

Available on-line at: www.oapub.org/edu

DOI: 10.46827/ejel.v9i6.5751

Volume 9 | Issue 6 | 2025

# THE EFFECT OF CONSTRUCTIVIST INSTRUCTIONAL APPROACH ON ENGLISH LANGUAGE WRITING SKILLS IN PRIMARY SCHOOLS IN KENYA

Philip Kwambai Cheruiyot<sup>11</sup>, Anne Syomwene<sup>2</sup>, Khaemba Ongeti<sup>3</sup> <sup>1</sup>Lecturer, Department of Curriculum Instruction & Media, Kisii University, Kenya <sup>2</sup>Associate Professor of Curriculum Studies, Moi University, Kenya <sup>3</sup>Professor of Curriculum & Instruction, Moi University, Kenya

#### Abstract:

The ability to communicate in writing, as indicated in the Kenya Certificate of Primary Education, has consistently been low. This implies that the learning outcomes have not been realized. The pedagogical approach contributes to improving pupils' writing skills. There are several instructional approaches to teaching writing, including communicative language teaching, inquiry-based learning, constructivist approaches, and product-based approaches. However, there have been few investigations to establish the effect of the constructivist approach on learners' writing skills. This study, therefore, sought to examine the effect of the constructivist approach on enhancing the pupils' writing abilities in selected primary schools, guided by the hypothesis that there is no significant difference in pupils' performance in a writing test before and after instruction using the constructive approach. The research employed Vygotsky's social-cultural development theory, which asserts that learners actively generate knowledge and meaning through their personal and societal interactions. The investigation was executed in four counties of Kenya, namely Elgeyo Marakwet, Uasin Gishu, Nandi, and Trans Nzoia. The target population included fourth-grade pupils and their teachers of English. Purposive sampling was used to select four English teachers and 226 fourth-grade pupils from the chosen schools. Simple random sampling was used to pick grade four pupils who participated in the writing achievement test and were thereafter randomly assigned to

<sup>&</sup>lt;sup>i</sup>Correspondence: email <u>pkwambai@gmail.com</u>

one of the four groups. The study used a quantitative approach, employing a quasiexperimental design with Solomon's four-group design, anchored on the post-positivist philosophical paradigm. Data were collected via a writing achievement test, which was then analysed using descriptive statistics: frequencies and percentages. In addition, inferential statistics, specifically t-test and ANOVA, were employed to evaluate the hypothesis with a significance level ( $\alpha$ ) set at 0.05. The findings were communicated through narration, tables, and figures. The post-test group, which was exposed to the constructivist approach, had higher performance compared to the pretest groups. The study concluded that using a constructive approach in teaching writing skills is beneficial to fourth-grade learners. It is recommended that curriculum designers and teachers bolster the incorporation of the constructive approach into writing skills. This study aims to improve the existing literature on writing skills instruction by identifying a more efficient teaching approach for developing writing abilities in fourth-grade pupils in primary schools.

**Keywords:** constructivist approach, writing skills, instructional theories, grade four, Solomon-four group design, primary school

# 1. Introduction

Proficiency in writing is a crucial skill that is beneficial in academia, professional endeavours, and personal spheres. The cultivation of writing skills in pupils is a fundamental component of the curriculum in many countries worldwide, notwithstanding the challenges pupils face in generating written materials. Therefore, learners need exceptional instruction to develop their writing abilities. Throughout history, writing skills have been delivered via various approaches, and vestiges of each of these systems can still be seen in educational institutions today. Although the need for writing instruction has existed for a considerable period of time, the teaching process was traditionally influenced by a rigid and unchanging philosophy until the early 1900s (Nunan, 2003). These criteria support the idea that skilled writing was executed following a well-defined set of rules and principles. Furthermore, it was the teacher's responsibility to comply with these criteria, while students used efficient writing strategies when analyzing certain written materials (Nunan, 2003).

Nagin (2006) asserts that writing is complex, and for students to reach the high standards of learning expected of them, the school should provide a high level of instruction. This statement emphasises the importance of writing instruction for developing writing skills. Among the myriad approaches to teaching language in general and writing skills in particular is the constructive approach (hereinafter referred to as CA). Constructivist education is based on the notion that learners should be the focal point of both teaching and learning, as they actively build information rather than simply absorbing it passively. This is because it gives learners the chance to utilise the language, specifically writing abilities, in the most authentic and meaningful circumstances.

Therefore, it is useful to find out how constructivist approaches enhance learners' writing abilities when learning writing skills in the English language.

Progressively, the audio-lingual method led to a teaching philosophy in which learners were taught in small chunks, mistakes were not accepted, and correctness was encouraged through structured practice. In the early 1980s, there was a transition from tightly regulated to guided writing. This meant that the pupils were limited to writing sentences that were often direct responses to questions or combinations of sentences that formed a relatively short piece of communication (Carter and Nunan, 2001). Carter and Nunan (2001) claim that scholars in the newly emerging field of composition by native English speakers were responsible for the gradual but crucial shift from language-based writing courses to the study of composition strategies and techniques. As people came to see mistakes as helpful and learning opportunities instead of undesirable and wrong, and as communicating became more important than correct grammar, teachers slowly understood what English as a second language (ESL) students needed in school (Carter & Nunan, 2001). After the 1960s, classrooms began to adopt a broader view of writing and writing education, resulting in the inclusion of the entire writing process, such as ideation, drafting, feedback, and revision, rather than just the completed product (Nunan, 2003).

There have always been issues with how writing is taught. For years, teachers have struggled to find the best ways to help students write. Despite the fact that a large percentage of learners experience trouble composing texts, developing writing abilities is a crucial component of the education curriculum in many countries, according to studies on the subject (Dockrell & Papoulidi, 2022). The approaches employed by teachers in Greek primary schools demonstrated that nearly all of them encountered difficulties, with half of them expressing challenges in motivating struggling writers. Researchers found that teachers faced a significant workload related to individual words, which often extended to the overall text (Dockrell & Papoulidi, 2022). According to a review of evidence-based practice studies (Graham, Harris, & Chambers, 2016), key elements of writing instruction include explicitly teaching writing skills and strategies, utilising contemporary creative technologies, and providing opportunities to employ writing as a means to enhance knowledge acquisition. Graham (2019) argues that the manner in which writing is taught is influenced by local and national policies on curriculum and instruction, as well as teachers' training in teaching writing and their own attitudes about writing. These factors have been found to impact learners' learning and growth as writers. Learner-centric approaches are currently being promoted in modern writing training, taking into account the findings of these studies. Given these circumstances, this study is well-timed to investigate the effect of a constructivist approach in teaching English language writing skills.

#### 1.1 Problem Statement

Writing has two purposes: to express ideas and to make an impression. In particular, authors work to satisfy their personal needs to express thoughts and feelings as well as

those of readers or audiences (Nunan, 2003). Writing solidifies the learner's command of language and structure, which supports other abilities and appropriateness. Additionally, writing improves students' capacity for managing written assignments whenever they are assigned, which eventually fosters the acquisition of vocabulary and grammar with the end goal of assisting learners in expressing themselves and their thoughts in writing (Waran, 1995). It is, therefore, imperative to solidly ground the teaching of writing skills in the best way possible. This is because the teaching approach will influence mastery of writing skills. A properly written work in English, especially for second language learners, should demonstrate competence in grammar and writing mechanics, vocabulary, and organization, which promote coherence and logicality. Mastery of writing skills should, therefore, be the ultimate goal for every level of education (Zhu, 2004).

However, learners display poor written communication across the various levels of learning, from upper primary education through higher education. Upper primary school learners in Kenya do not display the requisite communication skills that would guarantee optimum learning, and thus, the country's educational performance has been poor, especially in the written English language. Pupils in primary schools routinely demonstrate poor performance in the English language, especially in composition and essay assignments that assess their communication skills, particularly during external examinations. In writing, it is evident that Kenya Certificate of Primary Education (KCPE) candidates spend most of their time rephrasing the lead sentence multiple times rather than crafting a narrative that aligns with it. The learners are unable to construct a coherent narrative, and they often struggle with writing incorrect words. There are myriad errors of tenses and punctuation, wrongly constructed sentences and weak sentence structures, wrong spelling, and slips of omission, among others (KNEC report in atikaschool.org & elimuspace.co.ke, 2021). Such dismal English language outcomes have led to public outcry about learners' poor written communication ability in their academics and social lives (Muitung'u and Njeng'ere, 2010). The combination of these elements has led to lower scores in composition writing papers, thereby impacting overall English language performance.

Hence, this unfortunate situation can be attributed to an inadequate instructional approach, among other factors. According to Kembo-Sure and Ogechi (2009), despite the intended purpose of writing in upper primary classrooms, pupils are incapable of successfully communicating in English. Learners struggle to effectively communicate in basic English when engaging in creative writing tasks (Kalemesi, 2016). Moreover, Koross, Indoshi, and Okwach (2013) contend that the inadequate development of writing skills can be attributed, in part, to the instructional approaches employed in English language teaching. The constructivist and product methods of teaching writing are among the numerous approaches that primary teachers can use to improve their learners' writing abilities. The hunch behind this study is that upper primary learners need to acquire adequate writing skills using the constructivist approach. The study hypothesises that the approach by which writing skills are taught remains very fundamental,

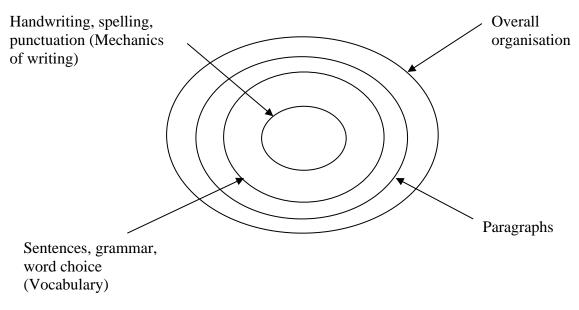
especially with the new competency-based curriculum (CBC), which aims to help learners enhance their skills (KICD, 2017).

## 2. Literature Review

Several factors have influenced the shift in traditional attitudes toward second-language classroom instruction. Some noted variables include the decline in traditional teaching methods, the increasing focus on developing both bottom-up and top-down abilities, the introduction of new English knowledge, and the teaching of integrated and multiple skills in real-life situations. Argyropoulou and Nina (2021) assert that these four qualities have had a significant impact on the development of classroom teaching and curriculum design for second language learners at different proficiency levels. The current methods used to teach second language writing to primary school pupils are based on the belief that learners must first become proficient in spelling and recognising letters and words before focusing on the analysis of morphemes, phrases, and sentences from a syntactic perspective (Celce-Murcia & Olshtain, 2000). As learners continue in their writing development, they are given more complex assignments that involve personal experience narratives, correspondence with acquaintances, and personal journals. Afterwards, the process of learning advances to the acquisition of writing skills in the school environment, typically combined with reading comprehension, as well as the absorption of grammatical structures and lexical knowledge (Adger, Snow, & Christian, 2002; Birch, 2005; Schleppegrell, 2004).

The advent of the communication approach in the 1970s had important consequences, including the expansion of language units from individual phrases to larger stretches of discourse and the conversion of text into a unified thematic entity. These principles have been firmly established in the field of writing instruction. To ensure efficient material organisation, it is crucial to incorporate principles such as arranging paragraphs based on functional categories and utilising various linking mechanisms. Clearly, having a communicative viewpoint on language is a necessary condition for writing that primarily emphasises the message. Teaching materials that adhere to a communicative approach emphasise the various aspects of writing that contribute to its development, such as the technical aspects of writing, the structure and arrangement of ideas, grammar, and vocabulary. Figure 2.1 depicts a variety of degrees of writing.

#### Figure 2.1: Levels of writing



(Adapted from Materials and Methods in ELT, 3rd ed., 2013 pp. 188)

The constructivist approach is an alternative to the traditional method for teaching writing, which has the potential to develop the desired writing abilities among learners in ESL classes. According to Vygotsky (1978), constructivists believe that the learner is the main focus, and that they actively construct information rather than simply absorbing it. Each learner forms their own understanding by drawing upon their distinct experiences and approaches. It emphasizes the learner's current comprehension and organization of knowledge. One's knowledge is comprised of one's prior experiences, mental models, and conceptions that are used to interpret events and objects. According to Brown (1987), the constructivist approach is highly advantageous in fostering writing proficiency because it regards writing as a fundamental cognitive ability that necessitates cognitive exertion to produce meaningful and expressive ideas. As stated by Bello (1997), writing is considered a productive language ability. Proficiency in writing is essential for improving language acquisition, as learners engage in the process of manipulating words and constructing sentences to express their thoughts clearly and efficiently, thereby solidifying their understanding of vocabulary and grammar acquired in the classroom. As a result, it is critical to give students the opportunity to develop their comprehension skills through learner-centred strategies and activities.

Teachers must select appropriate and efficient exercises and methods for enhancing their pupils' writing abilities. English as a foreign language (EFL) students continue to perceive writing as a formidable task, necessitating the identification of specific learning and teaching strategies that can facilitate their development as writers. Constructivism has notable ramifications for the process of learning and teaching. Hoover (1996) argues that teaching should not be viewed as a mere transmission of knowledge and information. Instead, constructivist teachers adopt the role of facilitators, guiding learners in a way that enables them to learn effectively and efficiently. Clements (1997) suggests that teachers should provide a learning environment that facilitates students' ability to articulate their thoughts. Additionally, teachers should build a learning environment that capitalises on the differences between students' recent experiences and their existing knowledge. This can be achieved by employing a constructivist approach founded on a comprehensive constructivist learning framework specifically designed to enhance interactivity in writing sessions. The primary goal of this design is to guide instructors towards novel modes of thinking and deviate from the conventional approach to reasoning, particularly by challenging the belief that the teacher possesses all knowledge and is beyond questioning. The constructivist approach provided with the necessary support and guidance to produce their thoughts in a productive and streamlined manner during the writing process. This could serve as a method to enhance pupils' motivation to write with clarity and efficiency.

Within the constructivist setting, which is one of the focuses of this study, Gagnon and Collay (2006) introduce six critical components-situation, groupings, bridge, questions, exhibits, and reflections-to effectively train students. Situations involve creating objectives, assignments, and academic standards. Bridge emphasises the use of students' cognitive maps, talents, values, motivation, and expectations to recall prior information. In contrast, grouping involves aggregating people and resources and implementing cooperative learning. The task requires the application of advanced cognitive talents and problem-solving approaches based on real-life scenarios. An exhibit is utilised to organise pupil portfolios and work samples, while reflection is employed to integrate information and critical thinking. The fundamental principle of constructivist classes is to engage students in tasks, foster independent thinking, and provide support as they strive to comprehend what they have learned. According to Okari (2016), writing instruction in English as a second language is often focused on reinforcing the teaching of specific grammar structures rather than improving writing skills. Sentences are frequently duplicated to create recently spoken patterns. Furthermore, Okari (2016) asserts that integrating a writing program into the educational system is essential for fostering the growth of writing proficiency. This program would align with the English language syllabus or the design of the new competency-based curriculum within the Kenyan context. The syllabus outlines the specific writing skills that students are expected to achieve by the conclusion of the course, tailored to their respective proficiency levels. By the conclusion of Form 4 (grade 12), it is imperative that all students possess a proficient grasp of written English in order to effectively and confidently engage in diverse discussions. Nevertheless, most learners lack the ability to successfully utilise language in authentic contexts (Onchera and Mwamba, 2009).

Writing abilities should be developed using an effective instructional strategy that provides students with ample opportunities to participate, learn, and implement writing techniques in a variety of classroom, daily life, and workplace situations. This would assist in meeting the demand from employers for straightforward and fluent writers. The

goal of instructing the four language skills—listening, speaking, reading, and writingshould be to cultivate pupils who can proficiently and eloquently communicate in diverse written and oral situations. As stated in the Kenya Institute of Curriculum Development's (KICD) Upper-Level Primary Design Volume One (2017), the learner is expected to demonstrate the ability to identify and react appropriately to pertinent information in different situations. The types of writing to be covered in grade four, as indicated in the learning design (syllabus), include guided compositions, which comprise filling forms and friendly letters, and open-ended compositions, which can be generated from pictorials, narratives, and diaries. The development of mechanics, which includes punctuation, spelling, and handwriting, will be covered alongside this composition. In Kenya, English writing is categorised into two main genres: creative writing and functional writing. Creative writing comprises various forms of literary expression, such as dialogues, discussions, small plays, poems, stories, and anecdotes. Functional writing, on the other hand, serves practical purposes in real-life situations, such as requesting or offering advice, inviting someone to a visit or event, and applying for something, among other examples. Functional writing provides learners with the necessary knowledge, skills, and comprehension to function proficiently, efficiently, and autonomously both within and outside of educational settings.

## 2.1 Writing Skills Instructional Theories

Teaching writing in English as a Second Language (ESL) poses significant challenges. Consequently, researchers have proposed multiple concepts to aid learners and educators in their efforts to improve language competency and the writing process (Hyland, 2015). The use of theories can improve instructors' ability to effectively apply techniques that have been validated and grounded in research. Hodges (2017) argues that there are four essential theories regarding the teaching of writing. Firstly, the cognitive process theory of writing. According to Flower and Hayes (1981), the theory maintains that writing is a cognitive process. To participate in the act of writing, one must use cognitive processes such as ideation, planning, and organisation, all of which require creative mental abilities. This theory seeks to educate learners on utilising cognitive processes to enhance their understanding of textual content. Compared to other writing theories, its extensive popularity can be attributed to its intrinsic virtues, which include the following: Prior to writing, writers actively participate in higher-order cognitive processes. These activities begin with the process of establishing the organisational structure. Composing involves setting objectives, and authors create both macro- and micro-objectives to successfully complete the writing activity. In essence, this approach just emphasizes the cognitive elements associated with the writing process.

The second one is the sociocultural theory of writing. Vygotsky developed a theoretical framework that places significant emphasis on motivation, affect, and social factors as integral elements of the writing process (Hodges, 2017). This discourse explains the manner in which human intelligence arises from societal or cultural influences, as well as the social nature of human learning. The theory posits the importance of

socialisation and interaction as key components that support the cognitive processes involved in knowledge acquisition. Vygotsky (1978) created the theoretical construct known as the zone of proximal development (ZPD), positing that learners require guidance and social interaction to facilitate their cognitive growth. In a classroom environment focused on English as a second language (ESL), it is imperative that students engage in collaborative efforts with their peers and seek support from both teachers and fellow students in order to enhance their learning experience.

The third theory is a social cognitive theory, which focusses specifically on the concept of self-efficacy in writing. Bandura (1993) proposed this theory to explain the complex interaction of cognitive, behavioural, psychological, and contextual factors that influence motivation and behaviour. The attention is centred on three elements: observational learning, imitation, and modelling. Self-efficacy pertains to the degree of confidence a student has in their ability to successfully complete a specific writing assignment and effectively handle any potential difficulties that may emerge. Bandura (1993) argues that the notion of self-efficacy proposes that individuals develop their beliefs about their skills by considering their past achievements. Consequently, individuals are more inclined to choose jobs that they feel confident in their ability to accomplish while avoiding undertakings that they see as challenging or beyond their capabilities. This theory outlines four fundamental principles: self-observation, self-evaluation, self-reaction, and self-efficiency. Within a writing classroom, it can be contended that both cognitive ability and confidence in one's ability to overcome challenges are important factors in facilitating writing instruction.

Fourthly, there is the ecological theory, whose proponent is Cooper (1986). The author argues that a writing ecology involves a wider range of factors than only the individual writer and their immediate environment. Interactions between students in the writing classroom create systems that influence and are influenced by peer writing in their learning environments. This theory suggests that the characteristics of a writer or a written work have a two-fold impact on both influencing and being influenced by the characteristics of other authors and written works in the system. Moreover, it implies that learners have an innate ability to be flexible and adjust to new circumstances. Although the structure and content of an entity may be initially established, they continuously undergo real-time change. An important drawback of this theory is its vulnerability to modification over long periods of time.

# 2.2 The Paradigm Shift towards Constructivism

Constructivist learning represents a shift from behaviourism to an educational strategy based on cognitive theory (Giridharan, 2012). The behaviourist approach considers aspects such as intelligence, domain of goals, level of knowledge, and reinforcement. On the other hand, constructivists view learners as active participants in the process of constructing knowledge through their interactions with the environment. As individuals accumulate further knowledge, they progressively develop their own unique understanding and convictions. Various concepts validate the constructivist approach when teaching a foreign language. The principles cover multiple facets of teaching, including the focus on interactive and cooperative learning, the incorporation of innovative classroom activities and project-based learning, the encouragement of learner independence, the acknowledgement of the significance of metacognition and language, and the cultivation of cross-cultural awareness. These concepts are critical and play a role in the development of comprehensive language learning experiences, which depend on a content-focused, genuine, and demanding learning environment. The phrase described above summarises the fundamental principle of the constructivist learning paradigm. According to constructivist learning theory, learners acquire additional knowledge by engaging in activities that spark their intrinsic curiosity, such as creating poetry and brief play scenarios.

Since the rise of constructivism, the pedagogical landscape has undergone significant changes. The foundational principles of constructivism can be attributed to Piaget's influential contributions to the field of cognitive development and Vygotsky's structural theory. The philosophy of constructivism influences both the individual and societal aspects of technological progress. The constructivist paradigm encompasses the discipline of linguistics, as well as the wider realm of literacy acquisition and specialized learning approaches. The transition from behaviourism to constructivism led to the rise of constructive thinking. Moreover, the implementation of constructivism has the capacity to enhance research carried out in classroom environments, particularly in language classrooms. Language educators can engage in innovative interdisciplinary research by encouraging critical thinking. While constructivism has been incorporated into language instruction through several pedagogical models (Jia, 2010), it is not widely apparent in language pedagogy and teacher education. In addition, the subject of language acquisition, particularly in relation to writing skills, has utilized several pedagogical methods that address learners' unique requirements and levels of involvement. Various advocates support the constructivist paradigm. Constructivist thinkers claim that people acquire knowledge by actively constructing it through a range of cognitive and sensory experiences. In addition, advocates of this viewpoint argue that individuals actively construct their own comprehension of the world through the process of assimilating experiences and engaging in relationships. Learning is conceptualised as an active and constructive process rather than a passive act of acquiring or transmitting knowledge.

The constructivist paradigm asserts that the learning process is predominantly influenced by the learner's contextual circumstances, personal beliefs, and attitudes. Perspective creation is the term used to describe the process by which students form their own unique worldviews by combining personal experiences and cognitive frameworks. Schuman (1996) states that the constructivist educational method enables learners to acquire the essential skills and abilities needed to effectively participate in problemsolving activities in situations where there are no clear solutions or well-defined boundaries. Constructivism highlights the active and dynamic responsibilities that both teachers and students play in the learning process. Lunenburg (2011) states that constructivism is based on the notion that individuals actively construct knowledge instead of passively receiving information from teachers. Constructivism is often associated with pedagogical approaches prioritising active learning or hands-on application. It is important to understand that constructivism is not a separate teaching method but rather a theoretical framework that explains how learning happens. This applies whether learners are using their own experiences to understand a lecture or following instructions to build a model (Piaget, 1967; Brooks and Brooks, 1993). According to Price (1997), constructivist theorists argue that students' ability to think critically and solve problems improves by creating new knowledge based on previous experiences and other sources. Consequently, learners engage actively in the process of constructing knowledge instead of simply taking it passively. Recognising that the acquisition of information depends on pre-existing knowledge is essential, as learners use their prior knowledge as a basis for building new knowledge (Neo, 2007).

The constructivist pedagogical approach encourages learners to acquire essential concepts using a variety of instructional methods. Discovery-based learning is the initial approach employed. This may include participating in activities with word strips to acquire knowledge about compound words, engaging in manipulative exercises to comprehend addition and subtraction, or conducting experiments involving different sizes of things to gain an understanding of capacity. Furthermore, other sources of knowledge acquisition may stem from individual theories or learners' independent conceptions of how phenomena function. Engaging in activities that elucidate and correct misconceptions, encouraging the consideration of diverse perspectives, facilitating conversation, and prioritising the comprehension of concepts rather than mere memorisation can also contribute to this process. Piaget (1967) advocates for the implementation of active learning tactics, including simulation and accommodation, while Vygotsky emphasises the need for social constructivism and collaborative group work, among other instructional approaches. The subsequent approach involves topdown processing. Constructivists tend to favour this approach over instructional methods that prioritise bottom-up learning. This implies that rather than receiving instruction on all the specific elements that contribute to the central concept, pupils identify the central concept first and subsequently deduce the supporting details. Learners are presented with the task of resolving intricate learning difficulties under the guidance of their teachers, thereby acquiring the necessary learning competencies.

Complex tasks provide learners with the opportunity to apply their cognitive knowledge and experiences to successfully complete activities that require scaffolding in top-down instruction. This technique offers necessary assistance and integrates collaborative activities, which are essential for promoting advanced cognitive skills (Brooks & Brooks, 1993). Cooperative learning is the third method of instruction. In this educational context, students show a greater inclination to absorb and incorporate intricate knowledge by participating in collaborative exchanges and exchanging thoughts related to the provided concept. This phenomenon stems from the intrinsic social elements of the learning process, when group and peer activities are used to promote critical thinking and correct misconceptions among students. This phenomenon results in changes in cognitive processes. Self-regulated learning is commonly regarded as the fourth component. Self-regulated learners are those who have the necessary knowledge and skills to effectively use learning strategies in a thoughtful and deliberate way (Bandura, 1991; Dembo & Eaton, 2000; Schunk & Zimnmer, 1997). This technique encourages independent learning despite the prolonged length of the activities. The approach entails decomposing complex problems into more feasible stages and conducting preliminary testing of various alternatives prior to implementation. Zimmerman and Kitsantas (1999) illustrate many academic talents, including the ability to quickly skim through text, engage in thorough comprehension when reading, and write well for different purposes and audiences. The fifth capability refers to the aptitude for problem-solving and critical reasoning. Problem-solving is a mental process that involves identifying, analysing, and solving problems.

## 2.3 Constructivist Approach to Developing Writing Skills

It is imperative to provide a strong foundation for writing instruction by adopting appropriate approaches. One effective approach to addressing writing proficiency challenges is to develop engaging methods to facilitate the acquisition of writing abilities. Learners receive a sense of liberation when engaging in enjoyable activities, allowing them to freely explore their daily experiences without encountering any obstacles. This can be achieved by implementing a constructionist method, in which the learning process is interconnected with other aspects. Zulela and Rachmadtullah (2019) emphasise that the learning process entails learners' active participation in group activities and mutual correction; attitudes are shaped through the cultivation of self-awareness abilities, which are built upon comprehension and existing schemata in pupils. Learners are encouraged to enhance their writing skills by aligning their work with the current environment, topics introduced by the instructor across different situations, and educational resources. This approach aims to foster and cultivate learners' creativity. Students are instructed to assume responsibility for overseeing and improving their individual assignments, specifically those related to writing. Learning takes place in a variety of environments, circumstances, and conditions, and the assessment of learning achievements encompasses multiple methods, such as work performance, assignments, and examinations.

In the realm of writing, there exist three fundamental facets of grammar that necessitate the cultivation of proficient skills among learners. This category encompasses topics such as letter composition, letter usage, and punctuation application. It is crucial to emphasise to learners that a mere alteration of a single letter (known as a phoneme) can have a significant impact on the meaning of a word, as seen by the distinction between *stationary* and *stationery*. The instructor should demonstrate a proactive approach by employing appropriate illustrations, such as writing on the chalkboard and displaying instances of punctuation on the wall. According to Jonassen (1998, as cited in

Seitzinger, 2006), the process of learning is most effectively facilitated by the collaborative efforts of individuals working together in teams to address and resolve challenges.

The activities implemented in a constructivist classroom foster a reciprocal process of teaching and learning. This approach will facilitate peer instruction among student pairs. In addition, inquiry-based learning (IBL) is also accessible. This is the space where students articulate questions and seek solutions through scholarly investigation and firsthand examination. This is the stage at which students offer their corroborating evidence to address the inquiry while also establishing links between their pre-existing knowledge and the knowledge they have acquired through the task. Ultimately, the researchers proceed to form conclusions, identify any existing gaps in knowledge, and formulate strategies for future investigations.

Another activity commonly found in constructivist classrooms is problem-based learning (PBL), which shares a fundamental principle with inquiry-based learning (IBL): students gain knowledge by formulating a solution to a problem. The sole distinction lies in the fact that problem-based learning (PBL) activities expose students to authentic, realworld challenges, hence requiring them to engage in collaborative problem-solving. Furthermore, students get the opportunity to develop their communication and teamwork skills by participating in challenging group projects that are rooted in realworld situations. Cooperative learning is an educational practice that aligns with the constructivist approach. In this educational context, students engage in collaborative learning by actively participating in small group activities, aiming to optimise their individual learning outcomes as well as enhance the learning experiences of their peers. Cooperative learning is distinct from conventional group work due to its reliance on interdependence among group members for problem-solving and task completion.

## 2.4 Methods for Strengthening Skills in Writing

Constructivism is influenced by a variety of factors, including the learner's interests, general and specific abilities, attitudes, successes, goals, and motivation. Therefore, it is vital to utilise an approach that offers versatility, drive, adjustability, and proficiency for both the teacher and the learner. Constructivist instruction is based on the fundamental principle that learning takes place when learners actively participate in the process of constructing meaning. The variation in individuals' schemas can be attributed to the disparities in their experiences (Hmelo-Silver, Duncan & Chinn, 2007; Jonassen, 1991). This suggests that it is important to tailor instructional approaches to meet the specific needs, interests, and experiences of individuals. Additionally, establishing linkages to prior information or schema serves as a basis for fostering the acquisition of new knowledge and comprehension.

The constructivist classroom in the context of English instruction is characterised by several distinctive features. The instructor and student have mutually supportive responsibilities, wherein the teacher assumes the role of a guide or facilitator while learners take on the responsibility for their own learning. Learner-centred techniques are frequently employed, wherein students actively engage in constructing meaning, generating ideas, and acquiring knowledge, facilitating the centralisation of the learning process. Learners participate in the negotiation process by actively contributing to the curriculum's development, which includes determining the content of courses, establishing the format of assignments, and formulating the criteria for evaluating those tasks. According to Smith (1993), the process of negotiating curriculum involves customising daily lessons to cater to the unique requirements of the students. Learners are anticipated to exhibit heightened levels of responsibility towards their own learning as a result of experiencing a sense of ownership over the lessons, acknowledging the collective involvement of all participants in the teaching-learning process, and actively engaging in the construction of their own ideas, inquiry, and the pursuit of solutions. This will additionally empower learners to acknowledge their ownership of the materials.

In constructivist classrooms, control and authority are distributed among multiple stakeholders. Students are encouraged to cultivate independence and autonomy, granting them a certain level of agency and authority in determining their educational pursuits, the dynamics of the classroom, the structure of assignments, and the methods of evaluation. This enables them to assume heightened accountability for their own learning journey. The responsibility they bear contributes to the development of their independence and autonomy. Learners are advised to engage in questioning as a means to cultivate and enhance their capacity for independent learning. Due to the active involvement and enthusiastic participation of students, the teacher's authority within the classroom is diminished. The constructivist English classroom exhibits democratic characteristics. This is accomplished through an educational program that fosters active student engagement in collaborative inquiry and decision-making processes, which are shared between students and teachers. Additionally, students are empowered to exercise autonomy in selecting their daily activities. Learners may be motivated to build operational ground rules, values, and conventions within their learning community. Furthermore, it is imperative to foster the active involvement of students, instructors, parents, and other stakeholders within the school community in the process of governance and policy development. In the constructivist English classroom, the instructor assumes the role of a researcher. The instructor may enquire about the learners' preferred learning styles as a means of gaining further insight into their individual needs, enabling the instructor to provide more effective support and guidance. According to Calkins (1986), the distinction between research and teaching becomes blurred when teachers acquire knowledge from their students during the instructional process since students' learning behaviours serve as a demonstration of their learning methods. Enhancing the effectiveness of instruction is contingent upon instructors' comprehension of students' learning processes. In an educational setting that adheres to the principles of constructivism, there is an active exchange of ideas and perspectives between professors and students.

Promoting interaction between learners and between learners and instructors is consistently advocated for. This is because classes that provide students with the opportunity to engage in interpersonal interactions promote the efficient development of their cognitive abilities. Students actively take on the duty of collectively acquiring knowledge, engaging in discussions that encompass a range of differing viewpoints, and exerting influence over the course's trajectory through collaborative and cooperative efforts. As a result, group debate is widespread. The project's completion can be facilitated by forming small groups, allowing students to assign distinct responsibilities to individual group members and then engage in discussions about their respective progress. The relationship between students and teachers has a pivotal role in shaping the learning environment. According to Katja et al. (2024), cultivating supportive and pleasant connections between instructors and students plays a critical role in fostering a deep sense of school belonging and promoting student engagement in collaborative classroom activities. Hence, it is imperative to direct attention towards both the pedagogical process and the dynamic between the student and the teacher since this synergy greatly enhances the overall teaching and learning experience. Nevertheless, the presence of a heterogeneous student body with varying linguistic backgrounds might provide a considerable obstacle for an educator in a classroom setting. This is because English language learners (ELL) encompass a wide spectrum of academic aptitudes, English language proficiencies, and academic experiences. Moreover, it is important to acknowledge that cultural disparities might influence a student's aptitude for academic achievement within the educational setting.

The development of writing as a sophisticated language skill, with the objective of enabling learners to effectively convey their thoughts, necessitates the crucial role of a teacher in employing a constructive strategy to support the learning process. According to the Kenya Institute of Curriculum Development (KICD, 2017), it is recommended that the teacher assume a guiding role rather than dominating the learning environment. This approach allows learners to actively participate and assume responsibility for their own learning. The promotion of learner-centric approaches is justified because writing skills are inherently self-initiated, enduring abilities that contribute to human growth and have practical applications extending beyond the confines of the educational setting. As a result, the teaching of writing must be characterised by immersive, participatory, and engaging methodologies. The methods employed should facilitate active engagement and learner participation in learning activities, with the aim of enhancing writing skills across different thematic areas. The Kenya Institute of Curriculum Development (KICD, 2017) presents a diverse range of instructional techniques, including role play, storytelling, question and answer sessions, discussions, singing, inquiry-based learning, discovery-based learning, role modelling, recitation, demonstration, fieldwork, problemsolving tasks, experiments, reflection exercises, practical activities, and e-learning. When considering instructional approaches, educators should be aware of educational requirements, individual learner needs, and the surrounding learning context. It is important to acknowledge that the CA emphasizes the use of guided instruction, in which the teacher plays a facilitative role in promoting learning through modeling and scaffolding. Within this framework, learners are encouraged to seek clarification and ask

questions while also applying these skills collaboratively and independently. Additionally, the teacher employs formative assessment methods to assess comprehension and ensure learning progress. Guided instruction exemplifies the congruence between the teacher's instructional objectives and the level of support provided to students in carrying out these tasks. In contrast, alternative teaching approaches exist, such as the conventional lecture approach, which requires learners to simultaneously comprehend the content of the presentation and apply underlying ideas. This is contrary to the principles of the constructivist method, as it results in less favourable learning outcomes.

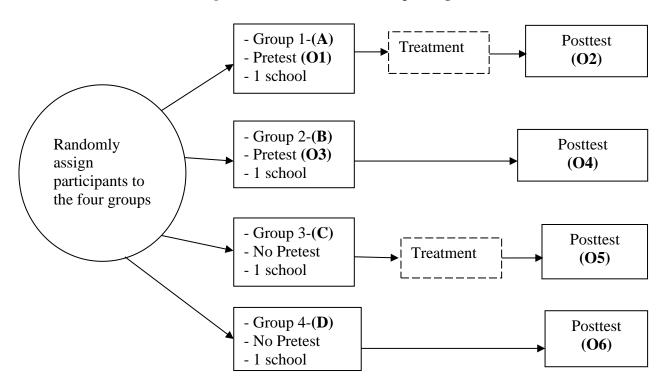
## 3. Materials and Methods

This study adopted the post-positivist paradigm, which maintains that objective methods based on measurements, control, and systematic observation enable rational researchers to investigate reality (Leavy, 2017). This is made evident in this study by the knowledge of a constructivist approach to developing writing skills in the English language in primary classes, which is grounded in school-based reality. Numeric data was collected to facilitate CA's effectiveness in developing writing abilities. In this study, the researcher maintained an axiological stance by carefully considering the ethical viewpoints that influenced the approach to inquiry and how the results were interpreted.

# 3.1 Research Approach

The current investigation utilised a quantitative approach in which data were collected with a view to testing the hypothesis. The data were collected via a writing achievement test (WAT), and the numerical data were analysed using statistical techniques. The research was executed using the Solomon Four-Group Design, which employed the specific instance of a 2x2 factorial design, wherein individuals were allocated randomly to four distinct groups (Ary, Jacobs, & Razavich, 1972; Ogunniyi, 1992). The use of a quasi-experimental design was suitable for this study because the random allocation of participants into control and experimental groups is not feasible due to the preset nature of the groups. Moreover, the quasi-experimental design was considered appropriate due to its incorporation of natural settings or groups, which consisted of either experimental groups exclusively or both experimental and control groups. It was possible to compare the experimental and control groups to see how well they performed on the writing test and how the constructivist approach affected the pupils between the pretest and treatment conditions. In addition, this design provided adequate control over confounding variables that may influence the internal and external validity of the study (Koul, 1984).

The study involved four groups, with two of the groups being experimental and the other being control. Two groups received a pre-test of comparative characteristics, and two groups received treatment (CA). To mitigate the potential influence of crosscontamination between two groups, the study employed a sampling strategy in which each group of subjects consisted of one school randomly picked from each of the four counties. Figure 3.1 depicts the study design.



#### Figure 3.1: Solomon Four-Group Design

(Adapted from Kobus, 2016)

Two of the groups in Figure 3.1 were experimental (A and C), and the other two were control (B and D). Groups A and B were given a pre-test (O1 and O3), and groups A and C were given treatment X (CA). After this, all four groups were given post-tests (O2, O4, O5, and O6).

#### 3.2 The Study Site

The investigation was conducted in public primary classes in four counties, namely Elgeyo Marakwet, Uasin Gishu, Nandi, and Trans Nzoia. Several factors influenced the research site choice. The public primary schools were adequately staffed with qualified and experienced teachers, and their teaching and learning facilities were comparable. In addition, the site was chosen because of the unsatisfactory pupils' academic performance at national examinations in English language writing skills over a long period of time. The grade four class, one of the upper primary classes, was chosen to ensure homogeneity in terms of learner ability.

#### 3.3 Target Population

The target population for this study included grade four pupils in upper primary classes as well as their English teachers. The accessible population consisted of four schools. Grade four teachers of English from the four counties were targeted, with four teachers forming the teachers' accessible population for observation and thirty-five for teacher questionnaire. One school was randomly selected from each county.

## 3.4 Sample Size and Sampling Techniques

Within the four counties were 2055 schools distributed as follows: Elgeyo Marakwet had 410 such schools, Uasin Gishu had 497, Nandi had 764, and Trans Nzoia had 384. The study used simple random sampling (SRS) technique to choose a total of four public primary schools, experimental and control groups. Two of the groups (A and C) were experimental, while the other two (B and D) served as control groups. Groups, A and B, received comparative characteristics pre-tests (O1 and O3). Groups A and C received treatment X (CA). Post-tests were administered to all groups (O2, O4, O5, and O6)

Random assignment was made among the four institutions, as well as the control and treatment groups. The study employed the SRS technique to pick the classes from a school with more than one stream that participated in the research. The SRS technique offered a notable advantage by ensuring that every school within the counties stood an equal chance to be selected as part of the sample. In addition, the SRS technique was employed to allocate participants to the control and treatment groups due to the restricted availability of school streams. This was achieved using a random balloting process. To select fourth-grade pupils and their English teachers, a stratified random sample was used. Grade four English teachers were chosen purposefully based on their current experience instructing the class. A naturalistic research approach is considered effective when used with purposive sampling, a type of non-random sampling when the researcher deliberately selects participants with specific characteristics (Nikolopoulou, 2023). Fourth-grade learners exhibit similar initial behaviours upon entering school, as the educational institutions are equipped with competent teachers. Additionally, these learners have access to comparable instructional resources and infrastructure. The fourth grade was also chosen on purpose because it is at this level that writing skills are introduced in the English language, and a high level of learner engagement is expected.

## 3.5 Research Variables

This study examined one independent variable: the constructivist approach to teaching English language writing skills. The approach was evaluated based on the learners' writing skills, that is, learners' ability to effectively and appropriately communicate in written form, as demonstrated through creative compositions that exhibit proper grammar and mechanics, handwriting, vocabulary usage, and organizational structure.

## 3.6 Research Instruments

Data for this study were collected by administering a writing achievement test (WAT) that was guided by its accompanying grading system. WAT was administered to grade four pupils. Over the course of their four-week duration, a constructivist instructional approach to writing was applied within their respective schools. Throughout the

investigation, the researcher provided individualised instruction to English teachers about their involvement with constructivist experimental groups. The purpose of this training was to ensure that teachers followed the guidelines and instructions outlined in the instructional manual.

The researcher created the instrument and then had supervisors from the institution verify its validity. WAT offered writing tasks that covered several elements, such as creative compositions, grammar and writing mechanics, handwriting, vocabulary, and organization. A representative sample of four primary schools received the writing assignment in the form of a single-page printed document. The given exercise was considered suitable for assessing the writing abilities of fourth-grade pupils, which was executed within 35 minutes as anticipated. Both the experimental and control groups were provided with the identical WAT, which served as a standardised measure regarding its duration, content, and style of communication. WAT necessitated the creation of a creative essay that included specific details about organization, language, mechanics, handwriting, and syntax. These features are used to assess an individual's skill in written communication. The writing task went by the heading Celebration or Party You Attended, as indicated in their fourth-grade textbook (KICD, 2017). The evaluation process included assessment criteria based on the KNEC Grade 4 Writing Rubric (KNEC, 2022), together with the instructional materials from the KICD teacher's manual and guide. The researcher evaluated each written (composition) work using a four-point scale level. The maximum score on the scale was 4, representing a range of 8–10 marks, while the minimum score was 1, representing a range of 1-2 marks. Attaining superior grades indicates a commendable mastery of writing abilities. To reduce the possibility of rater bias, the participants' identities were concealed.

## 3.7 Validity and Reliability of Instruments

Prior to the main research, a pilot study was conducted to evaluate the credibility of the tools used. Piloting facilitated the identification and refinement of certain words in the research tools that were not readily clear, and through the feedback obtained from the pilot sample, they were revised. An example in this study is the use of the term *reflections* and the distinction between experiments and practical activities as instructional methods within the CA. The researcher, with the aid of experts, excluded questions that were considered unsuitable and ambiguous before conducting the study (Mugenda and Mugenda, 2003). The WAT research instrument underwent a pilot phase in two primary schools located in Baringo County that were not included in the actual study. The objective of this pilot was to assess the validity and reliability of the research tools. To verify the WAT's accuracy, a thorough item analysis was performed with the guidance of language specialists. The user referenced the CLAQWA rubric (2.6.22) was also used, which is based on the work of researchers (Cooper, 1977; Teresa, 2009; and Krest, 1987) and was developed by the University of South Florida (USF). This rubric is used to assess written work and provide consistent and meaningful feedback on students' writing and critical thinking skills.

The reliability of the instrument was determined using the test-retest method, as recommended by Creswell (2014), which involves assessing the extent to which scores from a single sample remain consistent over time across multiple test administrations. In this fashion, the test was delivered by the researcher to the same subjects on two occasions, with each administration being temporally spaced apart. The instrument underwent a pretest on a sample consisting of two grade four primary schools located in Baringo County. This pretest aimed to assess the duration and level of difficulty of the writing test. For two weeks, the teacher had at least two lessons of 35 minutes each. WAT was administered as a pretest to pupils before they were taught using the CA in the specified groups (A and C), after which they took a posttest. Cronbach's alpha was used to determine how the items correlate with one another and to evaluate the instrument's internal consistency in measuring the construct of interest (Burke and Christensen, 2014). The consistency of the data was assessed using the reliability coefficient, specifically determined by Cronbach's alpha. This value was computed to assess the internal consistency of variables and determine the extent of correlation between the variables in the WAT. A reliability coefficient of 0.702 was obtained and deemed adequate for the study.

## 3.8 Data Collection Procedures

The research comprised four primary schools located in the four counties of Kenya, viz Elgeyo Marakwet, Uasin Gishu, Nandi, and Trans Nzoia. Group 1 was designated as the experimental group, and they were administered the pretest, received the treatment, and then undertook the post-test. Group 2 was assigned the role of the control group, wherein they undertook the pre-test, then exposed to no condition and subsequently undertook the post-test. Group 3 received the treatment and then undertook the posttest, whereas Group 4 undertook the posttest only. For at least one week, the researcher provided explicit guidance to the fourth-grade English teachers on the approach being investigated. The schools that were chosen for this study were assigned to either the treatment or control conditions using a random selection process. This was done since it was not feasible to separate complete groups of schools for the purpose of the research.

In the constructivist approach, the teacher divided the pupils into smaller groups of five to six. Each instructional session began with the facilitator prompting the pupils to share their thoughts on the objective and framework of the writing task at hand, followed by a discussion. The participants were given the opportunity to engage in a dialogue about the overarching techniques required for task completion, with the teacher adopting a passive stance by rarely interjecting so as to prevent impeding the learners' ability to freely articulate their genuine viewpoints. Learners composed their initial drafts of the assignment in their respective groups. After this, they were permitted to exchange texts, allowing each learner in the group to peruse their groupmate's work. This afforded an opportunity for learners to play the role of readers from writers; thus, it created their awareness of the fact that whatever they had written was read and assessed by another person who also made necessary corrections. The draft was then returned and revised based on feedback from peers. Every member of the group produced a final version of their written work, which was then shared among the group members for the purpose of modification and receiving final feedback.

# 3.9 Data Analysis

The data for this study was analysed using quantitative descriptive and inferential statistics. It was also evaluated using a variety of statistical techniques, such as means, frequencies, percentages, and standard deviations, in a way that was clear and easy to understand (Babbie, 2013). To succinctly summarize pupils' writing achievement performance, the mean was used as a statistical measure. Conversely, the standard deviation was used to evaluate the consistency of the population from which the sample was obtained, as well as to study the ordinal data. In the realm of inferential statistics, the t-test was used to examine independent variables (Burke and Christensen, 2014). Oneway analysis of variance (ANOVA) was used to look at differences in group means, especially when it came to the quantitative variable of written test performance. It also helped lower type I errors (Leavy, 2017). The data from WAT were analysed using inferential statistics and narrated descriptively. In order to assess whether to accept or reject the null hypothesis, the statistical tests underwent a significant test with an alpha level of 0.05, a margin of error of 5%, and a confidence level of 95%. In this study, the posttest is the dependent variable, whereas the four groups representing CA are the independent variables.

# 3.10 Ethical Considerations

The researcher obtained the necessary permits from the relevant institutions, including the university, National Commission for Science, Technology and Innovation (NACOSTI), and the other authorities within the research site, which were properly conducted for permission. After this, the researcher took on the responsibility of ensuring the protection of participants' rights and welfare during and after the study, which included guarding against subjecting them to any potential bodily and psychological discomfort, harm, or risk (McMillan & Schumacher, 2014). The accomplishment was achieved by observing and maintaining the informants' rights, preferences, values, and desires (Creswell, 2014). Given this context, the researcher accounted for many dimensions of study ethics, including informed consent, voluntary participation, privacy, secrecy, anonymity, and sensitivity towards participants (McMillan & Schumacher, 2014). Apart from these, consent for participation was sought accordingly (Bogdan & Biklen, 2007; Shaffer & Kipp, 2010). The use of pseudonyms safeguarded the confidentiality of all individuals and participating institutions. Pseudonyms were used to identify educational institutions such as schools A, B, C, and D, and individuals such as teachers 1, 2, 3, and 4. It becomes possible for individuals, organisations, and communities to effectively obscure their true identities. The researcher demonstrated a commitment to academic integrity by meticulously acknowledging and referencing all sources of material used in the research study (Jwan and Ong'ondo, 2011).

#### 4. Results and Discussions of the Findings

The results from the academic performance of learners who were taught using the constructivist approach to enhance their writing capabilities is hereby presented. The study involved testing and analyzing the hypothesis, followed by the presentation of the results in tabular format. The acceptance/rejection of the null hypothesis was based on the predetermined significance level of 0.05. The investigation involved 226 pupils. The pupils were divided into four groups: A, B, C, and D. Groups A and C received an intervention on CA prior to the posttest, whereas Groups B and D did not. The experimental groups A and C were taught using CA.

#### 4.1 Findings of the Study

The investigation's results are presented in accordance with the null hypothesis:

**Ho1:** There is no significant difference in pupils' performance in a writing test before and after instruction using the constructive approach to develop writing in selected primary classes of Kenya.

Pupils were categorised into four groups, thus, A, B, C, and D. 57 participants received treatment and participated in the pretest, accounting for 25%. In the control group, 73 participants, representing 32% of the total, participated in the pretest. Additionally, 74 participants, constituting 33% of the total, did not participate in the pretest but received treatment. Lastly, 74 individuals in the control group were not administered a pretest. A posttest was given to all four groups, comprising a total of 226 participants. Table 4.1 provides a comprehensive breakdown of the aforementioned information pertaining to the CA.

		Pre-test Post-test		ost-test	Total		
Treatment	Group	Pupils	Percentage	Pupils	Percentage	Pupils	Percentage
No	В	33	15%	40	18%	73	32%
	D			22	10%	22	10%
Yes	А	38	17%	19	8%	57	25%
	С			74	33%	74	33%
Grand Total		71	31%	155	69%	226	100%

**Table 4.1:** Summary of Pupils Who Participated in the Test Before and After the Constructivist Approach Instruction

CA to writing skills allow pupils to freely exchange ideas through learner-centered classroom activities. Techniques that are commonly used are collaborative learning, pair work, group work, and peer learning, among others. Learners are given the chance to create and openly share their own knowledge in a meaningful way. It employs heuristic strategies that give the pupil an advantage in learning. During writing skills instruction, the teacher should permit pupils to discuss the writing assignment at hand, share important issues to be considered, and engage in general brainstorming about the assignment. The teacher's primary responsibility is to assume the role of facilitator and

assist learners in navigating various instructional tasks. In this study, pupils' performance was assessed using a rubric to grade their writing. The grading rubric included criteria for grammar and mechanics of writing, handwriting, vocabulary, and organisation, with four performance levels: level 1 with marks between 1-2 (below expectations), level 2 with 3-4 marks (approaching expectations), level 3 with 5-7 marks (meeting expectations), and level 4 with 8-10 marks (exceeding expectation). In order to measure their performance, the experimental group was subjected to an intervention and then given a posttest through a writing task via CA. According to table 4.1, 71 learners (31%) were part of the treatment group (A and C). Group A was administered a pretest, followed by an intervention, and then a posttest. In contrast, group C only received treatment and a posttest, without any pretest. Out of all the participants, 155, which makes up 69% of the total, were placed in the control group (B and D). Group B received both the pre- and post-tests, while Group D was only given the post-test. Figure 4.1 provides a succinct overview of the findings of the investigation.

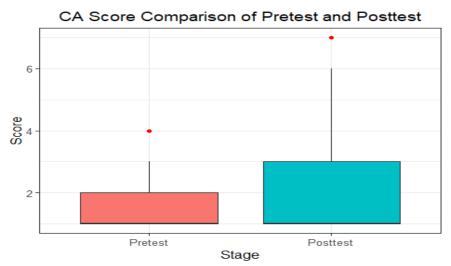


Figure 4.1: Comparative analysis of pretest and posttest scores using CA

According to Figure 4.1, there is an improvement in score performance in the posttest group, which has improved score performance compared to the pretest group. The results of the t-test analysis support the observation, indicating that the group's mean score on the post-test (M = 2.0, SD = 1.41) is 0.31 points higher than the pre-test (M = 1.69, SD = 0.87), t (204) = -2, p = 0.04. The null hypothesis is rejected because the p-value is below the threshold of 0.05 (specifically, 0.04<0.05). Because of this, we can confidently deduce with 95% certainty that there is a noticeable difference between how well pupils did on a writing test before and after using CA to improve their writing skills in a certain sample of Kenyan primary school classes.

It is indicated from the results in figure 4.1 that the intervention (CA) had an effect on the learners' performance by way of improving the learner's performance. Hence: inferential statistics **H**<sub>01</sub>: There is no significant difference in pupils' performance in a writing test before and after instruction using the constructive approach to develop writing in selected primary classes in Kenya.

This is therefore rejected, and it is concluded that there is a statistically significant difference in pupils' performance in a writing test before and after instruction using CA to develop writing in selected primary classes in Kenya.

#### 4.1.1 Effect of Constructive Approach on Writing Skills

The objective was to examine how CA affects writing skills among Kenya's primary classes. For CA, the participants were separated into four categories (A, B, C, and D). As shown in Table 4.2, two hundred twenty-six (226) pupils participated in the control and experimental groups, 95 and 131, respectively.

Group	Pupils	Sum of Score	Average	Percentage
Control	95	176	1.85	41%
Experiment	131	254	1.94	59%
Grand Total	226	430	1.90	100%

Table 4.2: Summary of Participants of the CA Control and Experiment Group

The experimental group was provided with CA instruction in order to enhance their writing skills, while the control group did not receive any form of intervention. Figure 4.2 displays the inquiry's findings.

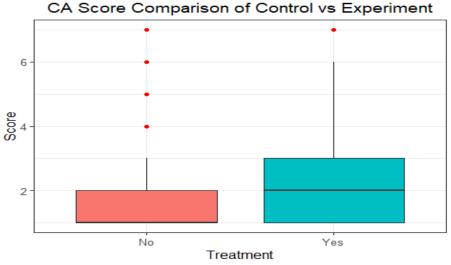


Figure 4.2: CA Control Group Vs Experiment Group Score Comparison

Based on the data shown in Figure 4.2, it is evident that both the control group and the experimental group have a similar distribution of writing scores. The t-test shows that the experimental group's average score (M = 2.10, SD = 1.29 vs. M = 1.71 for the control group and SD = 1.22) is significantly higher than the control group's average score (M = 1.71 for the control group and SD = 1.22) by a mean of 0.39. Since the p-value (0.02) is

lower than the significance level (0.05), it can be concluded that the null hypothesis is rejected. Therefore, we can confidently state that there is sufficient evidence to support the claim of a notable difference in pupils' performance on the English language writing test between the experimental group and the control group in primary school classes in Kenya, with a 95% level of confidence.

#### 4.2 Discussion of the Findings

## 4.2.1 Effect of Constructive Approach on Pupils' Performance on Written Achievement Test

The foundation of CA is the notion that knowledge is produced in the learner's mind, as well as being aware of what is constructed. Students do not simply repeat what they read or hear (Glasersfeld, 1983). CA represents a departure from teacher-centred approaches in favour of learner-centred ones. According to Kumaravadivelu (2001), this particular approach affords learners the chance to independently create and explore both familiar and unfamiliar information. Consequently, learners are able to develop autonomy, critical thinking skills, self-assessment abilities, and active engagement as members of the learning community. Constructivist instructional models utilise a framework known as the 5Es, which consists of the following stages: engage, explore, explain, elaborate, and evaluate (Duran & Duran, 2004; Ruiz-Martin, Hector, & Bybee, 2022). The 5Es served as the fundamental basis for the instructors' actions. In CA, learners engage in collaborative writing activities with their classmates, while the instructor plays a facilitative role in guiding the writing process within a nurturing and conducive learning atmosphere. In addition, learners are provided with personalized and tailored writing instruction through writing conferences and instructive moments.

In this study, CA exposed pupils to various activities, such as introducing learners to instructional tasks and relating them to their prior knowledge or ideas. Additionally, learners were encouraged to articulate and narrate their thoughts while the expected learning outcomes for the writing tasks were explicitly defined. Furthermore, learners were given the autonomy to create their own writing by monitoring and developing their own tasks, thus fostering interactive and collaborative learning. The findings suggest that the group that took the post-test exhibited superior performance compared to the group that took the pretest. These results provide enough evidence to support the conclusion that there is a notable disparity in pupils' writing test scores before and after receiving instruction using CA in selected primary classrooms in Kenya, with a confidence level of 95%.

In a study conducted by Al-Ghazo and Alzoubi (2018), the researchers examined how constructivist learning design affects the writing skills of college students. The results of their research showed similar outcomes. Milad's study (2017) and Malik *et al.*'s (2013) provide additional evidence that supports this analysis's findings. The findings have substantial implications for language teachers, particularly in terms of developing and executing effective techniques for teaching writing skills. Pre-service language teacher education programs should include instruction on teaching and improving language writing abilities, with a focus on the CA.

#### 5. Conclusions and Recommendations

#### 5.1 Conclusion

The learning process in CA is characterized by learners' active engagement in comparing new information with their pre-existing knowledge and establishing meaningful connections, as opposed to passively internalizing information for later regulation. The learner's context, beliefs, and attitudes are the key factors that influence learning. Through their own experiences and schema, learners develop their own view of the world so that they can prepare for problem-solving in uncertain settings and undergo a shift in their worldviews, enabling them to actively generate meaning. This is feasible when pupils engage with the phenomenon or text through social interaction or introspective thought.

There are several advantages to using CA in teaching. Learners that excel in the hands-on learning environment will derive advantages from this pedagogical technique, as it facilitates a seamless integration of classroom knowledge with their everyday experiences. The CA incorporates the learners' prior knowledge, advocates for teachers to allocate additional time to topics of student interest, and enables instructors to focus on essential details. In a constructivism course, it is common for pupils to engage in frequent collaborative group work. Learners benefit from the development of their social skills as they engage in mutual support of their academic endeavours and demonstrate a respectful attitude towards each other's opinions. Other advantages that learners gain from CA include gaining a new understanding of writing tasks, participating in cooperative learning, engaging in meaningful discussions, exchanging ideas on writing tasks during discussions and connecting ideas to the learning contexts.

During this investigation, the aforementioned advantages significantly impacted the pupils' writing abilities. The observed phenomenon can be attributed to the extensive training that is essential for teachers to effectively carry out their instructional duties. The competency-based curriculum (CBC), which is grounded in the constructivist curriculum, eliminates the use of grades and standardised assessments. Additionally, it eliminates the objectives and motivations tied to academic performance, such as grades, as well as the practice of comparing pupils' achievements at a national or regional level. This instructional approach should be properly and efficiently implemented in lower elementary grade levels, where pupils have limited familiarity with language structures, to encourage their participation in classroom writing activities.

## 5.2 Recommendations and Further Research

This study makes a few recommendations in accordance with the findings of the investigation to improve the instructional approaches for English language writing abilities among primary school pupils. The application of CA to writing skills has

beneficial effect on the development of writing skills; therefore, English teachers should incorporate engaging post-writing activities to enhance the meaningfulness of writing tasks within the classroom. Therefore, it is necessary for English Language Teaching (ELT) facilitators to use effective teaching methods when training English teachers. The goal is to enhance pupils' writing skills. Teachers must stay up-to-date with CA through action research, ongoing professional development, and ongoing engagement with the community of practice.

## 5.3 Contribution of the Study to the Body Knowledge

Teachers are in control of implementing instructional methods that focus on the pupil, including role-playing, group discussions, and demonstrations. Consequently, pupils in the fourth grade effectively benefit from these promoted techniques that lie within CA. This supports Vygotsky's (1978) assertion that learners need guidance from a more knowledgeable other (MKO) at a specific cognitive level, which is applicable to these young pupils in the fourth grade of primary institutions. The chosen study area has broadened the scope of English Language Teaching (ELT) studies in elementary education, which have gotten relatively less attention in terms of teaching methods to improve the writing abilities of pupils in Kenya and on a regional and global level. An analysis of academic journals and university repositories revealed that the primary focus of the study was on advanced courses in upper primary and secondary schools. This study used a quantitative methodology that utilised a Solomon-four group design, thereby broadening the methodological scope of ELT and the development of writing skills in particular. The quantitative results derived from the WAT provided significant insights into the effect of the technique being investigated prior to, during, and after the intervention. As a result, authentic data was obtained, revealing the true extent of the learner's writing proficiency development via CA.

## Authors' Disclosure and Conflict of Interest

The authors hereby declare no conflict of interest regarding the publication of this paper.

## About the Authors

**Philip Kwambai Cheruiyot** is a PhD student at Moi University and lecturer at Kisii University, Department of Curriculum, Instruction, and Media. He holds an M. Ed degree in English Language Education (Moi University) and a B. Ed Arts degree with a specialization in English and Literature (Kenyatta University). He specializes in English language education and has research interests in English language teaching, curriculum, instruction, and educational media. His published papers can be accessed via the Google Scholar link: <a href="https://scholar.google.com/citations?user=hF\_CoeEAAAAJ&hl=en&oi=sra">https://scholar.google.com/citations?user=hF\_CoeEAAAAJ&hl=en&oi=sra</a> **Prof. Anne Syomwene** is a holder of an earned PhD in Curriculum Studies and an Associate Professor in the same field at Moi University, Kenya. She is currently the Dean of the School of Education. She has previously served as a Chair of the Department,

campus coordinator and Teaching Practice coordinator. She has published many papers

in refereed journals and several books in the field of curriculum and instruction. She has supervised many doctoral and master's theses in education. Her research interests are on curriculum design, development and implementation; and gender issues in education. Her works can be accessed through the Google Scholar link: https://scholar.google.com/citations?user=J3YqAjgAAAAJ&hl=en&oi=sra and work profile link: http://profiles.mu.ac.ke/annes/syomwenekisilu/

**Khaemba Ongeti** is a professor of Curriculum and Instruction at Moi University and is currently the Dean of the School of Postgraduate Studies, Research and Innovation at Moi University. He is a champion of pedagogical innovation for modernization of learning and a reviewer with the Commission for University Education in Kenya. Ongeti was a member of the Technical Working Committee for the establishment of the Open University.

## References

- Al-Ghazo, A. & Al-Zoubi, S. M. (2018). How to develop writing skills through constructivist design model. *International Journal of Business and Social Science*. Vol. 9, No. 5. <u>http://dx.doi.org/10.30845/ijbss.v9n5a11</u>
- Argyropoulou, T., & Nina Zafiri, M. (2021, April 28). Improving the Writing Skills of EFL High School Learners through Alternative Methods of Assessment and Differentiated Instruction. *International Journal of English Language Education*, 9(1), 142. <u>https://doi.org/10.5296/ijele.v9i1.18572</u>
- Ary, D, Jacobs, L., Razavich, A. & Sorensen, C. (2010). *Introduction to research in education*. Wadsworth: Cengage Learning Retrieved from <u>https://books.google.it/books/about/Introduction\_to\_Research\_in\_Education.htm</u> <u>l?hl=id&id=FqF7n0zGJm0C&redir\_esc=y</u>
- Dockrell, J. E. & Papoulidi, A. (2022). Teacher Practices for Teaching Writing in Greek Primary Schools. *Reading and writing: An Interdisciplinary Journal*, Vol 35 Pp1599-1626. <u>https://doi.org/10.1007/s11145-021-10199-0</u>
- Babbie, E. (2013). *The basics of social research*. Independence, KY: Thomson Wadsworth. Retrieved from <u>https://www.cengage.uk/c/the-basics-of-social-research-7e-babbie/9781305503076PF/</u>
- Bandura, A. (1991). Social cognitive theory of self-regulation. Organizational Behavior and Human Decision Processes, 50(2), 248–287. <u>https://doi.org/10.1016/0749-5978(91)90022-L</u>
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational psychologist.* 28(2): 117-148. Retrieved from <u>https://doi.org/10.1207/s15326985ep2802\_3</u>
- Bello, T. (1997b). *Writing topics for adult ESL students*. Paper presented at the 31st Annual Teachers of English to Speakers of Other Language Convention, Orlando, FL, USA

- Bogdan, R. C. & Biklen, S. K. (2007). *Writing it up.* Boston, Pearson Education Inc. Retrieved from <u>https://eric.ed.gov/?id=ED419813</u>
- Brook, J. G. & Brooks, M. G. (1993). *In search of understanding: The case for constructivist classroom*. Alexandria, VA: Association for Supervision and Curriculum Development. Retrieved from <a href="https://ocw.metu.edu.tr/pluginfile.php/9173/mod\_resource/content/1/In%20Searc">https://ocw.metu.edu.tr/pluginfile.php/9173/mod\_resource/content/1/In%20Searc</a> <a href="https://ocw.metu.edu.tr/pluginfile.php/9173/mod\_resource/content/1/In%20Searc">https://ocw.metu.edu.tr/pluginfile.php/9173/mod\_resource/content/1/In%20Searc</a> <a href="https://ocw.metu.edu.tr/pluginfile.php/9173/mod\_resource/content/1/In%20Searc">https://ocw.metu.edu.tr/pluginfile.php/9173/mod\_resource/content/1/In%20Searc</a> <a href="https://ocw.metu.edu.tr/pluginfile.php/9173/mod\_resource/content/1/In%20Searc">https://ocw.metu.edu.tr/pluginfile.php/9173/mod\_resource/content/1/In%20Searc</a>
- Brown, H. D. (1987). *Principles of language learning and teaching*. Englewood Cliffs, NJ: Prentice Hall. Retrieved from <u>https://gustavorubinoernesto.com/wp-content/uploads/2020/06/H-Douglas-Brown-Principles-of-Language-Learning-and-Teaching.pdf</u>
- Burke, J. and Christensen, L. (2014). *Educational research: Quantitative, qualitative and mixed Approaches* (5<sup>th</sup> ed.). SAGE Publications. Retrieved from <u>https://us.sagepub.com/en-us/nam/educational-research/book259335</u>
- Calkins, L. (1986). *The art of teaching writing*. Portsmouth, NH: Heinemann Educational Books, Inc. Retrieved from <u>https://www.heinemann.com/products/08809.aspx</u>
- Carter, R., & Nunan, D. (Eds.). (2001). The Cambridge guide to teaching English to speakers of other languages. Cambridge: Cambridge University Press. Retrieved from <u>https://doi.org/10.1017/CBO9780511667206</u>
- Clements, D. H. (1997). (Mis?)constructing constructivism. *Teaching Children Mathematics* 4(4) 198-200. <u>http://dx.doi.org/10.5951/TCM.4.4.0198</u>
- Cooper, M. M. (1986). The Ecology of Writing. College English, Vol. 48, No. 4 (Apr., 1986), pp. 364-375 Published by: National Council of Teachers of English Stable URL: <u>http://www.jstor.org/stable/377264</u>
- Cooper, T. C. (1977). A strategy for teaching writing. University of Georgia. https://doi.org/10.1111/j.1540-4781.1977.tb04790.x
- Creswell, J. W. (2014). Research Design: Qualitative, Quantitative and Mixed Methods Approaches (4th ed.). Thousand Oaks, CA: Sage. Retrieved from <u>https://www.ucg.ac.me/skladiste/blog\_609332/objava\_105202/fajlovi/Creswell.pd</u> f
- Duran, L., and Duran E. (2004). The 5E Instructional Model: A Learning Cycle Approach for Inquiry-Based Science Teaching. *The Science Education Review*, v3 n2 p49–58 (2004): *ED.gov*. <u>https://files.eric.ed.gov/fulltext/EJ1058007.pdf</u>. Accessed January 23, 2023.
- Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College composition and communication*, 32(4), 365-387. Retrieved from <u>https://doi.org/10.2307/356600</u>
- Gagnon, G. W., & Collay, M. (2006). *Designing for learning: Six elements in constructivist classrooms*. Corwin Press. Retrieved from <u>https://eric.ed.gov/?id=ED451136</u>
- Glasersfeld, V. E. (1983). Paper presented at the North American Group for Psychology and Mathematics Education meeting, Montreal, September, 1983.
- Graham, S. (2019). Changing How Writing Is Taught. Review of Research in Education, 43(1), 277-303. <u>https://doi.org/10.3102/0091732X18821125</u>

- Hodges, T. S. (2017). Theoretically speaking: An examination of four theories and how they support writing in the classroom. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas.* 90(4): 139–146. https://doi.org/10.1080/00098655.2017.1326228
- Hmelo-Silver, C. E., Duncan, R. G., & Chinn, C. A. (2007). Scaffolding and achievement in problem-based and inquiry learning: a response to Kirschner, *Sweller, and educational psychologist*, 42(2), 99–107. <u>https://doi.org/10.1080/00461520701263368</u>
- Hoover, W. A. (1996). The practice implications of constructivism. *SED Letter 9(3)*. Retrieved from <u>https://sedl.org/pubs/sedletter/v09n03/practice.html</u>
- Hyland, K. (2015). *Teaching and researching writing*. London: Routledge. Retrieved from <u>https://www.routledge.com/Teaching-and-Researching-</u> Writing/Hyland/p/book/9781032056197
- Jonassen, D. (1998). Designing constructivist learning environments. In *C. M. Reigeluth* (*Ed.*), *Instructional Theories and Models* (pp. 215–236). Mahwah, Erlbaum. Retrieved from <u>https://www.routledge.com/Instructional-Design-Theories-and-Models-An-Overview-of-Their-Current-Status/Reigeluth/p/book/9780898592757</u>
- Kalemesi, J. P. (2016). The Role of Pictures in Teaching English Composition Writing in Upper Primary School in Emuhaya Sub-County, Unpublished Master's Thesis, Kenyatta University, Kenya. Retrieved from <u>https://irlibrary.ku.ac.ke/items/50d645c6-67c5-4ca3-8c95-32b9f543f9e7</u>
- Katja S., Jakob S., Julia, M. & Tina H. (2024). The role of teacher–student relationships and student–student relationships for secondary school students' well-being in Switzerland. *International Journal of Educational Research Open* 6(1):1-12 Volume 6, pp 100318, <u>http://dx.doi.org/10.1016/j.ijedro.2023.100318</u>
- Kembo-Sure, E. & Ogechi, N.O. (2009). Linguistic human rights and language policy in the Kenyan education system, Ossrea. Retrieved from https://doi.org/10.1080/10228195.2011.625038
- Kenya Institute of Curriculum Development (2017). Basic education curriculum framework. Retrieved from

https://www.kicd.ac.ke/images/downloads/CURRICULUMFRAMEWOR K.pdf

- Kenya National Examinations Council (2021) in <u>http://atikaschool.org</u> & <u>http://elimuspace.co.ke</u>
- Koross, B.T., Indoshi, F.C. & Okwach, T. (2013). Perception of teachers and students towards methods used in teaching and learning of English writing skills in secondary schools. *International Journal of English Language and Linguistics Research*, 1(1), 32-38. Retrieved from <u>https://eajournals.org/ijellr/vol-1-issue-1-june-2013/perception-of-teachers-and-students-towards-methods-used-in-teachingand-learning-of-english-writing-skills-in-secondary-schools/</u>
- Little-wood, B. (2014). Assignment Writing Service, Trusted, Reliable and Secure. Nottingham: All Answers Ltd.
- Koul, L. (1984). *Methodology of educational research.* Vikas Publishing House. Retrieved from

https://books.google.ro/books/about/Methodology\_of\_Educational\_Research\_5th .html?id=2B7zDwAAQBAJ&redir\_esc=y

- Kumaravadivelu, B. (2001). Toward a post-method pedagogy. *TESOL Quarterly*, 35(4). pp.537-560. <u>http://dx.doi.org/10.2307/3588427</u>
- Krest, M. (1987). Time on my hands: Handling the paper load. *English Journal*, *76*(8) December 1987, 37-42. <u>https://doi.org/10.2307/819412</u>
- Leavy, P. (2017). *Research Design: Quantitative, Qualitative, Mixed Methods, Arts-Based, and Community-Based Participatory Research Approaches*. New York, NY: The Guilford Press. 300 pp. <u>http://dx.doi.org/10.1111/fcsr.12276</u>
- Lunenburg, F. C. (2011). Critical thinking and constructivism techniques for improving student achievement. *National Forum of Teacher Education Journal*, 21(3), 1-9. Retrieved <u>http://nationalforum.com/Electronic%20Journal%20Volumes/Lunenburg,%20Fre</u>

d%20C.%20Critical%20Thinking%20%26%20Constructivism%20V21%20N3%202 011%20NFTJ.pdf

- Malik, A. G.; SartaJ, F. J. & Choudhary Z. J. (2013). Constructive feedback: An effective constituent for eradicating impediments in writing skills. *Canadian Center of Science and Education. English Language Teaching;* Vol. 6, No. 8. <u>https://doi.org/10.5539/elt.v6n8p21</u>
- McDonough, J.; Shaw, C.; Masuhara, H. (2013). *Materials and Methods in ELT: A Teacher's Guide (3<sup>rd</sup> ed.)*. John Wiley & Sons, Inc. Retrieved from <a href="https://www.wiley.com/en-sg/Materials+and+Methods+in+ELT%3A+A+Teacher's+Guide%2C+3rd+Edition-p-9781444336924">https://www.wiley.com/en-sg/Materials+and+Methods+in+ELT%3A+A+Teacher's+Guide%2C+3rd+Edition-p-9781444336924</a>
- McMillan, J. H. & Schumacher, S. (2014). *Research in education: Evidence-based inquiry*. Essex: Pearson. <u>https://eric.ed.gov/?id=ED577250</u>
- Milad, M. (2017). Blended learning approach: Integrating reading and writing research skills to improve academic writing. *Arab Journal of Applied Linguistics. Vol.* 3 No. 3 October, 23-55
- Mugenda, O. M. and Mugenda, A. G. (2003). *Research Methods, Quantitative and Qualitative Approaches*. ACT, Nairobi. Retrieved from <a href="https://books.google.ro/books/about/Research\_Methods.html?id=4WyrAAAACA\_AJ&redir\_esc=y">https://books.google.ro/books/about/Research\_Methods.html?id=4WyrAAAACA\_AJ&redir\_esc=y</a>
- Muitung'u J. & Njeng'ere D. (2010). *Mastering PTE English*, Oxford University Press. Nairobi. Retrieved from <u>https://textbookcentre.com/shop/mastering-pte-english/</u>
- National Writing Project, & Nagin, C. (2006). *Because writing matters: Improving student writing in our schools.* San Francisco: Jossey-Bass. Retrieved from <u>https://books.google.ro/books/about/Because\_Writing\_Matters.html?id=EUgapyr</u> <u>iSLgC&redir\_esc=y</u>
- Neo, M. (2007). Learning with Multimedia: Engaging Students in Constructivist Learning. *International Journal of Instructional Media*, 34(2), 149-158

- Nikolopoulou, K. (2023, June 22). *What Is Purposive Sampling*? | *Definition & Examples.* Scribbr. Retrieved September 6, 2024, from https://www.scribbr.com/methodology/purposive-sampling/
- Nunan, D. (Ed.). (2003). *Practical English language teaching*. New York: McGraw-Hill. Retrieved from <u>https://books.google.ro/books/about/Practical\_English\_Language\_Teaching.html</u> <u>?id=v1DMAAAACAAJ&redir\_esc=y</u>
- Onchera, P. & Manyasi, B. (1991). Functional Writing Skills for Effective Communication: The English Language Classroom in Kenya. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)* 4(6): 842-847. Retrieved from <u>https://www.scholarlinkinstitute.org/jeteraps/articles/Functional%20Writing%20</u> <u>Skills.pdf</u>
- Ogunniyi, M. B. (1992). Understanding research in social science. Ibadan: University Press.
- Okari, F. M. (2016). The Writing Skill in the Contemporary Society: The Kenyan Perspective. *Journal of Education and Practice* Vol. 7, No. 35. Retrieved from <u>https://files.eric.ed.gov/fulltext/EJ1126424.pdf</u>
- Piaget, J. (1967). *The role of action in the development of thinking*. In Knowledge and development (pp. 17-42). Springer US. Retrieved from <u>https://www.semanticscholar.org/paper/The-Role-of-Action-in-the-</u> Development-of-Thinking-Piaget/cb8d93f346dca1f8e42a01f581bd9b0ef466f4fe
- Ruiz-Martín, Héctor, and Rodger W. Bybee (2022). The cognitive principles of learning underlying the 5E Model of Instruction. *International Journal of STEM Education 9*, no. 1 (2022): NA. *Gale in Context: Science*. <u>https://link.gale.com/apps/doc/A695675665/SCIC?u=gale&sid=bookmark-SCIC&xid=7861634a</u>. Accessed January 23, 2023.
- Shaffer, D. R. & Kipp, K. (2010). *Developmental psychology*. Belmont, Wadsworth Cengage Learning. Retrieved from <u>https://books.google.ro/books/about/Developmental\_Psychology\_Childhood\_Ad</u> <u>ole.html?id=CuvXxrhk8HUC&redir\_esc=y</u>
- Smith, K. (1993). Becoming the "guide" on the side. *Educational Leadership*, *51*(2), 35-37. Retrieved from <u>https://ascd.org/el/articles/becoming-the-guide-on-the-side</u>
- Teresa, F. 2009). Handbook of Research on Assessment Technologies, Methods, and Applications in Higher Education. (University of South Florida, USA). Retrieved from <u>https://www.igi-global.com/book/handbook-research-assessment-technologies-methods/444</u>. DOI: 10.4018/978-1-60566-667-9.ch008
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press. Retrieved from <u>http://ouleft.org/wp-content/uploads/Vygotsky-Mind-in-Society.pdf</u>
- Waran, V. S. (1995). *Principles of teaching English*. Publishing House PVT LTD. Retrieved from https://books.google.ro/books/about/Principles\_Of\_Teaching\_English.html?id=Tr

d0dvUUlJwC&redir\_esc=y

- Zhu, W. (2004). Faculty views on the importance of writing, the nature of academic writing, and teaching and responding to writing in the disciplines. *Journal of Second Language Writing* 13(1):29–48. Retrieved from https://doi.org/10.1016/j.jslw.2004.04.004
- Zulela M. S. and Reza Rachmadtullah (2019). Constructivism Approach in Learning to Write Narrative at Elementary School. Pp 87-290. Proceedings of the 1st International Conference on Innovation in Education (ICoIE 2018). Atlantis Press. <u>https://doi.org/10.2991/icoie-18.2019.64</u>

Creative Commons licensing terms

Creative Commons licensing terms Authors will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions, and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of English Language Teaching shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a <u>Creative Commons Attribution 4.0 International License (CC BY 4.0)</u>.