Effect of Availability of Teaching and Learning Resources on the Implementation of Inclusive Education in Pre-School Centers in Nyamira North Sub-County, Nyamira County, Kenya.

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Abstract
Inclusive education is a process of adjusting the home, school and the larger community to accommodate persons with special needs. In respect to pre-school learners, it is a means by which centers accommodate all learners regardless of their physical, intellectual, social, emotional, linguistic challenges. UNICEF notes that some 150 million children with disabilities lack access to child care services, schools, recreation and other social services, and are likely to remain illiterate and untrained, ultimately unable to join the labor force. Children with special needs are still perceived negatively by society. Most of the learners with special needs do not enroll in pre-school centers in Nyamira North Sub-county and if enrolled, they drop out before the year ends as per the report from Education Office.

The study aimed at finding out whether availability of teaching and learning resources influenced implementation of inclusive education in pre-school Centers in Nyamira North sub-county. Efforts have been made to integrate the learners with special needs although the programme has encountered a lot of challenges; policies have been put in place to provide for the achievement of universal education and the realization of vision 2030. However, Inclusive education experiences a pyramid of challenges at pre-school level in the world and Kenya. The study employed descriptive survey research design. The target population was 134 head teachers in 134 pre-school centers, 402 pre-school teachers, 12 Education officers and 938 pre-school parents in Nyamira North Sub-county. Sample size was 40 pre-school centers and 40 head teachers which were randomly sampled to represent 30% of the centers. Further, 134 pre-school teachers and 270 pre-school parents were sampled through stratified random sampling and 12 Education Officers sampled by census sampling. Data was collected using questionnaires and observation checklists. Descriptive statistics of means, percentages and weighted averages was used in analyzing the data. Findings revealed that there were inadequate teaching and learning resources at pre-school centers in Nyamira North sub-county. 78 percent of the respondents revealed that inadequate resources affected the implementation of inclusive education. The study recommends that adequate teaching and learning resources should be provided to ensure effective implementation of inclusive education and more funds to be allocated for procuring teaching and learning materials for Special Needs Education (SNE) learners.

Keywords: Inclusive education, teaching and learning resources, pre-school centers, learners with special needs, implementation

Background of the Study
According to Owoko (2010), the term resources refers not only to teaching methods and materials but also the time available for instruction, the knowledge and skills of teachers acquired through training and experience. Teaching pupils with special needs in the inclusive classroom deviates from the “regular” programme. Pupils with special needs may require more instruction time, other learning methods and professional knowledge. This can be achieved by an increase in resources or by re-arranging available resources. Children with special needs are not required to meet the classroom standards rather the classroom meets the individual needs of all children (Bargsma, 2000). Puri and Abraham (2004) argues that school management and teachers should make efforts to identify and attend to learners with special learning needs for instance dietary needs especially pre-school.

Oyugi and Nyaga (2010) note that teaching and learning resources include; peripatetic services, support staff (sign language interpreters and Braille transcribers), community involvement, regular and special teachers among others. Inadequate trained special education teachers and professional’s acts as an obstacle to implementation of inclusive education (Kochung, 2011).

Oliver (1996) notes that the education system has failed learners with special needs by not equipping them with

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appropriate teaching and learning materials to exercise their rights and responsibilities as citizens, while the community and special education system has functioned to exclude them from both the education process and wider social life. (Heward, 2003).

Instructional methods, examination systems and rigid curriculum are some of the barriers to implementation of inclusive education in pre-school centres in Kenya. Implementing successful inclusive education often requires adequate support human resource, teaching and learning resources. Teachers frequently feel there is lack of human resources, teaching and learning facilities; this poses great barriers to implementing successful inclusion (Crawford, 2004).

In Nyamira North Sub-county, there are 19 special units which specifically caters for 440 pupils who are challenged against 25 SNE teachers (SCDE, 2012). Smith and Sutherland (2006) explained that availability of teaching and learning materials, resource centers attached to ordinary schools, teachers’ attitudes towards inclusion of children with special needs are most important for success or failure of implementing inclusive education. Environments where education institutions are situated are not disability friendly and the facilities within the community are inaccessible.

**Statement of the Problem**

Children with special needs are perceived negatively by society; in that, most learners do not enroll in pre-school centers since they are neglected group whose value to economic development is minimal or not existing. Therefore, using resources on them is like doing a lot of wastage without the realization that “Disability is not inability”. Several factors have been identified to affect the implementation of Inclusive education in pre-school centers, these include limited resources and poor implementation strategies (Fullan 2003). This study therefore, sought to examine influence of teaching and learning materials for the implementation of Inclusive education in Nyamira North Sub-county.

**LITERATURE REVIEW**

**Educational Inclusion**

Inclusive education is more than mainstreaming. Mainstreaming implies that a student from a separate special education class visits the regular classroom for specific, usually non-academic, subjects. Inclusion is an educational process by which all students, including those with disabilities, are educated together for all, or at least most, of the school day. Generally 80% or more of the day is what is considered inclusion by proponents-a majority could be anything more than 50%. With sufficient support, students participate in age-appropriate, general education classes in their neighborhood schools.

Inclusion is a philosophy of education based on the belief in every person’s inherent right to fully participate in society. Inclusion implies acceptance of differences. It makes room for the person who would otherwise be excluded from the educational experiences that are fundamental to every student’s development. When inclusion is effectively implemented, research has demonstrated academic and social benefits for all students: both those who have special needs as well as typical students. Friendships develop, nondisabled students are more appreciative of differences and students with disabilities are more motivated. True acceptance of diversity ultimately develops within the school environment and is then carried into the home, workplace and community Elweke and Rodda, 2002; Stough, 2003.

**Benefits of Inclusion**

A number of studies over the years have reported the various benefits of inclusive education. In 1996, the National Down Syndrome Society published a research report on the inclusion of children with Down syndrome in general education classes. After analyzing and comparing extensive parent and teacher questionnaires, this study found that with proper support and adequate communication between parents, teachers and professionals, inclusion is a favorable educational placement for children with Down syndrome. The study also found that the learning characteristics of students with special needs were more similar to their nondisabled peers than they were different. Moreover, teachers reported positive experiences with students with Down syndrome. They described their students as eager to learn, especially when encouraged, and reported personal satisfaction in terms of their professional achievements.

Literature documenting successful inclusion practices is significant and growing. An analysis by Baker, Wang and Walberg in 1994 concluded that "special-needs students educated in regular classes do better academically and socially than comparable students in non-inclusive settings." Research also found inclusion was not detrimental to students without disabilities 3. In fact, a national study of inclusive education conducted in 1995 by the National Center on Educational Restructuring and Inclusion (NCERI) reported academic, behavioral and social benefits for students with and without disabilities. The study also concluded that students within each of IDEA’s 13 categories of disability, at all levels of severity, have been effectively integrated into general education classrooms. NCERI also reported positive outcomes and high levels of professional fulfillment for
teachers. A number of other studies confirming the educational and social benefits of inclusion for students with and without disabilities can be found in the reference list at the end of this publication. In May 2000, the Indiana Inclusion Study investigated the academic benefits of inclusive education for students without disabilities. This study concluded that students without disabilities who were educated in inclusive settings made significantly greater progress in math than their peers. Although their progress in reading was not significantly greater than their peers, there was a “consistent pattern” in their scores that favored educating students without disabilities in inclusive settings. This and other research has highlighted improved academic skills, social skills, communication skills and peer relationships as four of the most important benefits of inclusion. Nondisabled students can serve as positive speech and behavior role models for those with disabilities and students with disabilities offer their nondisabled peers acceptance, tolerance, patience and friendship. As allies and friends, peers can offer support both in and out of the classroom. These findings show that everyone involved in inclusive schooling can benefit from the experience. The introduction to the Individuals with Disabilities Education Act acknowledges that education in inclusive settings works when the mandates of the law are followed. It states: "Almost thirty years of research and experience has demonstrated that the education of children with disabilities can be made more effective by having high expectations for such children and ensuring their access to the general education curriculum in the regular classroom, to the maximum extent possible, in order to—meet developmental goals and, to the maximum extent possible, the challenging expectations that have been established for all children; and be prepared to lead productive and independent adult lives, to the maximum extent possible; strengthening the role and responsibility of parents and ensuring that families of such children have meaningful opportunities to participate in the education of their children at school and at home; coordinating this title with other local, educational service agency, State, and Federal school improvement efforts, including improvement efforts under the Elementary and Secondary Education Act of 1965, in order to ensure that such children benefit from such efforts and that special education can become a service for such children rather than a place where such children are sent; providing appropriate special education and related services, and aids and supports in the regular classroom, to such children, whenever appropriate; supporting high-quality, intensive preserve preparation and professional development for all personnel who work with children with disabilities in order to ensure that such personnel have the skills and knowledge necessary to improve the academic achievement and functional performance of children with disabilities, including the use of scientifically based instructional practices, to the maximum extent possible; providing incentives for whole-school approaches, scientifically based early reading programs, positive behavioral interventions and supports, and early intervening services to reduce the need to label children as disabled in order to address the learning and behavioral needs of such children; focusing resources on teaching and learning while reducing paperwork and requirements that do not assist in improving educational results; and supporting the development and use of technology, including assistive technology devices and assistive technology services, to maximize accessibility for children with disabilities." Eltewe and Rodda, 2002; Stough, 2003

Inclusive education has also been shown to have a positive impact on employment outcomes. A 1988 study by Affleck et al., spanning fifteen years, found that students with disabilities educated in inclusive settings had an employment rate of 73 percent while those in segregated programs had an employment rate of 53 percent. Ferguson and Asch (1989) found that the more time students with disabilities spent in regular classes, the more they achieved as adults in employment and continuing education. In its 1997 annual report to Congress, the US Department of Education noted: "across a number of analyses of post-school results, the message was the same: those who spent more time in regular education experienced better results after high school." As nearly all employment settings are themselves inclusive, involving people with and without disabilities, it is easy to imagine why inclusive education has a positive impact on employment outcomes.

**Concept of Teaching and Learning Resources**

Adequacy of TLR refers to satisfactory or acceptable quality and quantities of material resources, physical facilities and human resources. According to DFID (2007), adequacy of instructional materials such as textbooks which is the main instruction material is the most cost effective input affecting student performance. In this context adequate supply is usually assumed to be a minimum of one textbook per three students, and at primary level enough reading books so that every child has the opportunity to read at least one new book every week. Adequacy of TLR determines an educational system’s efficiency, according to Padmanabhan (2001). For effective teaching and learning, textbook and resource materials are basic tools, their absence or inadequacy makes teachers handle subjects in an abstract manner, portraying it a dry and non exciting. It is also important to have appropriate personnel plan for adequate instructional materials and physical facilities to support educational effort. Therefore Scarcity of textbooks, libraries and physical facilities according to Coombs (1970), will constraint educational system from responding more fully to new
Influence of adequacy of Physical Facilities on Learners’ Performance

It is essential for educational institutions to have adequate and appropriate facilities for teaching and learning so that educational programmes can be implemented effectively. According to Lyons (2012), learning is a complex activity that involves interplay of students’ motivation, physical facilities, teaching resources, and skills of teaching and curriculum demands. Poor performance could be attributed to inadequate teaching and learning materials. Adequacy of TLR in FDSS since the implementation of FDSE in public education.

Influence of availability of Teaching and Learning Materials on Learners’ Performance

Material resources include textbooks, charts, maps, audiovisual and electronic instructional materials such as radio, tape recorder, television and video tape recorder. Other category of material resources consist of paper supplies and writing materials such as pens, eraser, exercise books, crayon, chalk, drawing books, notebooks, pencil, ruler, slate, workbooks and so on (Atkinson, 2000). Adeogun (2001) discovered a very strong positive significant relationship between instructional resources and academic performance. According to Adeogun, schools endowed with more materials performed better than schools that are less endowed. This corroborated the study by Babayomi (1999) that private schools performed better than public schools because of the availability and adequacy of teaching and learning materials. Mwiria (1985) also supports that students performance is affected by the quality and quantity of teaching and learning materials. The author noted that institutions with adequate facilities such as textbooks stand a better chance of performing well in examination than poorly equipped ones. Therefore, poor performance could be attributed to inadequate teaching and learning materials and equipment.

Influence of adequacy of Physical Facilities on Learners’ Performance

The development and maintenance of physical facilities in educational institutions by communities, parents, and sponsors should continue to be encouraged. This is because lack of such facilities interferes with learning process (Republic of Kenya, 1988a). DFID (2007) indicates the importance of school facilities in relation to quality education. Difference in school facilities would be seen to account for difference in achievement. Physical facilities include classrooms, lecture theatres, auditoriums, administrative block, libraries, laboratories, workshops, play grounds, assembly halls, and special rooms like clinics, staff quarters, students’ hostels, kitchen, cafeteria, and toilet amongst others. He further asserts that learning experiences are fruitful when there are adequate quantity and quality of physical resources; and that unattractive school buildings, crowded classrooms, non availability of playing ground and surroundings that have no aesthetic beauty can contribute to poor academic performance. Fonseca and Conboy (2006) posit that the physical conditions and organization of schools facilitate or inhibit construction of a culture of success. Ministry of Education Science and Technology, MOEST (2005) explains the importance of ensuring that there are adequate and appropriate facilities for teaching and learning so that educational programmes could be implemented effectively.

Influence of adequacy of Human Resources on Learners’ Performance

The adequacy of TLR determines the success or failure of the educational system. A method of determining the extent of teacher’s adequacy is through Students- Teacher ratio (STR) which is the number of students assigned to teachers for teaching. STR is used to determine the number of students that are to be allocated to a teacher in a given educational level. The STR shows a teacher’s workload at
a particular level of education. It also helps in determining the number of teaching manpower needed for a projected student’s enrolment. Thus, it could be used to determine either teachers are over-utilized or underutilized (Afolabi, 2005).

An educational institution’s human resources consist of teachers and other support staff who engage in the process of teaching and learning. They include, laboratory assistants, cooks amongst others. There should be optimum use of the available human resource especially teachers if good performance is to be achieved. Republic of Kenya (RoK, 2005) where teacher shortage exists, the head teacher and Board of Management (BOM) should hire on temporary basis, as there are very many trained but unemployed teachers. The study will find out the adequacy of human resources.

**Extent of utilization of TLR in FDSE**

The utilization of resources in education brings about fruitful learning outcomes since resources stimulate students learning as well as motivating them. A common way to examine the utilization of education resources is to analyze school expenditure. This is because school expenditures constitute the bulk of all resources devoted to schooling and they are tractable instruments of education policy (Meghir, 2002). Since the inception of FDSE policy, access to secondary education has gone up with the number of students enrolling in secondary education rising from 1.3 million in 2009 and 2.1 million students this year, raising the transition rate from 64% to 77% over the period (“FDSE”, 2014) led to overcrowded classrooms and overutilization on existing TLR. (KESSP, 2010)

According to SACMEQ (2003) Survey revealed that few schools provided libraries or reading corner to enable literate environment UNESCO (2007). A school should adequately utilize the available facilities to advance learning opportunities offered to pupils. It is the responsibility of the head teacher to ensure that there is adequate classroom space to enable teaching learning process to take place and should ensure that all facilities are efficiently and effectively utilized so as to achieve educational goals and improve learning outcomes.

**Availability of Teaching and Learning Resources for the Implementation of Inclusive Education**

Puri and Abraham (2004) emphasize that classroom need to be colourful, interesting, for learners to feel enthusiastic about coming to pre-school centres. For easy access, ramps (for children with physical disabilities), hand-rail (for children with visual impairment), Braille for reading and writing and wheel-chairs are needed. A mug and a bucket of water too may be kept outside the classroom to ensure that learners maintain basic hygiene by washing their hands after playing outside. Eleweke and Rodda (2002) noted that social facilities to accommodate learners with special needs are often non-existent or inadequate in many institutions. Few facilities may be found within the urban centres but none in rural areas.

Many colleges or universities provide training for regular and special needs teachers but there is concern regarding the adequacies of the programs, teaching and learning resources. These programs tend to concentrate on the pathology of disabilities, rather than instructing on modifications to suit the needs of the child (Eleweke and Rodda, 2002; Stough, 2003). The curriculum should be adapted to enable learners with special needs to learn at their own pace. Train the learners to make use of their functional parts of their bodies and to provide extra work for exceptionally talented and intellectually gifted learners (Ngugi, 2007).
Conceptual Framework

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Intervening Variables</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of teaching / learning resources</td>
<td>• Government policies</td>
<td>• Implementation of inclusive education</td>
</tr>
<tr>
<td>• Teaching methods</td>
<td>• Economical and political environment</td>
<td>• Enrolment of Learners with special needs</td>
</tr>
<tr>
<td>• Teaching materials</td>
<td>• Poverty</td>
<td>• Gender parity</td>
</tr>
<tr>
<td>• Time</td>
<td>• Cultural factors</td>
<td>• Sensitization of community on SNE</td>
</tr>
<tr>
<td>• Knowledge/skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Human resource</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MATERIALS AND METHODS

Research Design
The study employed descriptive survey research design.

Target Population
The target population was 1486 individuals from where a sample of 453 was drawn. According to records in the Sub-County Education office, there are 12 Education officers, 134 head teachers, 402 pre-school teachers and 938 pre-school parents giving a target population of 1486.

Sample Size and Sampling Procedure

Sample Size
The sample size for the study was determined using Mugenda & Mugenda’s 30% rule for sample size determination. Applying the rule to the total population of 1486 arriving at a sample size of 453 respondents.

Table 1: Sample Size

<table>
<thead>
<tr>
<th>Stratum</th>
<th>population</th>
<th>sample size</th>
<th>sampling procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head teacher</td>
<td>134</td>
<td>40</td>
<td>Random sampling</td>
</tr>
<tr>
<td>Pre-schoolteachers</td>
<td>402</td>
<td>134</td>
<td>Random sampling</td>
</tr>
<tr>
<td>School committees</td>
<td>938</td>
<td>281</td>
<td>Random sampling</td>
</tr>
<tr>
<td>Education officers</td>
<td>12</td>
<td>12</td>
<td>Census sampling</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1486</strong></td>
<td><strong>453</strong></td>
<td></td>
</tr>
</tbody>
</table>

Sampling Procedure
The researcher used census sampling for education officers and random sampling for head teachers and pre-school teachers and school committee members. The study sample was determined by 30% formula for sample size determination according to Mugenda and Mugenda (2003). The Sub-County has 134 schools and from the schools the researcher randomly sampled 40 schools, arriving at a sample size of 453 individuals.

Instruments for Data Collection
Structured and semi structured questionnaires and observation checklists were used to collect data.

Validity and Reliability of Research Instruments
Mugenda & Mugenda (2003) defines validity as the accuracy and meaningfulness of inferences, which are based on research results. Content validity was tested by subjecting the questionnaires and the observations to two experts (teachers) who scrutinized the instruments questions in each of the sub sections and judged their relevance to the objectives of the study.

Construct validity was used as index to measure the validity of the instrument. The content validity index was thus calculated as follows: 136 items were piloted and the returned items checked for content and construct. If 95 returned items are in agreement with questionnaire, then;

\[
\text{CVI} = \frac{\text{Sum of agreement on every relevant judgment}}{\text{Total number of items in Instrument}} \times 100
\]
Construct Validity Index 95/136= 0.70. This value was deemed appropriate thus the questionnaire was adequate for data collection.

Reliability of this study instruments were ascertained by pre-testing the questionnaires in the field. According to Weisberg et al. (1989), researchers can assess reliability by comparing the answers respondents give in one pretest with answers in another pretest. We can estimate the reliability of the sum scale via the spearman-Brown split half coefficient:

$$r_{sb} = \frac{2r_{xy}}{1+r_{xy}}$$

In this formula, $r_{sb}$ is the split-half reliability coefficient, and $r_{xy}$ represents the correlation between the two halves of the scale.

**Data Collection and Analysis Procedure**

The researcher got a research permit from National Commission for Science, Technology and Innovation (NACOSTI). The researcher did self introduction to intended respondents and sought permission to administer the questionnaires. A letter of introduction from Maasai Mara University was attached to every copy of the questionnaire to create confidence to the respondents on the intent of the assessment. The researcher notified the respondents of the intention to conduct the study during the visit in order to gain their confidence to provide information needed.

Descriptive statistics are invaluable in generalizing the sample data in such a way as to portray the typical respondent and to reveal the general pattern of responses (Burns et al., 2003). It is useful for the purpose of communication efficiency to present the finding by using both statistical techniques (frequency distribution table). The study used descriptive statistics to analyze data including means, percentages and weighted averages. Analyzed data was presented in tables.

**RESULTS AND DISCUSSIONS**

**Gender of Respondents**

The data on gender of the respondents is important because the researcher wanted to know the composition of the respondents essential to study the societal attitude on inclusive education.

**Table 2: Gender of Respondents**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Head teachers</th>
<th>Education officers</th>
<th>Pre-school teachers</th>
<th>Pre-school parents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>36.7</td>
<td>2</td>
<td>22.2</td>
</tr>
<tr>
<td>Male</td>
<td>19</td>
<td>63.3</td>
<td>7</td>
<td>77.8</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
<td>9</td>
<td>100</td>
</tr>
</tbody>
</table>

The study findings indicated that most of the respondents 19 (63.3%) among the head teachers were male while only 11 (36.7%) were female. Among the education officers the male were also more at 7 (77.8%) while only 2 (22.2%) of the education officers were female. It was also noted that most of the pre-school teachers 78 (78%) who respondent to the questionnaire were female while the rest 22 (22%) were male, while among the pre-school parents 139 (71.3%) were female and only 56 (28.7%) were male. This shows that there is gender disparity among the people concerned with ECDE, since in total there were 230 female participants and 104 were male. According to the results we have more female at the lower level among the teachers and the parents but the people at the leadership position are male. This might have an effect in the implementation of inclusive education at pre-school centers in Nyamira North Sub-County.

**Education Level of Respondents**

The study sought to find out the education level of the respondents.

**Table 3: Education Level of Respondents**

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Head teachers</th>
<th>Education officers</th>
<th>Pre-school teachers</th>
<th>Pre-school parents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Above degree</td>
<td>3</td>
<td>10.0</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td>Degree</td>
<td>12</td>
<td>40.0</td>
<td>4</td>
<td>44.5</td>
</tr>
<tr>
<td>Diploma</td>
<td>13</td>
<td>43.3</td>
<td>2</td>
<td>22.2</td>
</tr>
<tr>
<td>Certificate</td>
<td>2</td>
<td>6.7</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>KCE/KCSE</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>CPE/KCSE</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
<td>9</td>
<td>100</td>
</tr>
</tbody>
</table>
The results of the study presented on table 3 revealed that most of the respondents had gone past secondary education. Specifically, it is noted that most of the head teachers at the pre-school centres were 13 (43.3%) had attained diploma qualification with 12 (40.0%) having degree. Among the education officers most of them 4 (44.5%) hold degree with 3 (33.3%) having qualifications above the degree level, only 2 (22.2%) hold diploma. Among the teachers most of them 44 (44%) were diploma holders, 35 (35%) were certificates holders, 14 (14%) had KCSE qualifications with only 7 (7%) having degrees.

Lastly, among the parents most of the respondents 71 (36.4%) were holders of KCSE, 39 (20%) had certificate qualifications, 34 (17.44%) had diploma and 21 (10.77%) had degree. There were also 28 (14.3%) who had attained KCPE qualifications. This shows that most of the respondents had the basic education requirements, however, it was noted that most of the respondents had general training which was not specifically on special needs education. This might have a negative effect on the implementation of inclusive education among the ECDE centres in the county.

**Work Experience**

Respondents were asked to state their Work experience.

*Table 4: Work Experience*

<table>
<thead>
<tr>
<th>Years</th>
<th>Head teachers</th>
<th>Education Officers</th>
<th>Pre-school teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>0-5years</td>
<td>5</td>
<td>16.7</td>
<td>1</td>
</tr>
<tr>
<td>6—10years</td>
<td>10</td>
<td>33.3</td>
<td>6</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>15</td>
<td>50</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
<td>9</td>
</tr>
</tbody>
</table>

The results presented in table 4 shows the working experience of the respondents. The parents were excluded from this analysis and only the head teachers, pre-school teachers and the education officers participated. The results revealed that most of the head teachers 15 (50%) had worked for over ten years, among the education officers 6 (66.7%) had worked for between 5-10 years while for the pre-school teachers were majority 61 (61%) had worked for between 5-10 years.

This indicates that most of the respondents had worked for a reasonable period of time to have acquired the experience expected in handling the special needs learners. This might have an influence on the implementation of the inclusive education among the ECDE centers in the sub-county.

**The State of the Availability of Teaching and Learning Resources for the Implementation of Inclusive Education**

The availability of teaching and learning resources for the implementation of inclusive education, the respondents were asked whether the resources are adequate, the type of teaching resources for special needs education learners, whether learning resources enhance curriculum delivery, whether the structures are designed to meet learners with special needs and more time is dedicated to learners with special needs.
### Table 5: Availability of Teaching and Learning Resources

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>No Response</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is adequacy of Teaching and learning Materials and Resources in Pre-School Centres</td>
<td>8</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>148</td>
</tr>
<tr>
<td>The centers face a lot of challenges when Acquiring Learning Resources.</td>
<td>101</td>
<td>120</td>
<td>15</td>
<td>10</td>
<td>41</td>
</tr>
<tr>
<td>There are no SNE teachers to enhance the inclusion process.</td>
<td>101</td>
<td>80</td>
<td>37</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>The procedures of acquiring the materials for learning is very Rigid.</td>
<td>93</td>
<td>46</td>
<td>71</td>
<td>62</td>
<td>14</td>
</tr>
<tr>
<td>The centres lack government support hence they are unable to procure the required resources for SNE.</td>
<td>113</td>
<td>24</td>
<td>53</td>
<td>69</td>
<td>0</td>
</tr>
<tr>
<td>There is Lack of parental support.</td>
<td>91</td>
<td>113</td>
<td>43</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Lack of Teaching and Learning Resources Influence the Implementation of Inclusive Education</td>
<td>83</td>
<td>130</td>
<td>101</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Key**

P – Parents response  
T – Teacher’s response

The researcher sought to investigate adequacy of teaching and learning resources of learners with special needs in the pre-schools. Out of 195 respondents, 148 respondents disagreed with the statement that there were adequate teaching materials and resources in pre-school centers. Findings from among the teachers and head teachers indicate that all of them 130 agreed with the statement. This reveals that teaching and learning resources were inadequate in all the ECDE centers. This negatively affects the implementation of inclusive education in Nyamira North Sub County. Teaching and learning materials are important for enrolment and maintenance of learners with special needs in pre-school centers.

The researcher also sought to investigate whether the centers face a lot of challenges when Acquiring Learning Resources for children with special needs. Among the 195 parents participants who responded to this question majority 101 strongly agreed with the statement. A similar case was reported among the head teachers and the pre-school teachers with majority 120 strongly agreeing with the statement meaning that schools faced a lot of challenges when acquiring learning resources for the SNE pupils. This negatively affects implementation of inclusive education since implementation of inclusive education depends on availability of and learning resources.

Finally, the study findings indicated that there was lack of teaching and learning resources among the pre-school and this has an effect on the implementation of inclusion education. A total of 184 parents agreed with the statement while a total of 130 teachers and head teachers also agreed to the statement. These findings are in line with Kochung’s (2011) assertion that inadequate trained professionals are an obstacle to implementation of inclusive education.

**Conclusion**

Availability of teaching and learning resources towards the implementation of inclusive education in pre-school Centres in Nyamira North Sub-county enhance curriculum delivery, meets the needs of learners with special needs and enhance pupils’ enrolment and retention in pre-schools centres. The essential learning resources like Braille slates, large prints, audiotapes and loudspeakers, wheel chairs, crutches and sandpaper letters when made available lead to higher pupil enrolment and retention. The challenges to acquisition of teaching and learning resources due to lack of finance, ridged procurement procedures, unavailability of material and market logistics needs to be tackled by sound procurement policies. The study revealed that there were inadequate learning resources at pre-school centres in Nyamira North Sub-County. Lack of adequate teaching and learning resources affects the implementation of inclusive education in pre-school centers.
Recommendations of the Study

1) Based on the analysis of the study, the researcher wishes to make the following recommendations;

2) The government should increase funds to special needs education to necessitate purchase of learning resources, development of infrastructure, train and recruit adequate teachers.

3) There is need for explicit policy on the concept of inclusive education. As it is per now, the policy only talks about integration, which is different from inclusion.

4) There is need for collaboration and partnership between different departments and stakeholders in order to ensure the smooth learning of inclusive education.

5) There is need to review curriculum to cater for the needs of all learners in an inclusive set up.

References


Heward, W.L. (2003). Ten Faulty Notions about Teaching and Learning that Hinder the Effectiveness of Special Education. The Journal of Special Education.


