



**INFLUENCE OF TEACHERS' PREPAREDNESS  
AND INSTRUCTIONAL RESOURCES ON TRANSITION  
OF LEARNERS WITH VISUAL IMPAIRMENT FROM  
INTEGRATED PRE-PRIMARY TO PRIMARY SCHOOLS  
IN NAROK COUNTY, KENYA**

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**Abstract:**

Transition of pre-primary learners with visual impairment from integrated pre-primary to primary schools in Narok County has been low. Thus, the study assessed school dynamics influencing transition of learners with visual impairment from integrated pre-primary to primary schools in Narok County, Kenya. The study objectives were; to establish the influence of teachers' preparedness and instructional resources on transition of learners from integrated pre-primary to primary schools in Narok County. The study was based on the Ecological Systems Theory and Transition Theory. The study employed mixed methods approach and in turn used concurrent triangulation research design. The target population consisted of 16 headteachers, 3 Educational Assessment and Resource Centre officers and 208 teachers and 160 learners with visual impairment all totalling to 387. The study adopted the Krejcie and Morgan (1970) sample size determination formula where a sample size of 266 respondents was sampled. The study used purposive and stratified sampling method to select the sample. 15 headteachers and three EARC Officers were sampled using purposive sampling. Stratified random sampling method was used to select 135 teachers while 113 learners were selected using simple random sampling. Questionnaires were used to collect data from teachers, interview guides were used to

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collect data from headteachers and EARC Officers while an observation checklist was used to collect data from the learners. Pilot testing of the instrument was done on 2 headteachers, one EARC officer, 12 teachers and 5 learners with visual impairment from the neighbouring Bomet County. Validity was established through expert judgement. Reliability was established using test re-test technique and reliability index,  $r = 0.867$  was determined using Cronbach Alpha Method. Qualitative data were analysed thematically along the objectives and presented in narrative forms. Quantitative data were analysed using descriptive statistics and inferentially using Pearson's Product Moment Correlation Analysis with the help of Statistical Packages for Social Sciences (SPSS Version 23) and presented using tables. The study established that teachers' preparedness and instructional resources influence transition of learners with visual impairment from integrated pre-primary to primary schools. The study recommends that Ministry of Education should redesign the teacher training curriculum to encompass components of special needs education to equip them with skills to handle and teach learners in integrated school microsystems. Ministry of Education should also allocate more funds to schools to enable the school management to provide adequate, but suitable instructional resources for learners with visual impairment.

**Keywords:** visual impairment, pre-primary, teachers' preparedness, instructional resources

## 1. Introduction

Evidence from studies worldwide has proved that economic engagement of human capital through formal education is a fundamental factor in stabilizing the economy, prosperity and reduces poverty. Education diminishes social and economic inequality as it gives every person equal opportunity to explore the available resources. (Berlin, Dunning & Dodge, 2011). It is partly for this reason that increasing numbers of young children with visual impairment are being cared for in early childhood settings in most communities. Recent knowledge about the loss of potential intellectual development during the formative years has pointed to the importance of targeting young children in order to increase later developmental and educational outcomes (Barnes, 2008).

According to Suzanne (2007), including children with visual impairment in regular classrooms has widened the range of ability represented in groups of young children. World Bank statistics estimates that the worldwide number of people living with visual impairment to about 750 million, which is approximately 10% of the world's population. Apparently, well over 150 million are children of which 80% are found in developing countries. Moreover, only 2-3% of these groups of children in these countries have access to formal education (World Bank, 2009). With a vision to ensure education for all, the United Nations Educational, Scientific and Cultural Organization (UNESCO)

report (2008) indicated that over 77 million children are out of school of which well over 33% have visual impairment.

A regional survey for Africa shows that more than 90% of these children are not in school (Peters, 2007). Another survey in 2019 indicated that proportion of people living with visual impairment in Kenya was 10% of the whole 47 million populations. Demographics approximate that about 25% of the visually impaired group to be children who qualify to be in school (World Data on Education, 2007). Surveys have verified the demeaned enrolments of children with visual impairment (Republic of Kenya, 2012). There is need to understand the school dynamics influencing transition of learners with visual impairment and to eradicate negative beliefs associated with visual impairment. In Kenya, it remains necessary to piece together the scanty evidence on the school dynamics influencing transition of learners with visual impairment from the integrated pre-primary to primary schools. According to the current statistics, more efforts are made on increasing the number of schools for learners with visual disabilities with only the government trying to change the trend to an integrated education approach. However, issues such as inadequate professional teachers for visually impaired, infrastructure and stigma greatly challenge successful implementation.

### **1.1 Purpose of the Study**

The purpose of the study was to assess the influence of teachers' preparedness and instructional resources on transition of learners with visual impairment from integrated pre-primary to primary schools in Narok County, Kenya.

### **1.2 Objectives of the Study**

The study was guided by the following objectives: -

- 1) To establish the influence of teachers' preparedness on transition of learners with visual impairment from integrated pre-primary to primary schools in Narok County, Kenya.
- 2) To investigate the influence of instructional resources on transition of learners with visual impairment from integrated pre-primary to primary schools in Narok County, Kenya.

## **2. Literature Review**

This chapter provides the literature of the previous studies related to this study by examining various documents, including books and journal articles. The main purpose is to establish the knowledge gaps in the study. The section is based on empirical literature review on visual impairment and transition, the concept of transition, the influence of teachers' preparedness and instructional resources as factors during the transition process.

## **2.1 Teachers' Preparedness and Transition of Learners with Visual Impairment**

Teacher resource plays a critical role in realization of educational objectives and to optimize staff deployment, a systemic balance must be achieved. Key to realizing it is a thorough knowledge of the quantitative and qualitative aspects of the teacher resource pool, of short-term and medium-term staffing requirements and of the supply and demand for needed skills on the open job market. An understanding of how the teacher preparedness influences transition of learners with visual impairment from integrated pre-primary to primary school is therefore important.

Manasia, Ianos and Chicioeanu (2019) conducted a study on Pre-Service Teacher Preparedness for Fostering Education for Sustainable Development in Romania. The study aimed at developing a teaching readiness model with a focus on education for sustainable development. The study investigated pre-service teachers' readiness for fostering education for sustainable development by applying its principles to teaching and learning activities. Using a survey design, a sample was selected from among Pre-service teachers regarding their perception of the readiness for designing, conducting, assessing and engaging in teaching and learning experiences. The study established that teachers' professional knowledge and practice, engagement and self-management are important in understanding teachers' job readiness. It was also noted that the teachers' ability to design interactive evaluation tools and interpret the outcomes was an important aspect of teacher preparedness. This study presented general information on teachers' preparedness as a factor influencing learners' transition. Similar findings were reported in Ghana by Ukpokodu (2002) in which it was posited that teachers have parental roles and that they have a big role as parents in the learners' transition to school. There are other factors concerning teachers that are important in understanding the transition process of learners from integrated pre-primary to primary schools. This study sought to examine how teacher's preparedness influences transition of learners with visual impairment from integrated pre-primary to primary schools in Narok County, Kenya.

Mugambi (2011) investigated challenges faced by teachers in teaching students with visual impairment in integrated secondary schools in Nairobi County. The study adopted the descriptive survey design. The study sought to assess the adequacy of the teachers' training in teaching students with visual impairment, find out problems faced by the teachers in adopting to the syllabus for students who are visually impaired, it also investigated the problems the teachers faced in adopting the syllabus for students with visual impairment. It investigated on whether teachers were guided on teaching students with visual impairment and to find out the opinion of teachers towards the integration of the learners with visual impairment into the mainstream. The data for the study was collected using a questionnaire which was administered to forty-seven selected teachers who were selected using both purposive random sampling techniques. The data was analyzed using both descriptive and inferential statistics. The results indicated that teachers teaching students with visual impairment lacked support from the school administration. Considering Narok County, transition rates of pre-primary learners with

visual impairment from integrated pre-primary to primary schools have been low due to numerous teacher related challenges.

## **2.2 Instructional Resources and Transition of Learners with Visual Impairment**

Abdullahi (2011) defines Instructional resources as didactic material things meant to make learning and teaching possible. Instructional resources help the school teacher to communicate particular kinds of learning. The National Teachers Institute (NTI, 2007) and Mezieobi, Fubura & Mezieobi (2008) defined these instructional resources in terms of; audiotape; recorder, video tape recorders and projectors. They also include; still pictures, programmed instruction, filmstrips, chart, graphs and many others which offer a variety of instructional experiences.

## **3. Research Methodology and Design**

### **3.1 Introduction**

This chapter provides the methodology that the study followed. It explains the design; location of study; population; sample size, sampling techniques and procedure; data collection instruments; methods of testing the validity and reliability of instruments; the research procedure that was followed; and the data management and analysis techniques that were used in conducting the study.

### **3.2 Research Methodology**

According to Creswell and Plano (2011) the mixed methods research design has philosophical assumptions as well as methods of inquiry. The design is characterized by the fact that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems. This study employed a mixed methodology, where both quantitative and qualitative methods were employed.

### **3.3 Research Design**

This study adopted a descriptive survey design. A descriptive research design attempts to establish the actual state of affairs as it exists at present. It seeks to examine the opinion and views of respondents who are targeted for the study (Mugenda and Mugenda, 2003, Orodho, 2005). Okwany, (2005) States that the descriptive survey research requires the collection of standardized quantifiable information from all members of a population or a sample.

### **3.4 Location of Study**

The study was carried out in Narok County which comprises of 6 educational divisions namely: Mao Central, Ololulunga, Mulot, Osupuko, Loita, Transmara East and Transmara West. Singleton (1993) points out that in choosing a study locale, the recommendable study setting should be directly linked to the researcher's interest.

### 3.5 Target Population

Target population was drawn from the 16 integrated pre-primary and primary schools in Narok County. According to the county education statistics, the 16 schools consist of 208 teachers, 16 head teachers, 160 learners with VI and 3 Education Assessment and Resource Center Officers (EARC Officers) bringing the target population to 387 as shown in Table 1.

**Table 1: Target Population of the Study**

Categories	Target Population
Headteachers	16
Teachers	208
EARC Officers	3
Learners	160
Total	387

**Source:** Narok County Education Office (2019).

### 3.6 Sample Size and Sampling Techniques

The determination of the sample size for the study was guided by the Central Limit Theorem of Sample Size Determination, which states that, for any study normally distributed population, the sample size should always be greater than 30 ( $N \geq 30$ ), (Kothari, 2005). This study used a mixed method sampling technique which involved the selection of units or cases for a research study using both probability sampling and purposive sampling strategies (Onwuegbuzie, 2006).

### 3.7 Research Instruments

These are tools which were used to collect information about the definite set themes of research objectives. The instruments used included questionnaires, interview guide and observation checklist.

## 4. Research Findings and Discussions

### 4.1 Descriptive Statistical Findings on the Influence of Teachers' Preparedness on Transition of Learners with Visual Impairment from Integrated Pre-primary to Primary Schools

The descriptive statistics on the assessment the teacher's preparedness on transition of learners with visual impairment was represented in the table below.

**Table 2:** Views of Teachers on the Influence of Preparedness on Transition of Learners with Visual Impairment from Integrated preprimary to primary Schools

	SD		D		U		A		SA	
	N	%	N	%	N	%	N	%	N	%
Many teachers have different levels of education, though has not improved transition of learners with visual impairment from integrated pre-primary to primary schools	28	20.9	17	12.4	6	4.7	12	8.5	72	53.5
Teachers lack basic training on visual impairment which has negatively affected transition of learners with visual impairment from integrated pre-primary to primary schools	14	10.1	16	11.6	3	2.3	15	10.9	87	65.1
Teachers frequently use teaching approaches geared towards enhancing transition of learners with visual impairment from integrated pre-primary to primary schools	68	50.4	20	14.0	7	5.4	15	10.9	25	19.4
Many teachers lack experience in teaching visual impairment as a way of improving transition rates of learners with visual impairment from integrated pre-primary to primary schools	25	18.6	15	10.9	5	3.9	13	9.3	77	57.4

The data from Table 2 revealed that most of the teachers totally disagreed with the fact with the fact that they had different levels of education, though has not improved transition of learners with visual impairment from integrated pre-primary to primary schools 72(53.5), 12(8.5%) who disagree. 6(4.7%) of the teachers were undecided, 17(12.4%) disagreed and 28(20.9%) they strongly disagreed. This implies that though teachers teaching at pre-primary had the qualifications, they lacked the required skills to handle the learners at this level. This implies that professional and qualified teachers influence the learners' transition and learning.

The study also found out that a fair majority, 87(65.1%) of the teachers strongly agreed with the view that, in many primary schools, teachers lack basic training on visual impairment which has negatively affected transition of learners with visual impairment from integrated pre-primary to primary schools. At the same time, 15(10.9%) of the teachers agreed. However, 3(2.3%) of the teachers were undecided, 16(11.6%) of the teachers disagreed whereas 14(10.1%) of the teachers strongly disagreed. The results further indicated that 75.5% of the respondents agreed with the statement which shows that most of the teachers at the pre-primary and primary level lacked the prerequisite training on VI and hence it made it difficult to handle these learners effectively during transition.

The study also revealed that 25(19.4%) strongly agreed with the view that teachers frequently use teaching approaches geared towards enhancing transition of learners with visual impairment from integrated pre-primary to primary schools. On the same point of view, 15(10.9%) of the teachers agreed. However, 7(5.4%) of the teachers were undecided, 20(14.0%) of the teachers disagreed whereas 68(50.4%) of the teachers strongly disagreed.

The results further show that 70% of the respondents disagreed that majority of the teachers used teaching approaches that enhance transition of learners as compared to only 30% who agreed. This could be attributed to the fact that most teachers did not have appropriate training in VI and hence used teaching methods appropriate and suitable for the sighted learners only.

Majority, 77(57.4%) of the teachers strongly agreed with the view that many teachers lack experience in teaching visual impairment as a way of improving transition rates of learners with visual impairment from integrated pre-primary to primary schools. A paltry 13(9.3%) of the teachers agreed with the statement. At the same time, 5(3.9%) of the teachers were undecided, 15(10.9%) of the teachers disagreed whereas 25(18.6%) of the teachers strongly disagreed. It is also observed that majority of the respondents 66.7% agreed that teachers in integrated pre-primary schools did not have a teaching experience for VI learners a fact that contributed to the low transition of the learners. This implies that the number of years a teacher has taught is a major determinant of how many learners with visual impairment transition from integrated p pre-primary to primary schools.

#### 4.2 Instructional Resources and Transition of Learners with Visual Impairment from Integrated pre-primary to primary Schools

The second objective of the study sought to examine the influence of instructional resources on transition of learners with visual impairment from integrated pre-primary to primary schools.

##### 4.2.1 Descriptive analysis of instructional Resources and Transition of Learners with Visual Impairment from Integrated pre-primary to primary Schools

**Table 3:** Views of Teachers on the Influence of instructional Resources and Transition of Learners with Visual Impairment from Integrated pre-primary to primary Schools

	SD		D		U		A		SA	
	N	%	N	%	N	%	N	%	N	%
Learners have bookstands and reading stands to enhance transition from the integrated pre-primary to primary schools	98	72.9	11	7.8	2	1.6	7	5.4	17	12.4
Learners with visual impairment have enough slates/stylus, large print materials, partial blindness devices and white canes to enhance transition from the integrated pre-primary to primary schools	97	71.3	7	5.4	3	2.3	6	4.7	22	16.3
EARC Officers rarely provide assistive learning materials by as a way of enhancing the integration of learners with visual impairment from integrated pre-primary to primary schools	9	7.0	14	10.1	3	2.3	16	11.6	93	69.0
Learners with visual impairment are given extra time to do tasks at their own pace to enhance	71	52.7	6	4.7	3	2.3	16	11.6	39	28.7



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their transition from the integrated pre-primary to primary schools										
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Table 3 reveals that 17(12.4%) of the teachers strongly agreed with the view that learners have bookstands and reading stands to enhance transition from the integrated pre-primary to primary schools as did 7(5.4%) who agreed. However, only a paltry 3(1.6%) of the teachers were undecided, 11(7.8%) of the teachers disagreed whereas 98(72.9%) of the teachers strongly disagreed. These results imply that majority of the schools according to 68 of the respondents did not have the relevant resources to support the effective learning and transition of learners with VI to integrated primary schools.

These findings corroborate the findings of a study conducted by Milimu (2018) who revealed that most schools lack the required facilities to enhance transition. Hence, these findings indicate that there are few or no learning resources particularly the bookstands and reading stands to enhance transition process from one level to the next. The study also found out that 22(16.3%) of the teachers strongly agreed with the view that learners with visual impairment have enough slates/stylus, large print materials, partial blindness devices and white canes to enhance transition from the integrated pre-primary to primary schools. While 6(5.4%) of the teachers agreed with the statement. However, 3(2.3%) of the teachers were undecided, 7(5.4%) of the teachers disagreed whereas 92(71.3%) of the teachers strongly disagreed. This is an indication that the use of learning resources that are not adequately distributed to the learners prevents teachers from achieving objectives thereby compromising the quality of education.

The study also revealed that 93(69.0%) and 16(11%) of the teachers strongly agreed and agreed with the view that EARC Officers rarely provide assistive learning materials as a way of enhancing the integration of learners with visual impairment from integrated pre-primary to primary schools, while of the teachers agreed. However, 3(2.3%) of the teachers were undecided, 14(10.1%) of the teachers disagreed whereas 9(7.0%) of the teachers strongly disagreed. The response shows that there was minimal monitoring of the integrated pre-primary schools by the EARC officers who are expected to provide guidance on matters of school operations such as provision of learning resources and assistive aids. Limitations of the materials may be a hindrance to the transition process of the learners. However, only 39(28.7%) of the teachers strongly agreed with the view that learners with visual impairment are given extra time to do tasks at their own pace to enhance transition from the integrated pre-primary to primary schools. 16(11%) of the teachers agreed. At the same time, 3(2.3%) of the teachers were undecided, 6(4.7%) of the teachers disagreed whereas 68(52.7%) of the teachers strongly disagreed. These results indicate that learners with VI require extra time to keep pace with the rest of the learners. It was established that very few schools were able to offer that extra time to these learners hence chances of ending up with high cases of learners with VI not transitioning to primary schools. This implies that without these teaching aids, transition from one level to the next may not be possible.

## 5. Summary, Conclusions and Recommendations

Drawing from the above findings, it is evident that teachers' preparedness influences transition of learners with visual impairment from integrated pre-primary to primary schools. However, from the study findings, many teachers still have challenges in enhancing transition process for learners with visual impairment due to unpreparedness. It is also evident that integrated primary schools have different instructional resources available which include; pen holders, slate and stylus, large print books, reading stands, adapted desks and chairs, white canes, resource rooms and book stands. However, these instructional resources are not adequate nor are they suitable for learners with visual impairment. From the study findings, despite these inadequacies, integrated primary schools with such instructional resources for all learners with visual impairment witness transition of learners from integrated pre-primary to primary schools.

### Conflict of Interest Statement

The authors declare no conflicts of interests.

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