubber, books and rulers in the classrooms. In school A, it was revealed through an interview with the head teacher that academic materials are majorly supplied by class teachers in respective classes. During the distribution of these materials, the pupils with physical disability are given priority. This arrangement is available so that the pupils with physical disability do not have to strain going into the main offices in order to access the materials. In some classes it was noted that the class teachers are responsible in keeping the materials for the pupils with physical disability in order to avoid loss. The store boxes located at the back of the classrooms are at times used by the pupils to store the materials to avoid lose in classrooms where they are present. In school B, it was pointed out that although pupils with physical disability are supplied with the academic materials, the class teachers are not responsible for keeping the materials after use. The pupils with physical disability have to keep for themselves or at times their peers keep for them. However, the head teacher echoed that during times when the government delays to supply the materials, the guardians or parents of the pupils with physical disability are normally involved in buying the materials for their children. Also, through the interviews carried out with the head teachers in school C and school D, it was established that the pupils with physical disability are not supplied directly with stationery kits

through their class teachers. Pupils have to strain going to the main offices to be supplied with the stationery equipment. Also, the pupils have to keep the materials for themselves. This can greatly lead to losses. According to the questionnaires administered to the pupils with physical disability, all the pupils (100%) responded that they are normally supplied with academic materials. This agreed with what the respective head teachers had echoed. However, it was noted by the researcher that in school B, C, and D where the keepers of the academic materials were the pupils, most of the pupils had lost some of the materials. As much as the government supplies the materials through the schools, it was noted that once the materials have been issued by the start of the year, they are not replaced until the following year. Therefore, many of the pupils who had lost some of the kits had to make do with the ones they had or borrow from their peers. This interferes with learning activities as at some point the pupils may lack necessary equipments. This agrees with a report by The Salamanca statement [11] which points out that most schools do not have the basic facilities such as access to academic materials, hence experiencing serious difficulties in the process of teaching and learning in an inclusive setting. According to Pijil and Dyson [10], the growing feeling that learners with special needs could and should be educated alongside their peers in mainstream schools, raised the question of how to make the necessary additional resources/facilities available in those schools. The authors assert that the major barrier of inclusive education is serious shortage of resources and lack of learning materials.

## 6.2 EXTRA TIME FOR TEACHING

Through observation, the researchers found out that all the inclusive schools have their teaching periods extended by five minutes on the timetable. Regular primary schools normally have their teaching periods running for thirty five minutes. However, it was observed that inclusive primary schools have their teaching periods running for forty minutes. When such extra time is provided, pupils in inclusive settings can be able to cover the same content that is covered by pupils without physical disability in regular schools. Many of the teachers in the four inclusive schools reported that they normally teach during extra hours like mornings before normal class times commence or evenings after normal class times. Most of the teachers also echoed that they utilize the extra time quite well to cover the content they did not finish during the normal lesson times because some of the pupils with physical disability are slow in writing and general class room participation. Further, it was established that many of the teachers give individual attention to pupils with physical disability to ensure that they move at the same pace with their peers in classroom activities. The fact that pupils with physical disability in all the inclusive schools have been provided with boarding facilities is an added advantage. The researcher observed that dormitories were present in each of the schools. This enables the teachers to teach and offer extra tuition to pupils with physical disability who may be slow in class to bring them at par with their peers. The responses given by the pupils agreed with what was echoed by the teachers. 80% of the pupils responded that they are normally taught during extra hours while 20% said there is no extra time for teaching. This is illustrated in Fig1.

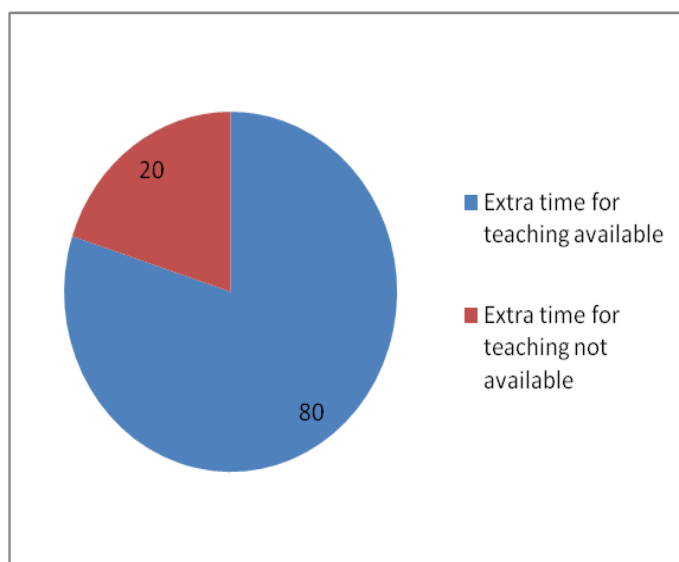


FIG1. AVAILABILITY OF EXTRA TIME FOR TEACHING

This means that as much as teachers feel that they teach during extra hours to bring all pupils to a balance, some of the pupils still feel that the extra time allocated is not enough for them. This means that there is need to increase the time frame for extra teaching in order to ensure pupils with physical disability understand and cover content just like their peers. In general, this finding was corroborated by studies carried out by researchers such as in [2], whose findings reflect that major obstacles to inclusive education at the primary school level often result from pragmatic factors such as limited time allocated to learners. The findings were also constant with [14] who reported that learners with physical disability require a specialist curriculum to support the implementation of the regular curriculum. Jha[6] observed that the curriculum in any education system is one of the major barriers or tools that facilitate the implementation or development of the inclusive system. Thus, it is important that pupils with physical disability be allocated more extra time on the school timetable, so that the teachers can get enough time to teach the content.

## 6.3 EXTRA TIME DURING EXAMINATIONS

As stated earlier, the researcher observed the process of examination administration in two randomly selected classrooms in each school. It was found out that in all the inclusive primary schools selected, the pupils with physical challenges were given extra time to finish their exams. None of the pupils was observed to be complaining of the exam paper being taken away before she/he finished the exam. Across all the inclusive schools selected, all (100%) the pupils also admitted through the questionnaires administered to them that they are normally given more time when it comes to handing in exams and assignments. It was only in school C in one of the classrooms where the researcher heard pupils complaining at low tones that the papers were being collected when they had not finished the exams. Giving extra time enables the pupils with problems in writing to have enough time to finish their exams just like their peers because they may be slow in activities like writing. In addition, the responses of the teachers tallied with the responses of the pupils and what was found out during the observations. Many of the teachers reported that they normally give pupils with physical

disability priority to enable them to finish their exams. The fact that pupils with physical disability are given extra time to finish exams ensures that those for example who have problems with the upper limbs are able to write at their own pace without straining and finish exams just like their peers. This helps to do away with discrimination because they feel part of the 'family' in the respective inclusive schools.

#### 6.4 MODE OF INSTRUCTION

The researcher attended one lesson in one classroom which was randomly selected in each of the inclusive schools selected. In school A, it was revealed that the teachers gave special attention to pupils with physical disability who had problems when it came to writing and classroom participation. It was observed that the teacher dictated notes slowly to enable the pupils with limb problem to write at their own pace. There was a special case in the class attended where a pupil was using the toes for writing. This case is exemplified in Fig2.



**Fig2.** a pupil with physical challenges using his toes to write

Such a pupil needs special mode of instruction as he cannot be able to write at the same pace with the peers. Sadly, the school does not have like a device called a page turner to help in turning the pages of the books that such a pupil uses. To counter this challenge, the teacher was observed at some point turning pages of the exercise book to enable the pupil to write on a new page. Further, the teacher did not discriminate when asking questions to the pupils. As much as the pupil cannot be able to write on the board, the pupil was given chances to contribute in some calculations where a colleague was calculating on the board. The fact that such a pupil is given a chance to participate in the classroom activities gives him a sense of contribution or value hence raising the self esteem. The findings of this study concur with what Wang [13] explains. Wang asserts that certain dilemma and difficulties are encountered in designing common curriculum that will meet all the learners' needs. Wang gives examples that learners with disability may require special methods of instructions to compensate for challenges, or they may need special equipment or communication technology to enable them to learn from the unmodified curriculum. This therefore

enhances learning activities in class. In school B and C, it was also observed that all the pupils with physical disability were given more attention to help them cover the same content as their peers. Also, just like in school A, these pupils were not left out during class discussions and other classroom activities like answering oral questions. In some instances they were involved actively in classroom activities like calculations on the chalkboard especially during mathematics lessons. This involvement in learning activities raises the esteem of the pupils with physical disability and helps them feel part of their peers. In school D, the situation was different from school A, B and C. Here, there was no special attention given to the pupils with physical challenges. The researcher was able to attend one of the lessons in class eight and it was found out that there was only one pupil with physical disability in that class. The pupil could not write at a faster rate because of disability that affected the right hand thus there was poor coordination of the fingers. The teacher could be seen dictating very fast not putting into consideration the needs of the pupil. The pupil could be seen complaining at low tones to his friend who was sitting next to him. There was no particular time during the lesson where the teacher asked the pupil a question to know if the pupil was following what was being taught. Such a situation means that there is no special modes of instruction like special attention to the pupil with physical disability that can enable him follow the class learning activities in a clearer manner.

#### 7 SUMMARY OF THE FINDINGS

The study established that the schools had adapted classroom curriculum adaptations which ensure that pupils with physical disability get equal opportunity to learn just like pupils without physical disability. One of the areas in classroom curricular adaptation which was available was the fact that teachers ensure allocation of extra time for academic work. The study established that pupils with disability are given extra time for academic work in relation to extra time for teaching and extra time during exams in addition to accessibility to academic materials. However, as noted earlier, one of the pupils complained that exam time was inadequate. According to a study by Muyskens and Ysseldyke[9], they found that active tasks increased the engaged behavior in terms of learning of students with disabilities. These findings were similar to what was noted because giving extra time during exams and the fact that the pupils with physical challenges are taught during extra times together with being provided with academic materials made them to participate actively in exam tasks and general instruction process in the classrooms. In addition, teachers have also ensured a favorable learning environment through non-discrimination of pupils with disabilities against those without during the instruction process. Although all the pupils in the classes are taught the same way, pupils with physical disability are given special attention to ensure that they are not left behind. These adaptations are in line with [4] which states that:

*Learning institutions shall take into account the special needs of persons with disabilities with respect to the entry requirements, pass marks, curriculum, examinations, auxiliary services, use of school facilities, class schedules, physical education requirements and other similar considerations (Part 3, 18 (2)).*

## 8 Conclusion

The researchers therefore concluded that there were adequate classroom curricular adaptations. This is because all the pupils had access to academic materials. Also, there was creation of extra time for teaching pupils with physical disability to bring them at par in terms of content coverage with pupils without disability. Further, pupils with physical disability were given extra time to finish their exams and in most of the inclusive schools there was special mode of instruction in order to cater for the needs of the pupils with disability.

## 9 Recommendations

Based on the results of this study, the researchers make the following recommendations: The respective schools in collaboration with the government should provide special equipments such as page turners for pupils with severe physical disability such as those who use the limbs of their legs to write. This can be enhanced through adequate funding and by also ensuring that such technologies are available and affordable. Teachers should be sensitized on the individual differences of pupils with physical disability in terms of severity of the disability in order for the teachers to accommodate them well and enhance full inclusion. The paper recommends policy review to address the concerns raised in this paper.

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