

## RELATIONSHIP BETWEEN CONSTRUCTIVIST GUIDING PRINCIPLES AND LANGUAGE LITERACY IN PRE-PRIMARY EDUCATION IN SOUTHERN NYANZA REGION, KENYA

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### Abstract

The study aimed to examine how constructivist guiding principles used by the teachers relate to learners' language literacy outcomes among pre-primary education in Southern Nyanza Region, Kenya. The study determined the relationship between the principle of opportunity, excellence and differentiated curriculum and learning, and language literacy outcomes among pre-primary learners. The study employed correlational and descriptive survey designs, guided by Vygotsky's Social Constructivism Theory. The target population was 9,224 participants including: teachers, headteachers and county ECDE directors in southern Nyanza region which comprised Homabay County, Kisii County and Nyamira County. A proportional sample of 384 respondents was selected using simple random and purposive sampling techniques. Data collection involved questionnaires, validated through expert judgment and reliability was confirmed with a Cronbach's Alpha of 0.83. Analysis was conducted using SPSS version 27.0, applying descriptive statistics and logistic regression at  $\alpha = 0.05$ . Findings indicated that constructivist guiding principles significantly predicted language literacy (Wald  $\chi^2$  (1) = 4.400,  $p = 0.036$ , Exp(B) = 2.117). The findings showed that teachers who effectively implemented constructivist guiding principles had a positive and significant contribution to language literacy. The study concluded that constructivist guiding principles play a critical role during language instructional process, enhancing literacy skills among pre-primary learners. The study recommended that, teachers should enhance the implementation of constructivist guiding principles to promote interactive teaching practices during language literacy learning, targeted teacher training and recruitment.

**Key Words:** Instructional process, Constructivist Guiding Principles, Language Literacy, Pre-Primary education, Relationship, language acquisition, learner-centered

### INTRODUCTION

Early childhood represents a crucial phase for language acquisition and literacy development, as it forms the foundation for later academic and cognitive success. Johnston (2023) emphasizes that children exposed to rich linguistic environments from an early age demonstrate stronger cognitive growth and superior academic performance. Conversely, limited exposure to language before school entry often results in difficulties keeping pace with peers, thereby influencing long-term educational trajectories (Elek et al., 2022). Recognizing the importance of early literacy, global education systems have increasingly adopted **Competency-Based Education (CBE)** principles to strengthen language learning in pre-primary education. Saydalievna (2022) underscores that this period presents the greatest potential for language acquisition, hence the need for structured and engaging learning experiences. Language literacy development depends on multiple factors including: teacher pedagogy, home support and resource availability, highlighting the collaborative role of teachers, parents and the learning environment.

UNESCO (2021) identifies literacy as a global human right and a foundation for cognitive, behavioral and social-emotional development. Proficiency in widely used languages such as English, enables learners to access global knowledge and participate effectively in economic life. Finders, Wilson and Duncan (2023) argue that fostering literacy across diverse early learning contexts requires rich linguistic exposure and interactive learning environments.

Mirna and Silvija (2021) and Barasa (2023) similarly emphasize the importance of instructional continuity and language-rich environments, where children can engage in dialogue, express ideas and explore vocabulary in everyday contexts. Creating such settings within pre-primary schools and homes is therefore essential for nurturing proficient readers and communicators.

Language literacy comprises four interrelated skills: listening, speaking, reading and writing which form the basis of creative and purposeful expression (Bunch, Kibler & Pimentel, 2012; Galaczi, 2018). Listening and speaking constitute **oral skills**, while reading and writing represent **written skills**. The former are receptive, involving comprehension of oral or written input, while the latter are expressive, involving communication through speech or text. Holistic literacy development requires balanced attention.

Constructivism positions learners as active agents in the meaning-making process (Thomas & Schweisfurth, 2021). Learners construct knowledge through exploration, interaction and reflection, while teachers facilitate learning through scaffolding and inquiry-based dialogue. Such practices encourage reading, writing and collaborative discussion, thereby promoting comprehension and critical thinking. Seh's (2021) study in Israel demonstrated that constructivist teaching models significantly improved students' reading comprehension, illustrating the model's potential for enhancing literacy outcomes.

Similarly, constructivist teaching in language education has been found to strengthen learner engagement and bridge the gap between instruction and application. Building on this foundation, the study therefore, sought to examine the relationship between constructivist guiding principles and language literacy in Kenyan pre-primary education to add literature to the existing body of knowledge.

Despite the importance of language literacy, many early childhood teachers experience difficulties implementing effective language instruction. Opinde (2016) identified numerous language-related barriers in teacher-child interactions during preschool instruction, reflecting a need for better pedagogical strategies. In Kenya, the introduction of the Competency-Based Curriculum (CBC) sought to address these challenges by promoting more active, learner-centered approaches (KICD, 2017; Mauki, Kitur, Ileri & Ngala, 2020; Njeng'ere, 2020). The Basic Education Curriculum Framework (KICD, 2017) positions guiding principles particularly constructivist guiding principles of opportunity, excellence and differentiated curriculum and learning as one of the key pillar to enhancing language literacy. Constructivist guiding principles such as: giving the learners opportunity to participate and engage in the learning experiences, helping learners to excel in the areas they are interested in and, differentiated curriculum and learning experiences such as flexible groupings, varied instructional strategies, cater for individual differences, games, songs and storytelling strategies to address different learning preferences. These activities promote effective, involving and engaging language literacy (listening, speaking, reading and writing skills). However, the extent to which these principles are effectively implemented in pre-primary language learning contexts remains insufficiently studied.

The constructivist guiding principle of opportunity emphasizes providing equitable access to language learning experiences for all children. VanPatten and Williams (2014) highlight that meaningful interactive tasks create opportunities for negotiation and authentic language use, which are essential for language acquisition. School and teacher characteristics including: access to resources, instructional time and pedagogical competence strongly influence the extent of opportunity available for language learning. Despite this, few empirical studies in Kenya have explored how pre-primary teachers operationalize learning opportunities in relation to constructivist principles.

The principle of excellence focuses on high-quality instruction that challenges learners while supporting individual growth. According to TESOL International Association (2018), exemplary teaching requires understanding learners' linguistic and cultural contexts to design responsive instruction. Darling-Hammond et al. (2017) associate excellence with setting ambitious yet attainable goals that stimulate higher-order thinking and communication. Similarly, Ellis (2012) advocates for Task-Based Language Teaching (TBLT), a method that aligns with constructivist ideals by fostering authentic, meaningful

interaction. While international studies affirm that excellence in instruction enhances literacy outcomes, evidence on how Kenyan ECDE teachers interpret and apply this principle within language classrooms remains limited.

The principle of differentiated curriculum and instruction emphasizes tailoring learning to meet the diverse needs of children. Demirci-Ünal and Öztürk (2024) explored differentiation in Turkish preschool classrooms, revealing that teachers employed strategies such as visual aids, demonstrations and peer observation to support varied learning needs. However, differentiation of learning environments such as flexible time and resource management was less evident. These findings underline the importance of adapting instructional content and processes to accommodate diverse learners. Although similar challenges exist in Kenyan classrooms, research specifically addressing how differentiation informs pre-primary language instruction under the CBE framework is scarce. Consequently, understanding the link between differentiated curriculum design and language literacy outcomes is crucial for improving instructional quality.

Numerous studies (UNESCO, 2021; Thomas & Schweisfurth, 2021; Seh, 2021; Demirci-Ünal & Öztürk, 2024) have affirmed the importance of constructivist approaches in fostering language learning, few have contextualized these principles within Kenya's Competency-Based Education framework at the pre-primary level. Most existing literature focuses on general curriculum implementation or teacher preparedness, rather than the specific pedagogical relationship between constructivist guiding principles and language literacy outcomes. Moreover, while prior studies in developed contexts emphasize the benefits of opportunity, excellence and differentiation learning, their contextual relevance and empirical validation in Kenyan ECDE settings remain underexplored. This gap emphasized the need for localized research to determine how constructivist guiding principles are being interpreted and applied in language literacy instruction and to what extent they influence learners' acquisition of foundational language skills.

## METHODOLOGY

### Research Design

The study adopted both a descriptive research survey and a correlational research design. Descriptive research survey facilitated the collection of both qualitative and quantitative data. Correlational research design allowed the researcher to examine relationships between constructivist guiding principles and language literacy outcomes. This helped reveal potential patterns and underlying trends in a natural educational setting. These two research designs provided a strong foundation for the investigation, enabling the researcher to draw meaningful conclusions and contribute valuable insights into pre-primary education in the Southern Nyanza Region of Kenya.



### Target population and sampling procedure

The study population consisted of 9,224 pre-primary teachers, headteachers and ECDE County Directors across the specified counties. There were 408 pre-primary schools and 1636 teachers in Nyamira County, 904 pre-primary schools and 3621 teachers in Kisii County and 991 pre-primary schools, 3967 teachers in Homabay County and 3 County Directors from the counties. The sample was determined using Yamane's (1967) formula.

$$n = \frac{N}{1 + (Ne^2)}$$

where,  $e = 0.05$

N = study population, 9,224

n = sample size

$$n = \frac{9224}{1 + (9224 \times 0.05^2)} = 384$$

Therefore, the study used a sample size of 384 participants.

This sample was proportionately distributed across the three counties, with 68 respondents from Nyamira, 151 from Kisii and 165 from Homabay. From each pre-primary school, one head teacher and two teachers were selected, making three respondents per school. This meant that the number of participating schools in each county was 22 in Nyamira, 50 in Kisii and 55 in Homabay. A simple random sampling technique was employed to select the pre-primary schools from each county. In contrast, the County ECDE Directors and ECDE head teachers were selected using purposive sampling to ensure relevant and knowledgeable participants.

### Data Collection Instruments

The study employed two main instruments for data collection: a questionnaire and an interview guide. The questionnaire was used to collect data from pre-primary teachers and head teachers. It comprised a mix of closed-ended, open-ended, and five-point Likert scale items designed to capture a wide range of responses. For pre-primary teachers, the questionnaire was divided into three sections: Section I captured respondents' background information; Section II focused on language literacy; and Section III examined constructivist guiding principles. The head teachers' questionnaire contained closed-ended items that complemented data obtained from the teachers. The questionnaire was chosen as the primary instrument because it enabled the efficient collection of accurate, structured, and comparable information from a large number of respondents within a relatively short period.

An interview guide was used to collect qualitative data from the County Directors of Education (ECDE) in Nyamira, Kisii and Homa Bay Counties. It was designed to elicit in-depth insights into the

constructivist guiding principles and their influence on language literacy. The interview guide facilitated the generation of comprehensive and context-rich information to complement the questionnaire data.

### Validity and Reliability of Research Instruments

The validity and reliability of the research instruments were assessed to ensure accuracy and consistency in data collection. Validity refers to the extent to which an instrument measures what it is intended to measure (Sapford, 2007). Three forms of validity, face, content, and construct, were examined. Face validity was ensured by aligning the questionnaire and interview items with the study objectives, reviewed literature, and the conceptual framework. Content validity focused on the adequacy of the instruments in covering all relevant aspects of the study constructs. The instruments were reviewed by supervisors and experts in educational measurement from the Department of Education, who evaluated the clarity, relevance, and appropriateness of each item. As emphasized by Borg and Gall (1989), expert judgment enhances the validity of research tools.

Reliability, which denotes the consistency of an instrument in yielding similar results under comparable conditions (Mugenda & Mugenda, 2003), was assessed using Cronbach's alpha coefficient. This test measured the internal consistency of questionnaire items (Hoyle, 2012). Cronbach's alpha values ranged from 0.767 to 0.905 for both ECDE teachers and head teachers, exceeding the acceptable threshold of 0.70 (Zinbarg et al., 2005). These results confirmed that the instruments were both valid and reliable for the study.

### Data collection procedure

Data collection was conducted in distinct phases. Phase one involved the researcher securing research authorization and obtaining permission from the relevant authorities. The authorities included: ethical clearance from Chuka University Research and Ethics Committee, NACOSTI permit, County commission approval and county directors of education permission. In phase two, the researcher visited pre-primary schools to hold introductory sessions and request permission to carry out the study. Phase three consisted of administering questionnaires to pre-primary educators and head teachers. During phase four, the researcher engaged with County Directors of Early Childhood Development Education (ECDE) in the Southern Nyanza Region to coordinate a suitable time for conducting the interviews. Finally, in phase five, the researcher carried out the interview schedule with the County Directors of ECDE to collect the required data for the study.

### Study Variables

The study examined the relationship between constructivist guiding principles and language literacy among pre-primary teachers. These variables were measured using five-point Likert scale statements ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The scale attained a reliability coefficient of 0.83, indicating it was suitable for use in data analysis.

### Data analysis

Quantitative data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 27.0. Descriptive statistics, including frequencies and percentages, were used to summarize and present the data. Hypotheses were tested at a significance level of  $\alpha = 0.05$  using the logistic regression model to determine the relationship between variables. Qualitative data obtained from interviews were analyzed thematically.

### Ethical consideration

The study upheld respondents' rights to privacy, informed consent, and confidentiality throughout data collection and reporting. Participants were fully informed about the study's purpose to eliminate fear of victimization. Ethical approval was obtained from the Chuka University Research and Ethics Commit-

tee and a research permit from NACOSTI. Additional authorization was granted by county directors of education in Southern Nyanza. Formal consent letters were also issued to head teachers of participating pre-primary schools.

### Results and Discussion

The study determined the relationship between constructivist guiding principles and language literacy in public pre-primary education in Southern Nyanza Kenya. The constructivist guiding principles were assessed based on teachers and head teachers' conception of the contributions of opportunity, excellence and differentiated curriculum and learning principle. Table 1 presents the percentage distribution of responses on the principle of opportunity.

**Table 1: Opportunity and language literacy (teachers)**

Opportunity	Teachers (N=252)					
Statement	SD	D	U	A	SA	Total
I use play-based learning activities during language learning	14.7	15.9	17.1	21.8	30.6	100.0
I give learners ample opportunities to use language during interactive activities.	6.0	7.5	20.6	27.0	38.9	100.0
I give learners ample opportunities to use language during collaborative activities.	14.3	9.1	15.1	26.2	35.3	100.0
I provide classroom environment that encourages spontaneous language use during free play.	14.7	7.9	23.8	23.0	30.6	100.0
Use storytelling to create opportunities for language learning.	15.1	13.5	9.5	27.4	34.5	100.0
Use songs to create opportunities for language learning.	7.9	6.3	12.3	46.8	26.6	100.0
Use games to create opportunities for language learning.	19.0	7.9	11.9	27.8	33.3	100.0
Incorporated child-led language activities into the daily routine.	8.7	9.9	10.3	33.3	37.7	100.0
Provide equal opportunities for children with different learning abilities to succeed in language literacy.	9.9	12.7	11.5	30.2	35.7	100.0
Ensure that language literacy activities are accessible for all children, regardless of their starting skill level.	7.9	19.4	14.7	19.4	38.5	100.0

As shown in Table 1, over half of the teachers (52.4%) reported using play-based learning experiences in their ECDE classrooms. Less than two-third of teachers give learners ample opportunities to use language during interactive activities (65.9%), less than two-third of teachers provide ample opportunities for learners to use language during collaborative activities (61.5%) and slightly more than half of teachers (53.6%) provide classroom environment that encourages spontaneous language use during free play. **At the same time, slightly less than two-third of teachers** use storytelling to create opportu-

nities for language learning (61.9%), about three-quarter use songs to create opportunities for language learning (73.4%) and **less than two-third** use games to create opportunities for language learning (61.1%). Similarly, less than three-quarters of teachers (71.0%) incorporate child-led language activities into daily routine, about **two-third (65.9%) provide** equal opportunities for children with different learning abilities to succeed in language literacy and more than half (57.9%) ensure that language literacy activities are accessible for all children,



regardless of their starting skill level. Findings from ECDE teachers show that a majority of them (62.5%) are making effort to provide learning opportunities for all learners without discrimination. Data obtained from head teachers on the variable were as presented in Table 2.

**Table 2: Opportunity and language literacy (head teachers)**

Opportunity	Head teachers (N=126)					
Statement	SD	D	U	A	SA	Total
Teachers use play-based learning activities during language learning	3.2	3.2	18.3	36.5	38.9	100.0
Teachers give learners ample opportunities to use language during interactive activities.	-	7.9	10.3	57.1	24.6	100.0
Teachers give learners ample opportunities to use language during collaborative activities.	3.2	2.4	22.2	27.0	45.2	100.0
Teachers provide classroom environment that encourages spontaneous language use during free play.	0.8	7.1	11.9	24.6	55.6	100.0
Teachers use storytelling to create opportunities for language learning.	0.8	10.3	10.3	28.6	50.0	100.0
Teachers use songs to create opportunities for language learning.	-	9.5	8.7	22.2	59.5	100.0
Teachers use games to create opportunities for language learning.	0.8	7.1	17.5	33.3	41.3	100.0
Teachers incorporated child-led language activities into the daily routine.	-	11.1	6.3	23.0	59.5	100.0
Teachers provide equal opportunities for children with different learning abilities to succeed in language literacy.	0.8	7.1	9.5	27.8	54.8	100.0
Teachers ensure that language literacy activities are accessible for all children, regardless of their starting skill level.	4.0	6.3	10.3	42.9	36.5	100.0

As shown in Table 2, about three-quarters of head teachers (75.4%) reported that teachers use play-based learning experiences in ECDE classrooms. More than three quarters (81.7%) indicated that, teachers give learners ample opportunities to use language during interactive activities. Less than three quarters (72.2%) believed that, teachers provide ample opportunities for learners to use language during collaborative activities. More than three quarters (80.2%) indicated that teachers provide classroom environment that encourages spontaneous language use during free play. At the same time, more than three-quarter (78.6%) use storytelling to create opportunities for language learning. More than three-quarter (81.7%) have a strong believe that teachers use songs to create opportunities for language learning. Less than three-quarters (74.6%) indicated that, teachers use games to create opportunities for language learning. More than three-quarters (82.5%) believed that, teachers incorporate child-led lan-

guage activities into daily routine. Similarly, more than three-quarters (82.6%) had a strong belief that teachers provide equal opportunities for children with different learning abilities to succeed in language literacy. More than three-quarters (79.4%) believed that, teachers ensure that language literacy activities are accessible for all children, regardless of their starting skill level. Findings from head teachers indicate that a majority of teachers (79.0%) are making effort to provide learning opportunities for all learners without discrimination.

The study sought the opinions of ECDE teachers on excellence and language literacy as demonstrated in Table 3.

**Table 3: Excellence and language literacy (teachers)**

Excellence	Teachers (N=252)					
Statement	SD	D	U	A	SA	Total
Language literacy methods are age-appropriate for pre-primary children.	11.9	18.3	14.3	22.2	33.3	100.0
I provide high-quality instruction tailored to the needs of diverse learners.	8.7	17.5	13.9	23.4	36.5	100.0
I give children opportunities to develop listening skill in a meaningful way.	13.1	20.2	17.5	21.4	27.8	100.0
I give learning opportunities to children to enable them to develop speaking skill.	13.9	8.7	14.3	33.7	29.4	100.0
I give children opportunities to develop pre-literacy skill in a meaningful way.	17.5	4.0	20.6	26.2	31.7	100.0
I integrate play-based activities into language literacy.	9.5	14.7	14.7	27.8	33.3	100.0
I regularly assess teaching strategies to ensure excellence	7.9	2.8	25.8	24.2	39.3	100.0
I am adequately trained to implement excellent language literacy for pre-primary learners.	9.9	14.3	10.7	23.8	41.3	100.0
I receive sufficient resources and materials to maintain high-quality language literacy.	8.3	6.3	21.4	21.8	42.1	100.0
Collaboration between teachers and administrators supports excellence in language literacy.	0.8	5.6	9.9	19.4	64.3	100.0

As shown in Table 3, slightly more than half of the teachers (55.5%) reported that language literacy methods are age-appropriate for pre-primary children. More than half (59.9%) provide high-quality instruction tailored to the needs of diverse learners. Less than half (49.2%) give children opportunities to develop listening skill in a meaningful way. Less than two-third (63.1%) give children learning opportunities to develop speaking skill. More than half (57.9%) give children opportunities to develop pre-literacy skills in a meaningful way. At the same time, less than two-third (61.1%) integrate play-based activities into language literacy. Less than two-third (63.5%) regularly assess teaching strategies to

ensure excellence. Almost two-third of teachers (65.1%) are adequately trained to implement excellent language literacy for pre-primary learners. Similarly, less than two-third of teachers (63.9%) revealed that they receive sufficient resources and materials to maintain high-quality language literacy and more than three-quarters (83.7%) revealed that collaboration between teachers and administrators supports excellence in language literacy. Findings from teachers indicate that, a majority (62.3%) ensure that they are providing teaching practices that enhances learners' excellence during language learning. Data obtained from head teachers on the variable were as presented in 4.

**Table 4: Excellence and language literacy (head teachers)**

Excellence	head teachers (N=126)					
Statement	SD	D	U	A	SA	Total
Language literacy methods are age-appropriate for pre-primary children.	-	18.3	11.9	42.1	27.8	100.0
Teachers provide high-quality instruction tailored to the needs of diverse learners.	-	12.7	19.0	26.2	42.1	100.0
Teachers give children opportunities to develop listening skill in a meaningful way.	5.6	10.3	25.4	31.7	27.0	100.0
Teachers give children learning opportunities to develop speaking skill.	3.2	2.4	11.9	45.2	37.3	100.0
Teachers give children opportunities to develop pre-literacy skill in a meaningful way.	0.8	6.3	15.9	30.2	46.8	100.0
Teachers integrate play-based activities into language literacy.	-	15.9	9.5	34.9	39.7	100.0



Teachers regularly assess teaching strategies to ensure excellence	5.5	13.5	16.7	36.5	27.8	100.0
Teachers are adequately trained to implement excellent language literacy for pre-primary learners.	0.8	7.9	4.0	32.5	54.8	100.0
Teachers receive sufficient resources and materials to maintain high-quality language literacy.	3.2	12.7	26.2	41.3	16.7	100.0
Collaboration between teachers and administrators supports excellence in language literacy.	3.2	9.5	19.8	33.3	34.1	100.0

As shown in Table 4, more than two-thirds of the head teachers (69.9%) believed that language literacy methods are age-appropriate for pre-primary children. More than two-thirds (68.3%) believed that, teachers provide high-quality instruction tailored to the needs of diverse learners. More than half (58.7%) felt that, teachers give children opportunities to develop listening skill in a meaningful way. At the same time, more than three-quarters (82.5%) stated that, teachers give children learning opportunities to develop speaking skill. More than three-quarters (77%) indicated that, teachers give children opportunities to develop pre-literacy skills in a meaningful way. Less than three-quarters (74.6%) confirmed that, teachers integrate play-based activities into language literacy. Slightly less than two-thirds (64.3%) felt that, teachers regularly assess teaching strategies to ensure excellence. Similarly, more than three-quarters (87.3%) believed that,

teachers are adequately trained to implement excellent language literacy for pre-primary learners. More than half (58%) revealed that, teachers receive sufficient resources and materials to maintain high-quality language literacy. Two-thirds (67.4%) perceived that, collaboration between teachers and head teachers supports excellence in language literacy. Findings from head teachers indicate that, a majority (70.8%) reveals a generally **positive perception of language literacy practices**, particularly in areas such as teacher training, speaking and pre-literacy development and use of play-based instruction. This indicate that there are efforts of implementing excellence in language literacy.

The study sought the opinions of ECDE teachers on differentiated curriculum and learning, and language literacy. Data were presented in percentage as demonstrated in Table 5.

**Table 5: Differentiated curriculum and learning and language literacy (teachers)**

Differentiated Curriculum and Learning		Teachers (N=252)				
Statement	SD	D	U	A	SA	Total
I assess children's language abilities regularly to inform my instruction.	-	8.3	7.5	31.7	52.4	100.0
I plan language activities that cater to different learning levels.	0.8	7.9	8.7	12.7	69.8	100.0
I modify language lessons to suit the needs of children with different language proficiency.	-	7.9	10.7	26.6	54.8	100.0
I incorporate relevant songs as a teaching strategy to address different learning preferences.	0.8	9.5	5.2	22.6	61.9	100.0
I use storytelling as a teaching strategy to address different language learning preferences.	-	11.9	4.4	25.8	57.9	100.0
I use games as a teaching strategy to address different learning preferences.	2.4	6.0	11.1	36.5	44.0	100.0
I adapt visual materials to meet the individual language needs of children.	2.4	18.3	15.5	33.7	30.2	100.0
I group children flexibly during language activities based on their learning needs.	1.2	8.7	15.1	28.6	46.4	100.0
I provide additional language support for children who need more practice.	6.3	9.9	23.8	25.8	34.1	100.0
I offer enrichment language activities for children who show advanced language skills.	3.2	8.7	13.1	40.9	34.1	100.0
I use educational apps to support differentiated language learning.	1.2	8.3	15.1	30.6	44.8	100.0
I use videos to support differentiated language learning.	0.8	15.5	10.7	29.8	43.3	100.0

As shown in Table 5, more than three-quarters of the teachers (84.1%) reported that they regularly assess children's language abilities to inform instruction. More than three-quarters (82.5%) plan language activities that cater to different learning levels. More than three-quarter (81.4%) modify language lessons to suit the needs of children with different language proficiency. More than three-quarter (84.5%) incorporate relevant songs as a teaching strategy to address different learning preferences. At the same time, more than three-quarters (83.7%) use storytelling as a teaching strategy to address different language learning preferences. More than three-quarters (80.5%) use games as a teaching strategy to address different learning preferences. Slightly less than two-third (63.9%) adapt visual materials to meet the individual language needs of children. Three-quarter

(75.0%) group children flexibly during language activities based on their learning needs. More than half (59.9%) provide additional language support for children who need more practice. Similarly, three-quarter (75.0%) offer enrichment language activities for children who show advanced language skills. Slightly more than three-quarter (75.4%) use educational apps to support differentiated language learning. Slightly less than three-quarters (73.1%) use videos to support differentiated language learning. The findings from teachers indicate that, a majority (76.6%) recognizes the importance of differentiated curriculum and learning to inform their language instruction thus, enhancing language literacy skills. Data obtained from head teachers on the variable were as presented in 6.

**Table 6: Differentiated curriculum and learning and language literacy (head teachers)**

Differentiated Curriculum and Learning		Head teachers (N=126)				
Statements	SD	D	U	A	SA	Total
Teachers assess children's language abilities regularly to inform instruction.	4.0	4.0	16.7	43.7	31.7	100.0
Teachers plan language activities that cater to different learning levels.	6.3	1.6	23.0	49.2	19.8	100.0
Teachers modify language lessons to suit the needs of children with different language proficiency.	-	4.8	3.2	42.1	50.0	100.0
Teachers incorporate relevant songs as a teaching strategy to address different learning preferences.	3.2	2.4	25.4	34.9	34.1	100.0
Teachers use storytelling as a teaching strategy to address different learning preferences.	4.8	4.8	14.3	41.3	34.9	100.0
Teachers use games as a teaching strategy to address different learning preferences.	-	4.0	19.0	38.1	38.9	100.0
Teachers adapt visual materials to meet the individual language needs of children.	-	8.7	11.1	30.2	50.0	100.0
Teachers group children flexibly during language activities based on their learning needs.	1.6	11.9	10.3	28.6	47.6	100.0
Teachers provide additional language support for children who need more practice.	5.6	12.7	5.6	29.4	46.8	100.0
Teachers offer enrichment language activities for children who show advanced language skills.	1.6	15.1	5.6	34.1	43.7	100.0
Teachers use educational apps to support differentiated language learning.	-	11.9	16.7	22.2	49.2	100.0
Teachers use videos to support differentiated language learning.	0.8	10.3	11.9	29.4	47.6	100.0

As shown in Table 6, about three-quarters of the head teachers (75.4%) reported that teachers regularly assess children's language abilities to inform their instructional practices. More than two-thirds (69.0%) indicated that, teachers plan language activities that cater to different learning levels. A significant majority (92.1%) recognized that, teachers modify language lessons to suit the needs of children with different language proficiency. More than two-thirds (69.0%) incorporate relevant songs as a teaching strategy to address different learning prefer-

ences. At the same time, more than three-quarters (76.2%) had a strong belief that teachers use storytelling as a teaching strategy to address different language learning preferences. More than three-quarters (77.0%) believed that, teachers use games as a teaching strategy to address different learning preferences. . More than three-quarters (80.2%) had a strong believe that teachers adapt visual materials to meet the individual language needs of children. Slightly more than three-quarter (76.2%) support the idea that teachers group children flexibly during



language activities based on their learning needs. Slightly more than three-quarter (76.2%) perceived that, teachers provide additional language support for children who need more practice. Similarly, more than three-quarter (77.8%) indicated that, teachers offer enrichment language activities for children who show advanced language skills. Less than three-quarters (71.4%) believed that, teachers use educational apps to support differentiated language learning. Slightly more than three-quarter (76.9%) had a strong belief that teachers use videos to support differentiated language learning. The findings from head teachers indicate that, a majority (76.5%) largely affirm that, ECDE teachers are incorporating differentiated strategies in language instruction thus, promoting language literacy skills.

Relative to constructivist guiding principles, the findings indicate that a majority of the ECDE teachers (67.1%) confirmed that the principle influences language literacy. They indicated that the principle of opportunity (62.3%) and the principle of differentiated learning (76.6%) had an influence on language literacy. This suggests that they have a greater consensus on differentiated curriculum and learning. Teachers' observation was supported by a significant proportion of the head teachers (75.4%). The findings suggest that constructivist guiding principles constitute a foundational framework for enhancing language literacy in pre-primary education. Although opportunity and excellence were identified as influential, the stronger consensus regarding differentiated curriculum and learning highlights its pivotal role in responding to learner diversity and promoting equitable literacy development. This emphasize the necessity for instructional practices to institutionalize differentiated approaches as a means of fostering inclusivity and optimizing literacy outcomes. Moreover, the convergence of teachers' and head teachers' perspectives reinforces the need for sustained institutional commitment to embedding these guiding principles within pedagogical practice and

school-level strategies.

The findings concurred with the study by Tomlinson (2014); Suprayogi et al. (2017). The study showed that, differentiated instruction has been found to significantly enhancing language literacy outcomes by addressing diverse learner needs. Similarly, studies in African and international contexts confirm that opportunities for active, learner-centered engagement foster language acquisition and literacy development (Ackesjö & Persson, 2019; Orodho, 2014). In addition, excellence-oriented practices such as high expectations and structured support, contribute to improved early literacy performance (Mashburn et al., 2008). The convergence of teacher and school leader perspectives in this study is consistent with evidence emphasizing the importance of institutional commitment in embedding constructivist practices across classroom and school contexts (Sheridan et al., 2011).

The study thus proceeded to assess the inferential relationship between constructivist guiding principles and Language literacy among pre-primary education in southern Nyanza region Kenya. The first objective sought to determine the relationship between constructivist guiding principles and Language literacy among pre-primary education in southern Nyanza region, Kenya. The first hypothesis,  $H_{01}$  formulated for this purpose sought to establish whether there existed a significant relationship between constructivist guiding principles and Language literacy among preprimary education in southern Nyanza region Kenya. The study thus tested the relationship between pre-primary teachers perceived constructivist guiding principles and language literacy. Since normality test showed that data obtained from most study variables were non-normal, logistic regression was used for the test. Table 7 and 8 presents the findings.

*Table 7: Relationship between constructivist guiding principles and language literacy (model summary)*

Step	-2 Log likelihood	Cox & Snell $R^2$	Nagel $R^2$	Model fit			Model Sig.			Obs.	Pre.
				$\chi^2$	df	Sig.	$\chi^2$	df	Sig.		
1	323.926	.083	.111	1.667	1	.123	17.280	1	.000	63.9	56.0

Estimation terminated at iteration number 3 because parameter estimates changed by less than .001.

Independent variable in the model was constructivist guiding principles. The model was significant  $\chi^2(1) = 17.280$ ,  $p < 0.001$  and the Hosmer and Lemeshow Test confirmed model fit,  $\chi^2(1) = 1.047$ ,  $p = 0.277$ . Cox & Snell R square predicted a variance of 8.3% while Nagelkerke R square predicted 11.1% variation in language literacy explained by the model. The model with independent variable explained 63.9% of constructivist principles, an improvement from the initial 56.0% initially predicted. Table 23 presents information on variables in the equation.

*Table 8: Relationship between Constructivist Guiding Principles and Language Literacy (Regression Coefficient)*

	B	SE	Wald $\chi^2$	df	Sig.	Exp(B)
Opportunity	-1.428	.319	20.098	1	.000	.240
Excellence	.239	.127	3.554	1	.039	1.270
Differentiated curriculum	-.413	.374	1.214	1	.217	.662
Constructivist guiding principles	.750	.358	4.400	1	.036	2.117
Constant	.724	.196	13.700	1	.000	2.062

a. Variable(s) entered on step 1: Constructivist guiding principles

The elements of the independent variables were entered into the model stepwise. Regression analysis illustrated that opportunity negatively and significantly predicted language literacy, Wald $\chi^2(1) = 20.098$ ,  $p < 0.001$ ,  $\text{Exp}(B) = .240$ . Similarly, excellence on its own was found to positively and significantly predict language literacy, Wald $\chi^2(1) = 3.554$ ,  $p = 0.039$ ,  $\text{Exp}(B) = 1.270$ . However, differentiated curriculum and learning negatively predicted language literacy, Wald $\chi^2(1) = 1.214$ ,  $p = 0.217$ ,  $\text{Exp}(B) = .662$ , the observation being insignificant. Ultimately, constructivist guiding principles positively and significantly predicted language literacy, Wald $\chi^2(1) = 4.400$ ,  $p = 0.036$ ,  $\text{Exp}(B) = 2.117$ . Findings mean that constructivist guiding principles is positively and significantly related with language literacy. Therefore, the first hypothesis which stated that there is no statistically significant relationship between constructivist guiding principles and language literacy among pre-primary education in southern Nyanza region, Kenya was rejected. Findings means that constructivist guiding principles is significantly related with language literacy among pre-primary education in southern Nyanza region, thus its implementation would significantly contribute to language literacy in the study area. The findings collaborate with Awandu (2023) study on the implementation of constructivist pedagogies in Grade 3 competency-based curriculum. The study concluded that constructivist pedagogies significantly predicted effective curriculum implementation.

Qualitatively, teachers proposed that constructivist guiding principles might be improved by: Increasing provision of diverse resources (digital, learning and play-based), use of storytelling and customized les-

sons to address diverse learner needs, curriculum implementation strategies like flexible grouping and investment in teacher training and recruitment. County directors of ECDE confirmed that storytelling, play-based learning, workbook usage and use of interactive device portrays the relationship between constructivist guiding principles and language literacy among pre-primary education in Southern Nyanza region, Kenya.

## Conclusion

The study sought to determine the relationship between constructivist guiding principles and language literacy among pre-primary education in Southern Nyanza Region. Findings on the opportunity and excellence, Logistic regression analysis illustrated that, both predict language literacy. Principle of differentiated curriculum and learning descriptively is important but logistic regression analysis indicated that, the principle negatively predicted language literacy. The study concluded that there is a positive significant relationship between constructivist guiding principles and language literacy. The study recommended that, teachers should enhance the implementation of constructivist guiding principles in order to harness their potentials in promoting interactive teaching practices that actively engage learners in language acquisition. There is need for education stakeholders to organize targeted training and teacher recruitment to cater for diverse needs of the learners.

## Conflict of Interest

The authors declared no conflicts of interest.



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