Inclusion of Learners with Disabilities in Early Years' Education - A Case of Kiwanja Primary School, Nairobi City County, Kenya

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Abstract: Inclusion refers to the practice and policy of providing equal opportunities and resources for individuals with special needs. One of such opportunities is education. If education is necessary for "normal" children, it would be much more necessary for those children with disabilities. Early childhood extends from birth to six years. This period consists of the nursery (2-4 years) and Kindergarten or pre-school age (5-6 years). This is a crucial, formative, and developmental human stage, in which social inclusivity begins at home and must continue under caretakers and teachers in any Early Childhood Education Centre, be it public or private. The study purposed to investigate the Inclusion of Learners with Disabilities in Early Years' Education in Kenya. Findings revealed that an instructional strategy which was an IEP was the most effective for learners with disabilities in Early Years Education while the assessment method that was mostly used for grading these learners was rubrics as required by CBC.

I. INTRODUCTION

Inclusion refers to the practice and policy of providing equal access to opportunities and resources for people who might otherwise be excluded and marginalized. These people would include those with disabilities such as physical. Mental, emotional, and visual, to name but a few. Further, opportunities and resources are first and foremost found at home, school, and community for the child. Here they provide basic needs to all children in the family equally. One of such opportunities is education. If education is necessary for "normal" children, it would be much more necessary for those children with disabilities. Early childhood extends from two to six years (Piaget, 2020; Nzoka, 2021). This period consists of the nursery (2-4 years) and Kindergarten or pre-school age (5-6 years). This is a crucial, formative, and developmental human stage in which social inclusivity begins at home and must continue under caretakers and teachers in any early childhood education center, be it public or private (MoE, 2013). All children have a right to learn and to play together. They have a right to be valued and not discriminated against. By being excluded or sent away due to their disabilities such as learning difficulty. There are no legitimate reasons to separate children within the duration of schooling as they belong together and need not be protected from one another. All children should work in inclusive communities, with different races, religions, aspirations, and disabilities. All children should learn and grow in an environment in which they will work and live. Education should be a right for all but not a privilege. Finally, creative

alternatives should be available for persons who do not succeed in typical ways (The Agra Seminar, 1998).

Objectives of the Study

(i) To determine instructional strategies used by teachers at Kiwanja primary for learners with disabilities in Early Years' Education

(ii) To determine assessment methods used by teachers for learners with disabilities in Early Years Education at Kiwanja primary school.

II. REVIEW OF RELATED LITERATURE

Importance of the Early Years Education: The Convention of the Rights of the Child () states that children (non-disabled or disabled) have a right to live and develop to their full capacity through the provision of adequate care (and education) during the early years. A good foundation laid in the early years of growing up children has far-reaching benefits to an individual child within the community.

Instructional Strategies

According to Stanback and Stanback (1984), there are no special teaching methods that hinder learners who are disabled. A good basic program (adopted, specialized, specialist, adapted) can be effective for all learners. For this to happen, the teacher has to: (i) adapt instructional strategies. This refers to change/modification on the manner to which the teacher uses to provide information to the class. This may include demonstrations, role play, drama, storytelling, question and answer method, group discussion/activity, reading aloud to them, guiding and motivating them to make use of all their senses in the learning process. (ii) Adapting instructional materials. Here adapting teaching materials, involve making changes to the equipment a learner may be using in class to access information. This may include changing formats through which the information is presented to the learner and adapting engagement with the curriculum during the instruction. Such adaptation may include: the readability level of the written materials, enhancing critical features of the content within the materials, designing materials that appeal to the senses, and selecting instructional materials for their availability and safety. (iii) Adapting/adopting curricular content. This involves modifying/varying the complexity and nature of the content presented to the student. This type of

curricular adaptation calls for an adjustment of the cognitive demand or level of a learning task for a particular class. (iv) Adapting assessment practices. This curricular adaptation in an inclusive setting refers to various alterations by which the teacher gets information from a learner in class. This involves a change in learning output by the learner. Adaptation of assessment practices includes expansion of the test items, taking into consideration time allocation on a power test, using multiple criteria to assess a learner's product, providing structured answer frames, worksheets, portfolios and evaluating processes equally with the final product, using impassive measures such as comparing a learners performance with his/her past performance and offering learners a variety of practical strategies and choices for producing required assignments; opportunities to respond to instructions inclusively, written expressions, collage, sculpture, pantomime, dramatic portrayal, music composition, motoric demonstration, photographic presentations, graphics display and tactile materials (Stanback & Stanback,1984).

Although according to Stanback and Stanback there are no special teaching strategies that are effective for learners who are disabled in an inclusive setting, a study conducted at Kiwanja Primary School in Nairobi City County revealed that most teachers in the school used the Individualized Education Plan (IEP) as a teaching strategy for learners with disabilities. This was closely followed by a learner-centered strategy which was also popularly used by the teachers in the school. This study showed that most teachers encouraged educational inclusivity for learners with disabilities at the time of the research. Further, this study revealed that Kiwanja Primary school was not fully-disability friendly especially for learners with disabilities as stated by the majority of the teachers. Concerning social interaction, this study showed that learners with disabilities did not play much with their typically developing peers hence the need for more awareness creation by various stakeholders.

III. ASSESSMENT METHODS

In assessment, information may be gathered through group and individual tests of intelligence; checklists and rating scales; teacher/parents interviews; and past school performance (Grossman, 2005). Tests of intelligence performance claim to assess general reasoning, learning, and problem-solving abilities (Andiema, 2010). This scholar noted that most intellectual performances were essentially measures of verbal abilities and skills in dealing with numbers and other abstract symbols. Typical content areas tested include discrimination, generalization, general information, motor behaviors, vocabulary, induction, comprehension, sequencing, detailed recognition, and pattern recognition (Kang'ethe, 2012). Measures of adaptive behavior assess non-academic areas and living skills at home and in a community (Grossman, 2005).

School success is assessed for two reasons: (i) to determine the relationship between school performance and adaptive behavior and (ii) to determine its influence on learners' actual learning problems. Visual perception, memory, auditory perception, and motor deficits are measured through group and individual tests, observations, inventories, interviews, and questionnaires as readiness indicators. Tested skills include reading, handwriting, math skills, ability to follow simple oral directions, answer multiple choice questions, good writing, and e.t.c in Pre-school and Primary school curriculum.

IV. RESEARCH METHODOLOGY

The variables of this study were independent were inclusive strategies such as instructional and assessment strategies while dependent variables were enhanced academic performance, socialization skills, and communication skills. All of which promoted inclusive teaching/learning processes.

This study was carried out at Kiwanja primary school (special needs education, inclusive, and regular primary school) located in Nairobi City County. Thirty percent of the total number of learners with special needs and teachers in this school were selected for this study. They were equally distributed across the two genders. The sampling technique was purposive sampling because only teachers who were with qualifications in special needs education were sampled. Also, learners were purposively sampled but their typically developing peers were randomly sampled. The research design was a case study. This study employed mixed methods that were quantitative and qualitative; library and internet search. Research instruments were questionnaires interviews and observation schedules all of which were used to collect data for this study. After two weeks allocated for data collection elapsed, all the questionnaires were centrally checked for errors in coding and entry. Quantitative data was coded and fed into a spreadsheet in Predictive Analysis Software (PASW)/Statistical Package for Social Sciences (SPSS) version 22, for analysis. Analyzed data from descriptive statistics was then presented with a graphical representation of frequency distribution tables, percentages, and pie charts. Results from interview schedules and observation checklists were captured verbatim, categorized, and manually reported in a narrative form.

V. PRESENTATION OF FINDINGS

Demographic Data

Demographic information is important in a research study as it provides data regarding research participants. It is necessary the determination whether the individuals in a particular study are a representative sample of the target population for generalization purposes according to Orodho (2004). For this study, the gender, designation, training experiences, and professional qualification of the respondents were established.

Data were collected from a total of 9 participants using a semi-structured questionnaire that contained 14 items. Data were coded, entered into a computer, and analyzed using Statistical Package for Social Sciences. Data were presented using tables and Figures under three sub-sections: Demographic data, instructional strategies, and assessment strategies.
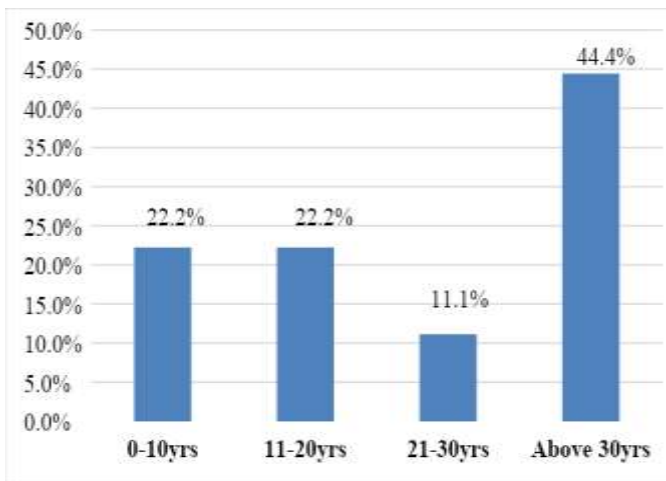
Figure 1: Gender

Distribution by Gender
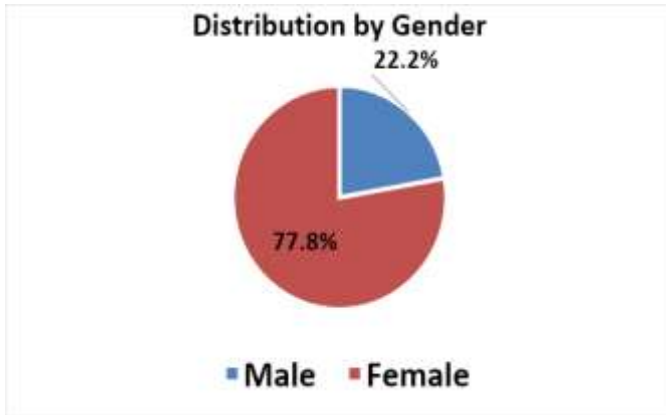
Results in Figure show that the majority 7(77.8%) of the participants were female while males were represented by 22.2%.

Figure 2: Designation of the Participants
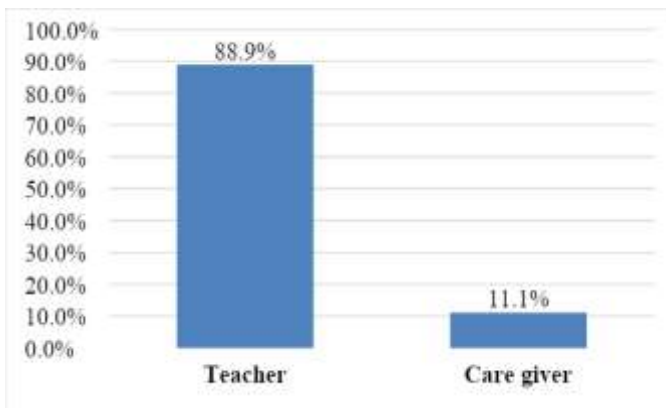
The majority 8(88.9%) of the participants comprised teachers while only one (11.1%) was a caregiver.

Figure 3: Training Experience

Results in Figure 3 indicate that participants were distributed across the four categories of the year of experience with the highest number in the category above 30 years.

Figure 4: Training Specification/Professional Qualification

Results in Figure 4 indicate that most teachers/caregivers for children with disabilities were regular teachers and hence did not have training in special needs education. However, only 3(33%) were professionally trained.

(i) Instructional Strategies

These refer to methods that teachers use to deliver course material in ways that keep students engaged and practicing different skill sets (study.com, 2021). Here the following subsections were discussed: methods employed in teaching learners with disabilities (LWDs); sources of teaching/learning materials; opinion on inclusivity; status of the school environment and social interaction skills.

Table 1: Methods employed in Teaching LWDs in school

Methods Used for Teaching	Frequency	Percentage
IEP	3	33.3%
Learner-Centred strategy	2	22.2%
Modeling	2	22.2%
Group project	1	11.1%
Individual	1	11.1%
Total	**9**	**100.0%**

The approaches applied by the participants in teaching LWDs in school were distributed across such methods as IEP (33.3%), Learner-centred method (22.2%), modeling (22.2%), group project (11.1%), and individualization at 11.1%.

Figure 5: Sources of Teaching/Learning Materials
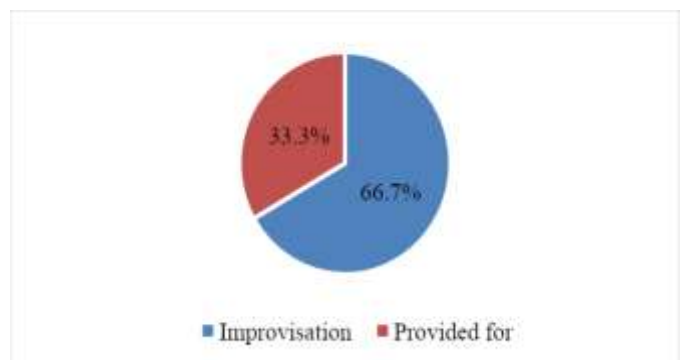
Majority 6(66.7%) improvised teaching/learning materials while 3(33.3%) said that the materials were provided for.

Table 2: Opinions on Educational Inclusivity

Response	Frequency	Percentage
Encourage	5	55.6%
Discourage	4	44.4%
Total	**9**	**100.0%**

Results in Table 2 demonstrate that 55.6% of the participants encouraged educational inclusivity while 44.4% discouraged it. Further, the majority of the respondents who preferred to encourage educational inclusivity explained that it would help learners with disabilities to be assisted by regular learners through peer teaching. On the other hand, those who discouraged it reasoned that it is because of understaffing, lack of training in special needs, and that some learners will not benefit.

Table 3: Status of School Environment

Status of School Environment	Frequency	Percentage
Disability Friendly	2	22.2%
Disability Unfriendly	7	77.8%

Although that 55.6% of the participants encouraged educational inclusivity as presented in Table 2, further results in Table 3 indicate that majority (77.8%) reported that their school environment was not friendly to children with disabilities in teaching and learning.

Table 4: Social-Interaction between children with disabilities and the typically developing peers

Response		Frequency	Percentage
Children in both parameters play	Yes	4	44.4%
	No	5	55.6%

Results in Table 4 show that 55.6% reported that children with disabilities play with their typically developing peers.

(ii) Assessment Methods

This is an educational resource that focuses on the process used to determine a child's specific learning strengths and needs and to determine whether or not a child is eligible for special education services. Assessment in special education is a process that involves collecting information about a student to make decisions. Assessment, also known as evaluation, can be seen as a problem-solving process. This study looked at specific areas of assessment such as types of accommodation in tests provided for learners with disabilities; differences in tests administer; grading system; criteria for promotion and transition opportunities.

Table 5: Types of accommodation in tests provided to LEDs

Type of Accommodation in Test Provided	Frequency	Percentage
Extra time	0	0.0%
Oral test	3	33.3%
Modification in test	5	55.6%
Large Prints	1	11.1%

In Table 5, it is evident that modification in the test was the most type of accommodation in the test provided as represented by 55.6%.

Figure 6: Whether tests administered to the LDWs are different from those of their typically developing peers
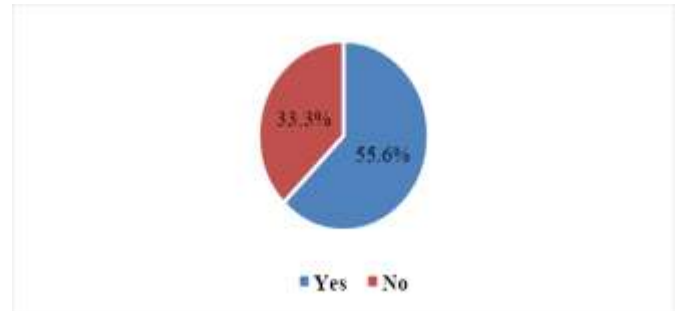
Results in Figure 6 shows that 5(55.6%) agreed that test administered to the LDWs are different from those of their typically developing peers while 3(33.3%) disagreed on the same.

Table 5: Grading of Performance of LWDs

Grading	Frequency	Percentage
Use of Rubrics	7	77.8%
Portfolios	3	33.3%
Report Forms	0	0.0%

In Table 5, it is evident that the most used grading method was the use of rubrics as reported by 77.8%. However, none reported that they used report forms.

Table 6: Criteria used to promote LWDs to the next class

Criteria	Frequency	Percentage
Pass mark	0	0.0%
Age	3	33.3%
Abilities	6	66.7%

Table 6 shows that abilities were the most used criterion in promoting LWDs to the next class as reported by 66.7%. However, none reported that they used pass marks.

Table 7: Opportunities available for children with disabilities who age out of school

Opportunities available for Children with Disability but age out of school	Frequency	Percentage
Excited to go stay at home	0	0.0%
Income generating activities	5	55.6%
Vocational Training and Rehabilitation Centres	3	33.3%
Employment Opportunities	1	11.1%
Secondary Schools	0	0.0%

Table 7 indicates that 55.6% of the participants said that Income generating activities were the opportunities available for children with disabilities but aged out of school. However,

none mentioned staying at home and promotion to secondary schools as the latter alternative for the age out of school.

To triangulate the findings, the researchers observed children with disabilities in class and playfield to establish the extent to which inclusivity was enhanced among Early Years Learners with disabilities and their typically developing peers. The observations were made in two sessions. In the first session, learners with disabilities were observed while responding to academic activities introduced to all children in the classroom setting. In the second session, they were observed outside the classroom during P.E. lesson together with their typically developing peers. Results showed that children with disabilities were less active in a classroom setting but were able to socialize with their typically developing peers outside the classroom setting.

The researchers also used an interview schedule for the head teacher of the school on various ways that are put in place to encourage the inclusion of learners with disabilities in Early Years Education. The head teacher mentioned several strategies which were evidence-based practices in the school to ensure the inclusion of learners with disabilities during the Early Years of Education. Some of these evidence-based practices rotated on instructional strategies following the CBC curriculum and assessment method which was also referred to as Competency Based Assessment. Other areas the head teacher mentioned were barrier-free environments that supported all categories of disabilities.

VI. CONCLUSIONS

In the first objective which was instructional strategies the following conclusions were arrived at as per subsection:

(i) *Methods employed in Teaching LWDs in school* - it is evident that the approaches applied by the participants in teaching LWDs in school were distributed across such methods as IEP (33.3%). Therefore, IEP was the most preferred method employed in the school by teachers. This was supported by previous researchers that learners with disabilities in the Early Years of Education were able to benefit in all aspects of learning if IEP was developed and implemented for them.

(ii) *Sources of Teaching/Learning Materials* - The majority 6(66.7%) improvised teaching/learning materials. In conclusion, teaching/learning materials used for learners with disabilities in the Early Years of Education are mainly improvised, and this is supported by the new curriculum CBC which calls upon learning institutions to use locally available materials in teaching to enhance creativity and innovativeness among learners.

(iii) *Opinions on Educational Inclusivity* - The majority of the respondents who preferred to encourage educational inclusivity explained that it would help learners with disabilities to be assisted by regular learners through peer teaching. On the other hand, those who discouraged it reasoned that it is because

of understaffing, lack of training in special needs, and that some learners will not benefit. This is supported by several previous researchers who concluded that the benefits of Inclusion are numerous to both learners with disabilities and those without disabilities.

(iv) *Status of School Environment* - Even though that 55.6% of the participants encouraged educational inclusivity for children with disabilities concerning teaching and learning. It was concluded that for the Inclusion of learners with disabilities to succeed in regular schools, the school environment should be disability friendly. Improving accessibility in schools has been a top priority for disability rights groups for many years. In Kenya, the government has worked with several Special Needs Education activists to deliver projects that make education more inclusive for all pupils. In 2019, Kenya passed a new policy aimed at making education accessible, so that all children with disabilities can go to school. This includes providing space, resources, and training in mainstream schools so that children with and without disabilities can learn alongside each other.

(v) *Social-Interaction between children with disabilities and their typically developing peers* - Results show that 55.6% reported that children with disabilities play with their typically developing peers. It was concluded that when children with disabilities play with typically developing peers' socialization skills were enhanced.

In the second objective which was on assessment strategies the following conclusions were drawn per subsections:

(i) *Types of accommodation in test provided to LWDs* - it was evident that test modification was the most type of accommodation done represented by 55.6%. This, therefore, confirm with other findings from previous researchers that learners with disabilities can benefit from accommodation during testing.

(ii) *Whether test administered to the LDWs are different from those of their typically developing peers* - results in Figure 6 shows that 5(55.6%) agreed that test administered to the LDWs are different from those of their typically developing peers. This study concluded that learners with disabilities benefited when their tests are adapted to suit their needs.

(iii) *Grading of Performance of LWDs* - it is evident that the most used grading method was the use of rubrics as reported by 77.8%. However, none reported that they used report forms. This study concluded that the best-preferred grading system was the use of rubrics.

(iv) *Criteria used to promote LWDs to the next class* - that abilities were the most used criterion in promoting LWDs to the next class as reported by 66.7%. However, none reported that they used pass marks. This study concluded that transition from one

level to the next should be pegged on the skills acquired but not on their cognitive abilities to conform with the stage-based pathway being implemented in CBC.

(v) *Opportunities available for children with disabilities who age out of school* - 55.6% of the participants said that Income generating activities were the opportunities available for Children with disabilities that age out of school. This study concluded that as learners with disabilities age out of school they should join vocational rehabilitation centers to further the skills learned in schools.

VII. RECOMMENDATIONS

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

(i) Policy Recommendations

i. This study recommends that policymakers, KICD, the Teachers Service Commission, and the Ministry of Education should work together to develop programs supporting learners with disabilities in Inclusive Settings to be retained in regular schools.

ii. The study recommends that learners with disabilities should be allowed to learn at their own pace and interest hence their curriculum should not be examination-oriented but competence-based.

iii. The study recommends that the Ministry of Education through public training and sensitization should increase knowledge on Inclusive Education in all institutions in Kenya.

iv. This study recommends that government agencies and policymakers utilize the findings of this study to inform the active formulation of important national policies and legislation that might be relevant and sensitive to the plight of learners with disabilities in inclusive settings.

v. Future and current academicians and scholars might find the findings and recommendations of this study valuable as it would extend the level of knowledge available on the Inclusion of learners with disabilities

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