

**USE OF JIGSAW COOPERATIVE LEARNING STRATEGY AND ITS  
CONTRIBUTION IN DEVELOPING CREATIVE WRITING SKILLS  
IN ENGLISH AMONG SECONDARY SCHOOL STUDENTS IN  
MACHAKOS COUNTY, KENYA**

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## DECLARATION

I hereby attest that the work contained in this thesis is unique to me and has not previously been submitted for consideration for a degree by any other university. The sources cited in support of this thesis have all been properly acknowledged. The text, statistics, spoken words, graphics, photographs, and tables that were taken from other sources, including the internet, were specifically acknowledged and the sources were all mentioned following anti-plagiarism laws and the APA 7th edition.

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## **DEDICATION**

To the wonderful mother who raised me, Mrs. Hannah B. Dennis, a seasoned teacher. I dedicate this work to you. May God continue to bless you, mama.

I also dedicate this work to my lovely daughters Joelyne and Joetta Dennis who have been my fountain of inspiration, support, and reinforcement throughout this difficult, but worthwhile journey. I appreciate your efforts; may God reward you.

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## **ABBREVIATIONS AND ACRONYMS**

<b>CBC</b>	Competence-Based Curriculum
<b>CBE</b>	Competence-Based Education
<b>CDE</b>	County Director of Education
<b>CCT</b>	Cognitivist Constructivist Theory
<b>CW</b>	Creative Writing
<b>CWS</b>	Creative Writing Strategy
<b>CWSAT</b>	Creative Writing Skills Achievement Test
<b>CLS</b>	Cooperative Learning Strategy
<b>JCLS</b>	Jigsaw Cooperative Learning Strategy
<b>KCBE</b>	Kenya Competence-Based Education
<b>KCSE</b>	Kenya Certificate of Secondary Education
<b>KICD</b>	Kenya Institute of Curriculum Development
<b>KNEC</b>	Kenya National Examination Council
<b>SLT</b>	Social Learning Theory
<b>UK</b>	United Kingdom
<b>USA</b>	United States of America

## ABSTRACT

Creative Writing skill is an important aspect of Secondary school English. However, secondary school students have performed poorly in creative writing over the past five years evident by the low performance in English Paper (3) in the Kenya Certificate of Secondary Examination. This could have been as a result of ineffective methods employed by teachers among others. The study goal was to investigate the cause of this problem by evaluating the role of the jigsaw cooperative learning strategy in increasing creative writing abilities amongst Secondary school students in Machakos Sub-county. Recommendations were made based on the findings. This study was guided by three objectives: (a) evaluate teachers' preparedness in the use of the Jigsaw Cooperative Learning Strategy (b) determine whether the JCLS supports the development of creative writing skills (c) investigate challenges experienced when teaching and learning creative writing using the JCLS. The study was grounded on the Social Learning Theories (SLT) of Albert Bandura in 1960 and the Cognitive Constructivist Theory (CCT) by Jean Piaget in 1968. It adopted the quasi-experimental design and used mixed method to collect quantitative and qualitative data from the respondents. A targeted number of fifty-seven (57) secondary schools in Machakos Sub-county, one thousand, six hundred, eighty-three (1683) Form 2 students, and fifty-seven (57) teachers of English. Accumulatively, 1740 teachers and students were the targeted population for this study. A simple random sampling technique was used to select 6 schools from three clusters (sub-county, county and extra county schools). From the 6 schools, 168 Form 2 students were chosen as the sample size. Six teachers of English were purposively sampled for the study. A total of 174 respondents were selected for the study. The study used four tools; a creative writing skills achievement test, focus group discussion guide, questionnaire, and teacher interview schedule for information gathering. Qualitative and quantitative data were examined using coding, categorization, and interpretation through Excel and Statistical Package for Social Sciences (SPSS) version 25.0. The qualitative data were examined using descriptive coding and interpretation of the findings while the quantitative data were examined using a measure of central tendency, paired sampled T-test, and independent sample T-test to measure the effect of the JCLS before, likewise after the intervention. Results were interpreted in tables and bar graphs. The study was piloted in one co-educational school that was not a part of the selected schools for the study. Sixteen students from Form 2 were chosen at random and 1 teacher purposively for the pilot study. Alpha Cronbach's reliability analysis showed a 0.76 coefficient above the required threshold of 0.70. The instruments were validated by education specialists from the Department of Educational Communication and Technology. The study found that JCLS improved the students creative writing skills, fostered cooperative learning, and promoted teamwork. Teachers of English were willing to use the JCLS after they were trained to use the strategy. It was recommended that policymakers, curriculum developers, and education officers use the findings to development materials on jigsaw cooperative learning strategy to improve creative writing skills achievement in English. Further recommendation was the inclusion of the jigsaw cooperative learning strategy in the syllabus of Universities and Teacher Training Institutes to have pre-service teachers trained how to use the JCLS.

## **CHAPTER ONE**

### **INTRODUCTION AND BACKGROUND OF THE STUDY**

#### **1.0 Introduction**

This chapter presents the background of the study, the statement of the problem, the purpose of the study, the objectives of the study, and the research questions. It also presents the significance of the study, limitations, delimitation, and assumptions of the study. The theoretical framework that anchored the study and the conceptual framework are part of this chapter.

#### **1.1 Background of the Study**

The Jigsaw cooperative learning strategy (JCLS) is a research-based cooperative learning strategy and learner-centred method that is intended to take over from the conventional methods of teaching (teacher-centred method). In this learner-centred strategy, the students are anticipated to be responsible for their own education and the teacher becomes a facilitator to help learners engage more in critical thinking to solve their problems. Ramiaida & Abdullah (2021) stated that the jigsaw class was originally built in Austin, Texas by Aronson, in 1971. This type of learning strategy sees every learner like a puzzle which is important to complete the entire puzzle. Each student possesses knowledge that is essential to completing a given task. To use this strategy, the teacher divides the learners into groups of four to five members constituting the 'home' group. According to Mbacho (2013), the 'home' group is where students of each group specialize in one portion of the learning task before going to the expert group. The topic to be covered is also divided into trunks to fit the number of groups formed. Each member takes ownership of their role at the start of the class. Each student first simply studies the material containing their task. The jigsaw or 'home' and expert groups are the two discussion groups used in this

strategy. Learners gather in expert groups to reinforce ideas, clarify misconceptions, fill gaps in knowledge, and learn from each other what was discussed in the 'home' group. Because the learners perform engaging tasks that might be challenging in their expert groups, Fadul (2000) suggests that they must be eager to fully participate because they are the only ones with access to that piece of knowledge and are required to take back the knowledge to their home groups. Metro & Metro (2022), argue that by using (JCLS) in teaching descriptive writing, the procedure will be more effective in getting students' interest in learning English and in using the language for communication purposes based on their acquired competence and skills. Hanso (2016) suggests that children with sufficient and significant fundamental basic language abilities, such as reading, writing, and communication, grow cognitively and gain adequate social skills, according to research. When a skill is learned, the learners gain powerful communicative skills that they may apply in their daily lives. These abilities, on the other hand, must be acquired by learners working together with one another and with the teacher.

According to Abuhamda (2020), written language is a system that supports spoken language acquisition, grammar, and vocabulary. However, writing as a skill has recently received more focus. In this interconnected world, writing well is becoming crucial to a point where learning second and foreign languages increasingly depends on it. English is one of the languages that are important for communication purposes across the continent in the 21st century because it is developing into a Lingua Franca. A lingua franca is a language that speakers of diverse native tongues adopt as a common language. Now, many francophone countries and other nations where English is a second language have adopted English language curricula to equip their learners to be able to adequately communicate in the English Language. China, India,

and Indonesia are examples of these countries. There four linguistic abilities that must be learned are necessary to send or deliver messages from one person to another Shammout (2020), citing Kustati & Yuhardi (2020). Shammout (2020) goes on to say that while learning a foreign language, writing is a skill that is difficult and problematic for both students and teachers. This skill cannot be attained passively, but rather actively via the use of cooperative learning strategies and methodologies.

Cooperative learning (CL) is an active pedagogy that encourages improved educational attainment, Bakeer (2018). The learners' motivation to attend classes regularly is increased through cooperative learning. Additionally, it improves their interdependence, behaviour, motivation, and attitude. When cooperative learning is carried out in a well-organized manner using various tactics that encourage students to take responsibility for themselves, it increases their accomplishments. According to Yassin et al. (2018), cooperative learning is a classroom activity in which students are responsible for their peers' mastery of the topics at the same time as they communicate information in a socially controlled manner. Bubb & Jones (2020) point out that the value of implementing cooperative learning is intended to boost motivation so that the learning process can be effective. Combining cooperative learning strategies and activities that inspire motivation would unquestionably lead to an increase in the learners' competency (Bubb & Jones, 2020). It is therefore thought that cooperative learning in the classroom will better get students ready to handle obstacles in real life. Working as a team, you can strengthen your social and cognitive skills. According to Dubravac et al. (2018), students who participate in cooperative learning tactics and learner-centred teaching strategies are more likely to learn English as a foreign language.

In a productive gathering, learners connect in small groups to accomplish a single objective, where important elements of cooperative learning improve performance and achievement, (Kova & Mikanovi, 2017). The more independently learners work in groups that are facilitated by the teacher, the better their educational background outcomes. Due to this, collaborative learning strategies are encouraged. According to Mendo-Lázaro et al. (2022), cooperative learning strategies, which teachers employ to encourage learners entail encouraging them to take part more fully in the process of teaching and learning and trigger the development of interpersonal skills.

Metro & Metro (2022), state that learners have viewed writing as being very difficult because they have not been given sufficient collaborative exercises that reveal their genuine natures and give them the freedom to make discoveries and communicate their thoughts, feelings, and ideas. According to Khairuddin et al. (2022), the growth of the learners' writing skills, as well as their critical thinking or cognitive capacities in the pursuit of knowledge is greatly aided by creative writing. The development of creative writing abilities is the utmost vital of all four linguistic skills, (reading, writing, listening and speaking) Rasuan (2023). Writing is regarded as one of the most challenging abilities for learners to acquire when learning English as a foreign language since it is so complicated and necessitates the proper use of written language according to Avramenko et al. (2018).

Mohammad, A. (2019) asserted that creative writing is a type of application that is produced by effective writing methods. Students must use their imagination and other creative processes to help them improve all writing-related skills. This is because creative writing is more than just a habit. Avramenko et al. (2018) claims that the USA, UK, Australia, and South Africa are countries where creative writing (CW) which is important for language development originated in the 19<sup>th</sup> century. Creative

Writing reinforces the personal development of the writer by increasing their imagination, creative thinking, self-esteem, and ability to engender unique responses. Teachers need to create a conducive atmosphere and the right learner-centred strategies so that learners can expand their creativity.

The quest for excellence in teaching and learning creative writing for better acquisition of skills by learners has now motivated the desire to examine concrete ways to facilitate their learning. In this regard, there are various strategies that teachers can use in achieving this task. The lack of writing skills may even contribute to students dropping out of school altogether (Hu & Choi, 2023). According to Karim, Yusuf, Josoh & Yusuf (2019), as cited in Shammout (2020), the lack of interest in writing is attributed to a low understanding of the language and a lack of knowledge of vocabulary, grammar, spelling, and punctuation. Students gaining proficiency in creative writing skills is crucial to writing various types of writings ranging from compositions, functional and non-functional, poetry, and poems which will be developing their cognitive abilities to interact with the diverse creed of individuals. Introducing learner-centred strategies will be best to achieve this goal.

Studies from throughout the world show that JCLS is effective as a cooperative learning strategy. These studies to some extent have enhanced cooperative learners' performance and acquisition of skills. Muinde (2014) states that the Jigsaw strategy as labelled by this study proves effective because learners who received this instruction by means of the cooperative learning strategy performed exceptionally than those instructed utilizing the conventional teaching approach. The study recommends that this strategy be adopted to improve the acquisition of knowledge and skills in other areas of learning.

According to Efendi (2021), the jigsaw cooperative learning strategy brings out the effectiveness of teaching both introverted and extroverted learners. They acquire competence in reading skills which is considered a means of acquiring the remaining three language skills (writing, listening and speaking). Metro & Metro (2022), argued that it was made the case that the Jigsaw cooperative learning technique has applications far outside of the classroom. This means, it does not only build the writing skills of the learners, but also intergroup relationships and leadership abilities they can apply to their daily lives outside of school. Bacsal et al. (2022) observes that the Jigsaw cooperative learning strategy has also been used to help future teachers gain the competence they need to teach mathematics skills so that they can effectively implement it in their classrooms.

Mbacho (2013) notes that the Jigsaw Cooperative Learning Strategy proves effective learning outcomes in mathematics content areas during instruction. Though other researchers have looked at the Jigsaw strategy in other aspects of writing, this study looks into how the jigsaw cooperative learning strategy helps secondary school students strengthen their creative writing abilities.

Kenya adopted the 8.4.4 system of education in 1985 which implemented the teacher-centred approach of teaching. Teachers used teaching methods like the lecture method, presentation, and individual learning methods of teaching.

According to Emaliana (2017), there needs to be a change from the teacher-centred approach of instruction to the student-centred technique to allow the students to interact as the lesson go along. This allows the learner to develop the skills faster, easier, and better. According to Alaagib et al. (2019), one of the common teacher-

centred methods that students regard as less effective is the lecture method. It does not encourage active ways of learning but rather self-directed learning.

Since 2017, the Competence-Based Curriculum (CBC) has been revised by the Kenya Institute for Curriculum Development (KICD) to fit the Kenyan context. Education (2023) claims that in order to support the realization of Kenya's Vision 2030, the Global Commitment on Education from the Sustainable Development Goal (SDGs), and the African Union's Continental Education Strategy for Africa (CESA 16-25), Kenya had to introduce the CBC which started in 2017. By the year 2023, (Education 2023), Kenya hopes to see the first cohort of CBC transition into Junior Secondary School. (Mulenga & Kabombwe, 2019) and (Muchira et al. 2023) compared CBC implementation in the USA, South Korea, and Kenya. The findings show that even though the CBC is a new phenomenon in Kenya, and has a positive influence on learners' achievement, the need to adapt models from other countries like the USA and South Korea is important.

According to Omariba (2022), the parents of the learners are crucial in assisting them to develop the necessary abilities and skills. For the Competence-Based Curriculum (CBC) to succeed, parents must grasp the abilities, information, and attitudes that must be instilled in their children. One of the key participants in their children's educational journey is they. To further assist the learners when they leave the school environment each day, (Omariba, 2022) states that they must be informed about the CBC and involved in its activities.

Countries in East Africa and the rest of the globe are now aware that the CBC is a great method to replace the Content-Based Curriculum or system of education, according to M'mboga (2021). The values, attitudes, abilities, knowledge, and

competence required for community services are acquired by learners in CBC. This new system of education stresses the importance of skills and knowledge development to apply competencies in real-life situations. After this process, learners would have attained proficiency in communication and collaboration, critical thinking, and problem-solving, imagination and creativity, citizenship, learning to learn, self-efficacy, and digital literacy. These are the seven competencies of Competency-Based Education (CBE) being implemented with the help of the competence-based curriculum. These competencies can be achieved by using student-centred methods of teaching where students are exposed to hands-on activities.

Bill (2021) pointed out that in the context of the Kenyan Competency-Based Curriculum (KCBC), competency is the ability to apply appropriate knowledge and skills to successfully perform a function. Therefore, it is expedient that learners gain competencies in the seven (7) core areas of the CBC and one of the ways this can be done is through cooperative and collaborative efforts of both the teachers and the learners. The Kenya National Examinations Council (KNEC) tests learners for English in addition to Literature competence at the end of a four-year program. This is accomplished by evaluating writing abilities in three different ways. The learners' functional writing skills, or their capabilities to transcribe effectively by means of the correct organisation and style, followed by their grammatical, vocabulary, and punctuation abilities, and their creative and imaginative writing skills, where they are asked to creatively write compositions KNEC (2021). Consequently, there is a need for students to be taught using a variety of different cooperative and interactive teaching and learning strategies which will allow them to fully interact with the teachers, materials, and their colleagues, and the jigsaw cooperative learning strategy could be a better learning cooperative strategy to achieve this goal.

According to Wamalwa, et al. (2020), students in Kenya are tested in English and Kiswahili because these are the two national and official languages used for instruction. Kimazi (2018) also made the case that students must know the English language to perform satisfactorily on tests and communicate in professional situations. According to the KNEC (2021), with the performance of Form Four (4) students as shown by past and present examination results, students continue to score below the average of 50% in all three papers in English and Literature as administered by KNEC. Moreover, paper three (3) which is creative and imaginative writing has always been the least performing paper over the past five years.

Table 1.1 is on the overall performance of Form 4 learners in English 101/1, 101/2, and 101/3 KCSE from 2016 to 2020.

**Table 1.1: Candidates' Overall Performance in English (101) papers 1, 2, & 3 in the last five years in KCSE Exams in Kenya**

Year	Paper	Candidature	Maximum Score	Mean Score	Standard Deviation
2016	1	571644	60	29.15 (48.58%)	8.15
	2		80	20.39 (25.49%)	10.86
	3		60	18.52 (30.86%)	5.23
	overall		200	68.06 (34.03%)	22.03
2017	1	610084	60	25.89 (43.30%)	7.12
	2		80	28.24 (35.30%)	11.73
	3		60	19.42 (32.37%)	5.92
	overall		200	73.55 (36.77%)	22.57
2018	1	659953	60	29.15 (48.58%)	8.51
	2		80	24.78 (30.98%)	9.42
	3		60	18.85 (31.42%)	6.58
	overall		200	72.78 (36.39%)	22.27
2019	1	659953	60	29.00 (48.00%)	8.23
	2		80	33.00 (41.25%)	11.08
	3		60	20.00 (33.33%)	5.70
	overall		200	82.00 (41.00%)	
2020	1	743984	60	25.38 (42.3%)	7.7
	2		80	26.69 (33.3%)	12.08
	3		60	20.66 (34.4%)	5.38
	overall		200	75.71 (37.86%)	23.51

Source: KNEC Report 2020

From Table 1.1 above, it is evident that the performance of the candidates in 2020 declined by 6.29 marks from 82.00 (41%) in 2019 to 75.71 (37.86%) in 2020. There was also a reduction in the mean performance of learners in English 101/ 1 and 101/2. The mean performance in English 101/3 improved slightly by only 0.66 points. Nevertheless, candidates’ performance in this paper continues to be far below expectations with a comparable low mean of 30.86%, 32.37%, 31.42%, 33.33%, and 34.4% in 2016, 2017, 2018, 2019, and 2020 respectively. Based on the analysis of Table 1.1, there is a need to interrogate the issues that contribute to the perpetual poor performance of candidates in the writing tasks to help learners improve their writing skills. As shown in the table, the five years' combined performance is still below the desirable mean of 100. (50%), showing low proficiency in the subject.

**Table 1.2: Performance of Form (4) learners in English 101 paper 3 from (2016 – 2020) in schools in Kenya**

Year	Maximum Score	Mean Score	Percentage
2016	60	18.52	30.86
2017	60	19.42	32.37
2018	60	18.85	31.42
2019	60	20.00	33.33
2020	60	20.66	34.4

*KNEC Report 2020*

Table 1.2 illustrates the performance mean scores for English 101/3 over five years for Form 4 learners from 2016 to 2020. The maximum score for this paper is 60. Out of this maximum, candidates obtained 18.52, 19.42, 18.85, 20.00, and 20.66 in 2016, 2017, 2018, 2019, and 2020 respectively. It is clear from the above table that the candidates did not meet up to the 60 maximum score or 30 maximum score which is

50% of 60 which is the maximum score. This result is being seen throughout the five years of the administration of the examinations.

Table 1.3 shows the performance mean scores of Form 4 learners from Machakos sub-county in English 101/ paper (1, 2, & 3) in KCSE from 2018 to 2021.

**Table 1.3: Learners of Form four (4) performance in English 101/ paper (1, 2, & 3) at the K CSE level from Machakos Sub-County in Machakos County from (2018 – 2021)**

Sub-County	2018	2019	2020	2021
Machakos sub-county	4.0215	4.4158	4.1948	3.8131

*Source: County Director of Education (CDE) Office, Machakos County, 2021*

The analysis in Table 1.3 reports sets the basis for this study to be conducted in Machakos sub-county. It is a report that presents the mean scores in English 101/ paper (1, 2, & 3) respectively for four academic school years from 2018 to 2021. Every learner who sat the KCSE English exams from this sub-county score is included in each of the mean score for the four (4) years as presented. In 2018, the mean score of the candidates who sat the KCSE was 4.0215. In 2019, KNEC reported the mean score of 4.4156. This indicated that there was a little increase of 0.3943 in the mean score. Also, in 2020, KNEC reported that there was a decline in the mean score of the candidates as compared to 2019. The mean score decreased from 4.4158 to 4.1948 (0.221). Finally in 2021, there was also a decrease in the 2020 mean score from 4.1948 to 3.8131. This indicated that there was a 0.3817 decrease in the mean score for 2021.

With these fluctuations and decline in the mean scores and performances of candidates over the period (2018-2021), there is an indication that their mean scores were far less than the mean score equivalent of a C<sup>+</sup> or C<sup>-</sup> mean grade. It also shows

that there is a need to investigate causes of these fluctuations and decline in the mean scores in order to recommend possible solutions.

## **1.2 Statement of the Problem**

Creativity ensures a crucial part in developing not only the writing skills of the learners but also the critical thinking or cognitive abilities of the learners in the pursuit of knowledge. According to Rasuan (2023), creative writing skills acquisition is one of the most significant of all four linguistic skills (reading, writing, listening, and speaking) that students must achieve in order to help them build other skills. Creative skills are not easily achieved using normal or rote methods and strategies of teaching (Harris, 2008). Students suffer because of their inability to articulate themselves, think creatively about themselves and their surrounding and make wide their range of thoughts. Consequently, teachers have found it difficult to train learners to write compositions in English creatively using the conventional methods of teaching. For a nation to progress and have citizens who can communicate effectively through creative compositions, an active cooperative learning environment is needed. Despite creative writing being essential in school for the preparation of learners to function in society, the learners continue to show poor performance over the past 5 years. KCSE results from the Kenya National Examination Council (KNEC) show that the country is still lagging behind in terms of achieving its educational goals according to Vision 2030.

Machakos sub-county is one of the sub-counties in Machakos County and data obtained from this sub-county discloses that over the period of four years (2018 - 2021), Form 4 students who wrote the KCSE did not obtain a main score of 50% and above. Moreover, there was a decline in the performance of the 2020 KCSE result from 4.1948 in 2020 to 3.8131 in 2021, This shows that the entire county and

Machakos sub-county in particular were unable to obtain a mean score of a C+ or C for each of the year reviewed. This scary report from concerns raised by stakeholders that students have not been able to meet the minimum benchmark of 50% and above in paper 3 of the KCSE English Exams as well as constructing creative compositions necessitated the use of the jigsaw cooperative learning strategy and its contribution in developing creative writing skills in English among secondary school students in Machakos sub-county, Kenya.

Jigsaw Cooperative Learning Strategy was selected as a perfect cooperative learning strategy to conduct this study owing to the fact that it invokes creativity, critical thinking as well as socialization in the learning environment. It was also selected to investigate its contribution in developing creative writing skills in English because there was no documented information on the use of the JCLS to teach creative writing skills in English from the related literature reviewed.

### **1.3 Purpose of the Study**

The purpose of this study was to investigate the use of jigsaw cooperative learning strategy and its contribution in developing creative writing skills in English among secondary school students in Machakos sub-county, Machakos County, Kenya.

### **1.4 Objectives of the Study**

The specific objectives of the study were:

- i. Evaluate teachers' preparedness in the use of the Jigsaw cooperative learning strategy to teach creative writing.
- ii. Evaluate the effectiveness of the Jigsaw Cooperative Learning Strategy in the development of Creative Writing Skills in Secondary School Students.

iii. Investigate the challenges experienced in teaching and learning creative writing using the jigsaw cooperative learning strategy.

### **1.5 Research Questions.**

The study was guided by the following research questions:

- i. How prepared are teachers to teach learners creative writing in English using the Jigsaw cooperative learning strategy?
- ii. How effective is the Jigsaw Cooperative Learning in developing Creative Writing Skills in Secondary students?
- iii. What are the challenges experienced in teaching and learning creative writing using the Jigsaw cooperative learning strategy?

### **1.6 Significance of the Study**

Students, teachers of English in secondary schools, and the Kenyan government can all benefit from the study conclusions. The Government of Kenya through the Ministry of Education will use the findings to train teachers on the use of the JCLS so that they can become better prepared to teach students using this cooperative learning strategy. This training can be done at the pre-service and in-service levels. Students who are enrolled at universities and teacher training colleges can learn about the Jigsaw Cooperative Learning Strategy and how to use it to teach creative writing in English to their students. They can also use the learning strategy to teach other subject contents. The strategy could also be included into in-service training manuals and be taught during trainings and workshops. This could help teachers who are already teaching but don't have the knowledge of the JCLS. The study will inform and help Teachers of English, and students on procedures and steps to follow when implementing the jigsaw cooperative learning strategy in teaching creative writing in English. When fully trained to use the JCLS, teachers will use this learning strategy to

teach students Creative Writing which will develop learners' creative writing skills and stimulate their interest for active involvement in the educational process. The outcome will inform teachers about the possible challenges that they will encounter while using the jigsaw cooperative learning strategy when teaching creative writing so that they can put measures in place to handle the challenges. This study will help Education Officers and policymakers decide on the best methods of instruction for students to advance their creative writing skills in English. Finally, when the teachers are fully prepared to use the JCLS and the students are taught creative writing in English adequately using the JCLS, their creative writing skills will increase. They will become better thinkers that Kenya can depend on for quality decision making in school and the society at large.

## **1.7 Limitations and Delimitations of the Study**

### **1.7.1: Limitations of the Study**

This study's primary shortcoming and limitation was getting hours during the schools' regular time to conduct our intervention classes with the teachers and students. This challenge was overcome by scheduling all our intervention classes after regular school hours. This was to enable the students and teachers who were part of the study to complete their regular classes and be present for the intervention classes. The second challenge this study faced was the difference in the spoken accents of English between the researcher and the learners. This was overcome by several socialization visits that were made at the selected research schools. This enabled the researcher to familiarize himself and adjust to the spoken accents of the English language spoken by the students.

The third limitation of the study was the use of the Jigsaw Cooperative learning strategy to determine its contribution to developing creative writing skills in English

and no other content areas in the English language or other subject areas. It focused on secondary schools and not colleges and universities. Therefore, the findings may not be generalized to all levels of the Education Systems.

### **1.7.2: Delimitation of the Study**

According to Chabi & Ahmed (2022), delimitations are appearances advancing from limitations in the scope of the study and show the restrictions and resolutions the investigator made throughout the study plan's expansion. It indicates what is included in the research, making it manageable and relevant. Miles (2019) argues that delimitations are sets of imposed restrictions by the researcher to focus on the intent and the relevance of the research. This study was delimited to Machakos sub-County in Machakos County, Kenya. The study was delimited to the content of creative writing composition in English instead of general content in English language. This research emphasized 6 secondary public schools in Machakos sub-county (Machakos Town). Twenty-eight Form 2 students each from 2 Extra County schools, 2 county schools, and 2 sub-county schools in Machakos sub-county. Additionally, it was restricted to mixed-gender, boys boarding school, and girl boarding school.

### **1.8 Assumptions of the Study**

This investigation was guided by the assumption that the entry behaviour of each school cluster (sub-county, county and extra-county) in Machakos sub-county is similar since the share similar characteristics.

### **1.9 Theoretical Framework**

#### **1.9.1 Cognitive Constructivist Theory and Social Learning Theory**

Two theories served as the foundation for this study. The cognitive constructivist theory and the social learning theory. The stages of cognitive growth of the learner are related to learning. This theory has some limitations that give rise to the introduction

of the second theory, Social Learning Theory (SLT) which is the cooperative aspect of the study. Kumar (2012) narrates that a group of learners participate in learning collectively, and what is learned is distributed to individuals through more than one person's mental processes.

#### **1.9.1.1 Cognitivist constructivist theory (CCT)**

This theory is crucial to this investigation since it deals with the creativity and imagination of the students, so they are ready and capable of using their cognition or minds to be able to write creatively. The theory was proposed in 1968 by Jean Piaget. Colliver (2002) reiterates that most cognitive scientists now believe in the models of knowledge that attempt to answer questions like how learners come to know what they know. It is simply because knowledge is formed in the minds of the learners. Even the traditional view of knowledge is assumed on common sense belief of the existence of the real world despite our interest in it (Colliver, 2002). The researcher, therefore, believes that this theory will support creativity which is generated from the human mind. According to GSI Teaching & Resource Center (2016), the cognitive approach was developed to focus on mental processes rather the observable behaviour.

#### **1.9.1.2 The Social Learning Theory (SLT)**

This study plans to employ the Social Learning Theory (SLT) in this investigation due to the shortcomings of the cognitive constructivist theory. The CCT fell short of addressing the issue of cooperative learning and focused on mental processes and creativity. It did not emphasize learning through teamwork and taking social responsibilities while working and learning from each other. Since jigsaw is a cooperative learning strategy that was used to determine whether when it is used to teach creative writing it will develop the creative writing skills of students, it was necessary to introduce the second theory.

The SLT contributes to the social interaction of the learners and creates an enabling environment where the learners can mentally, socially, and cooperatively interact. The tenets and concepts assigned in SLT aided the underpinning for the suggested research, allowing it to benefit greatly from this theory.

Albert Bandura proposed the social learning theory in 1960. This idea places a heavy emphasis on the value of observing, modelling, and mimicking other people's behaviour, attitudes, and emotional responses. According to the social learning theory, learning and behaviour are influenced by a combination of environmental and cognitive factors (SLT).

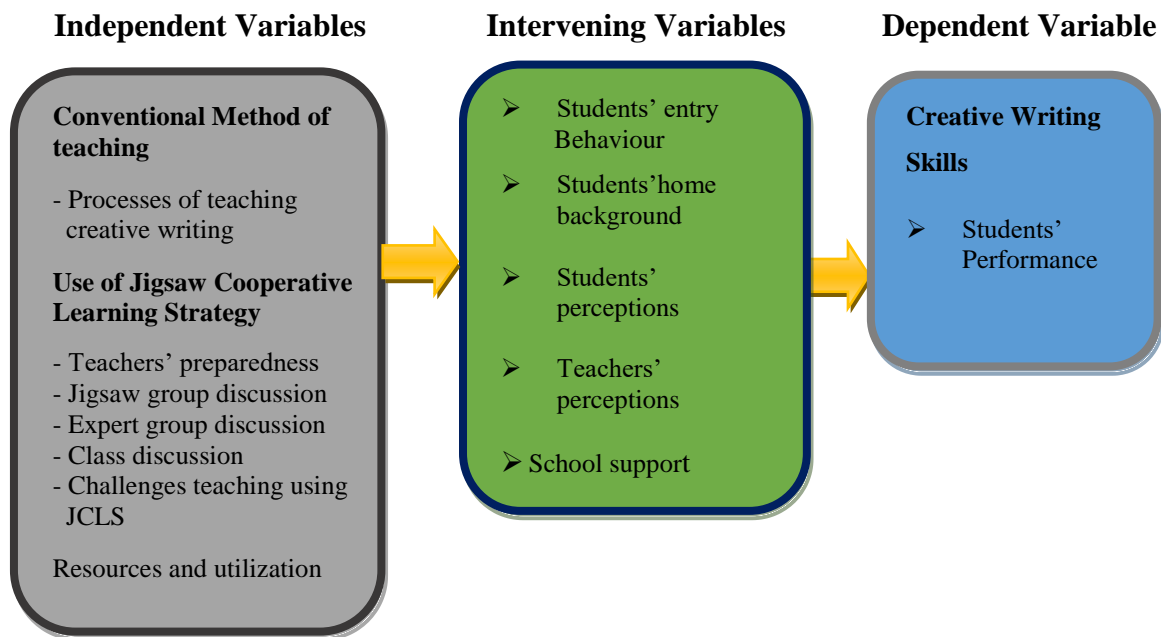
### **1.9.1.3 The implication of the theories for the study**

These two anchored theories, cognitivist constructivists, and social learning were used in this study. The cognitivist constructivist theory (CCT) informed the study by the tenets and principles that are directly linked to the study. The cognitive constructivist theory deals with the creative and critical writing skills of the research. Students' creativity was researched based on the tenants and principles of the CCT. The researcher is informed about the thought processes of the learners.

The social learning theory (SLT) is linked to the study because it shows the social cooperation and collaboration of the learners and the tenants and principles of these two theories guide the researcher in carrying out the research. Applying these theories to this study, the jigsaw cooperative learning strategy adequately enhanced students' participation both in the jigsaw groups and the home expert groups. They took responsibilities to perform tasks in their respective groups as they learned from each other. Subsequently, their creative writings improved during the final stages of the interventions. They began writing creatively.

### 1.10 Conceptual Framework

The conceptual framework below indicates by what means the variables of the research intermingle with each other. It shows a pictorial representation of the study. This framework contains the independent variables, intervening variables, and dependent variables.



**Figure 1.1: Conceptual Framework**

Figure 1.1 shows the link between the independent variables. Conventional approaches of teaching (processes of teaching creative writing), use of jigsaw learning strategy (teachers' preparedness, jigsaw group discussion, expert group discussion, class discussion and challenges teaching creative writing using JCLS), activities used to help teachers to teach creative writing, and resources and utilization), the intervening variables (students' backgrounds, students' entry behaviour, students' home background, students' perceptions, instructors' perceptions, and school support) and the dependent variable, creative writing skills (students' performance).

In this conceptual framework, the independent variables (Conventional methods of teaching processes of teaching creative writing, use of jigsaw learning strategy:

*teachers' preparedness, jigsaw group discussion, expert group discussion, class discussion, and challenges in teaching creative writing using JCLS*, activities used to help teachers to teach creative writing, and resources and utilization are interacting with the intervening variables to produce the desired outcome which is the dependent variable (creative writing skills), students' performance. The interaction is such that students' entry behaviour, home background, the teachers' perception, students' perception and the support received from the school are all affected by the processes of teaching creative writing, the use of the jigsaw cooperative learning strategy and the resources available and how they are used. These interactions further lead to the performance of the students which is the overall goal. Developing creative writing skills in English.

In this study, the students' entry behaviour was controlled by sampling the schools by cluster or categories of similar behaviour to study them. Selecting two school from the same cluster was a better idea to control their behaviour. Selecting one of each cluster to be experimental and control school was also a better idea based on the intent of the study.

### **Summary**

This chapter has presented the background of the study, statement of the problem as well as the objectives of the study. It highlights the significance of the study, limitations and delimitations of the study. The assumption of the study, theoretical framework and conceptual framework were all discussed in this chapter.

### **1.11 Operational Definition of Terms**

Constitutive and working definition of terms that were utilized in this study.

**Competence-Based Curriculum:** A curriculum that places more emphasis on what students are expected to do than primarily on what they are required to know is known as a competency-based curriculum. Such a curriculum, in theory, is learner-centred and flexible enough to meet the requirements of students, teachers, and society.

**Competence-Based Education:** Competence-Based Education (CBE) is a system of education where students can move according to how quickly they can acquire a skill or competency in any given setting or environment.

**Conventional teaching methods:** Teachers typically utilize and have been using these teaching and learning strategies for a long time. It refers to the typical instructional strategies utilized to teach creative writing in this study. It is mostly focused on teachers.

**Cooperative Learning Strategy:** A unique way in which students share in trunks of groups to complete a predetermined task. The teamwork abilities of the participants are improved. as they execute projects, deal with problems, finish projects, or create new products.

**Creative Writing Skills Achievement Test:** A test that was prepared to measure the achievement of creative writing skills of learners in learners. The CWSAT administration during this research helped to validate the study.

**Creative Writing Skills in English:** An important aspect of secondary school English where students think beyond the normal way of thinking to compose poems, stories, and written compositions.

**Expert group:** A person with a piece of extraordinary knowledge, training, and skill is an expert. For this study, the expert group contained students with the same task from the jigsaw groups that came together to discuss.

**Jigsaw:** A cooperative learning method that allows each student in a "home" group to focus on a particular facet of a subject. For instance, one learner studies the heading of a friendly letter while another learner studies the greeting, and another learner studies the body, the closing and the last one the salutation.

**Jigsaw group:** The term "home group" also applies to the jigsaw group. It is the original group of four or six people created to begin the discussion and sharing of their tasks before going to the expert group.

**Jigsaw cooperative learning strategy:** A method of cooperative education where a student from a "jigsaw group" focuses on a particular area of the day's lesson topic. When students have mastered the content in the "expert group", they return to their "jigsaw group" and teach the material to the other members of their group.

**Kenya Competency-Based-Education:** The way Kenyan proposes and designs education to focus on developing core competencies based on learners' abilities to apply appropriate knowledge and skills to finish an exact task.

**Learner:** Students of form 2 classes who were selected for the study.

**Teachers' Preparedness:** Teachers of Form 2 being trained on how to use the jigsaw cooperative learning strategy to teach creative writing in English.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.0 Introduction**

This chapter reviews relevant literature related to the study topic and objectives. The literature has been arranged in sequential order as seen below. History of Jigsaw cooperative learning strategy, Jigsaw cooperative learning strategy improves creative writing, learners' performance in creative writing, methods of teaching creative writing, the impact of creative writing techniques on learners' performance, how Jigsaw cooperative strategy supports creative writing, teacher preparedness to use Jigsaw cooperative learning strategy, attitude, and perception of teaching cooperative strategy and challenges teachers face teaching using Jigsaw cooperative strategy and finally the synopsis of the reviewed Literature gap in the chapter.

#### **2.1 History of Jigsaw Cooperative Learning Strategy**

Cooperative education is one of them that was projected by Elliot Aronson in 1971 and is known as the jigsaw cooperative learning strategy. This strategy is being used in many nations to improve students' skills in diverse disciplines as cited in Garcia et al. (2017).

Gulati, (2022) claimed that Aronson invented the jigsaw method in 1978. He said that any level of schooling can use this strategy. According to research done by Ramiaida Darmi, and Hazlina Abdullah, (2021), Aronson created the jigsaw class in Austin, Texas, in 1971. There was no information in the literature on the teachers' assistance in helping to develop learning cooperative abilities rather, it talked about how the students can interact neglecting the teachers' role. The study highlighted the teachers' preparedness in applying JCLS. Jigsaw is a cooperative learning technique which causes every learner to focus on a particular facet of a subject and share what they

have learned with their classmates. Jigsaw classrooms are a result of tactics and philosophies that emphasize active and experiential learning Moskowitz et al. (1985).

Using this method of teaching, Garcia et al. (2017) mentions that learners are divided into blocks or groups just as the knowledge or content is divided into blocks and assigned to each block or group for discussion and interaction with the text, the teacher and one another through the home and expert groups. Kordaki & Siempos (2010) as cited in Garcia et al. (2017) mentions an increase in learners' participation, focus attention span, self-esteem, and acquisition of requisite skills in the content that is taught as benefits of the jigsaw method of teaching.

Abdel-Mordy et al. (2022) argue that the jigsaw cooperative learning strategy reduces discrimination in terms of race or skin colour, nationality, and regions of the individual learners in the class. They will be made to interact with each other as they help each other learn. According to Abdel-Mordy et al. (2022), the class must first be divided depending on the pieces of information that the teacher has for the class time. At least 4 to 6 learners should be in each set called the jigsaw group. Each group receives a piece of material from the topic to be taught during that session to be worked on in the jigsaw group. Each student in each block or group supports each other and participates because they will further form an expert group where each new group shares their pieces of information with the new group members who take the information to their original home groups for further discussion and subsequently whole class discussion supervised and summarized by the teacher.

This study found that the jigsaw cooperative learning strategy is very important in enhancing learning and reducing discrimination among learners. It gives room for participation across all spectrums of the learning environment causing pupil-to-pupil

participation, and pupil-to-teacher participation. In such an educative environment as the jigsaw cooperative learning classroom, active and experimental learning was employed as the learners were actively engaged. In the experimental groups, learners wrote creative compositions in their expert groups which were taken to their jigsaw groups for sharing and discussions. This learning inspired individual students and made them think creatively during the writing process.

### **2.1.1 Jigsaw cooperative learning strategy's contribution to creative writing skills**

According to research by Michael et al. (2022), the jigsaw cooperative learning technique improved the performance of social studies students. They claimed that when JCLS was used, social studies students performed better than those who conventionally received instruction. The investigation showed a statistically significant difference in the mean scores of learners who were imparted using the JCLS. The above study was conducted in Social Studies while the current study was conducted in Creative Writing, English. The previous research was carried out in Nigeria while the present study was conducted in Machakos Sub- County, Kenya.

According to Metro & Metro (2022), a cooperative learning technique based on jigsaw puzzles will successfully attract students' interest in learning English, utilize it to communicate, and enhance their competence and skills. Hanso (2016) asserts that students who successfully acquire reading, writing, and communication abilities through conventional methods and strategies will not do as well as students who were instructed to utilize the JCLS. Therefore, teachers should make use of the JCLS to assess students' participation and active engagement as well as the efficiency of their instruction. The gap in the first study by Metro & Metro (2022) is that the English language, in general, is the study main emphasis. However, this study was an anchor

in creative writing in the English language. The second study by Hanso (2016) reveals that jigsaw was not used with a specific subject, but it can be used with every subject and grade level.

This revelation by Hanso (2016) that jigsaw can be used with any subject is true. A study like this one used a jigsaw cooperative learning strategy to teach creative writing, and it was so interesting to the learners that it enhanced their level of participation in all the lessons. There was a significant level of improvement in their creative writing as we continued to utilize the jigsaw cooperative learning strategy as compared to the beginning of the study. Also, immense improvement in the creative writing of the experimental groups was realized as compared to the controlled groups who used the conventional method of teaching. Similarly, Akkuş & Doymuş (2022) argues that the jigsaw strategy has a greater influence on learners' Reading Writing presentation, reading writing application, and cooperation. Akkuş & Doymuş (2022) reveals that the jigsaw group performed statistically more exceptionally in the post-test than the control group. This shows that utilizing the jigsaw strategy is significantly important to improve students' academic attainment. The jigsaw technique proved to be an effective teaching technique (Bafadal, 2015). Jigsaw, a useful teaching strategy allows a group of learners to cover many topics and build many skills at the same time and in a relatively short period.

## **2.2. Learners' Performance in Creative Writing**

English language in most countries of the world is practised and spoken as a foreign language. Therefore, developing students of English language writing skills, and creative writing skills is a difficult task. Abdalla & Mohammed (2019) suggests that the reason for the poor learning progress of learners in creative writing is the lack of sufficient time for the learners to practice writing. Abdalla & Mohammed (2019) also

mentioned that teachers use techniques, strategies, and methods that are not suitable to expose the students to writing activities.

This work exposes some reasons for the poor performance of students in creative writing. It points out that unsuitable techniques and strategies are used by teachers, however, it does not specify the techniques, strategies, and methods that allow students to enhance this creative writing skill in English. Another gap in this literature is that the study was conducted using females from the University as participants. This study used a specified learning strategy which is known as the jigsaw cooperative learning strategy, 168 students of Form 2 classes, and 6 teachers of English.

According to Harris (2008), kids who write creatively integrate challenging skills like academic literacy with self-directed learning which is an interdisciplinary practice. A major factor that lead to students' poor creative writing performance is the lack of knowledge in three areas which prevent them from developing their writing abilities (Harris 2008). Knowledge in these three categories includes strategic knowledge, cognitive knowledge, and self-knowledge. They suffer because of their inability to articulate themselves, think imaginatively about themselves and their surroundings, and widen the range of their thoughts, though every student has the potential of being creative (Swanzy-Impraim et al., 2023).

One gap in the reviewed literature according to Harris (2008) is that it was conducted using college students as respondents and generally the targeted population. Also, a little work was done in creative writing on world language Education. It was not specific as to the creative writing in the English language. The instruments used to collect the data were interview questionnaires, observation checklist and focus group

schedule. This study used Form 2 students as respondents and targeted population to fill the gap of the previous study. Instead of focusing on World Language Education as the previous study did, it focused on creative writing in English language. By this means, the scope of the content was narrowed from a general perspective to specific content in the English language. Owing to the fact that this study is investigative in its context, the quasi-experiment design was employed. Interview questionnaires, observation checklist and focus group schedule were not the only instruments used in this study. Students' creative writing skills achievement pre and post-test were also used.

Avramenko et al. (2018) assert that creative writing is crucial for teachers as well as pupils to strengthen their language skills. There are explanations for why children perform poorly in creative writing. According to Avramenko et al. (2018), psychological issues including fear, lack of desire, and lack of self-confidence can also contribute to learners' poor creative writing abilities. It is also evident that students' fear of learning linguistics prevents them from progressing in creative writing and leads to the development of weak creative writing skills. Avramenko et al. (2018) also suggest that teacher preparedness introduces learners to creative writing using various creative approaches and strategies better enhance their skills in creative writing.

A gap that is acknowledged by the researcher in the reviewed literature above is the coverage of writing in general rather than creative writing specifically. Writing, in general can take the form of composition, utilitarian writing, or creative writing. This study, however, focused on how cooperative learning strategy like jigsaw cooperative learning helps develop students' creative writing abilities.

Joel (2017) stated that the results of students who took the IELTS exam as well as those of other students who wrote creative writing assessments to gauge their critical thinking abilities had been analysed. He claimed that it was noted that the students' performances were lacking. One factor was a lack of critical thinking skills. Another reason is that educational programs did not involve the training of these abilities. The methodology used in the above research is the gap identified in this literature. The study was done using a qualitative method while this study used a mixed method.

This study assessed the performance of students in creative writing and identified that learners who received instruction using the jigsaw cooperative learning strategy had a better performance than learners who received instruction using the traditional teaching methods. Additionally, it was noted that lack of practice time, confidence, drive, and fear of learning linguistics were challenges faced by students especially students from the control groups. Teachers' preparedness to introduce learners to creative writing strategies was experienced.

### **2.2.1 Methods of Teaching Creative Writing**

Maninji et al. (2020) refer to creative writing as imaginative composition writing found in Kenya's upper primary classrooms. According to Maninji et al. (2020), upper-primary pupils have trouble expressing themselves in English in a creative and meaningful way. The outcomes of the investigation carried out by Maninji et al. (2020) indicates that learners' shortcomings in acquiring creative writing skills are caused by teachers' gaps in their knowledge of how to employ various approaches in teaching creative writing and their inadequacy in doing so. Teachers should use techniques and tactics for teaching creative writing so that students begin to develop the skills they require at the lower educational levels since Maninji et al. (2020) suggest that excitement depends on the techniques and strategies teachers use in

teaching. To teach creative writing, a variety of methods and approaches have been employed, from teacher-centred methods like sentence building and grammar drills to comprehensive methods like the three styles: product-based, process-based, and genre-based Dyson et al. (2022).

The effectiveness of these three techniques can be shown in the expansion of creative writing abilities. In this regard, the pupils' fluency, accuracy, and originality increase. Students only participate in a session utilizing the product-based method by delivering passive replies, which makes it challenging for the teacher to pinpoint specific learning gaps in the class. However, when a subject is presented using a process-based approach, students are participatory and included in the education process through activities like brainstorming, material organization, and group learning to produce relevant and innovative passages that joyfully engage and capture the learners' attention and interest, the genre method helps students' writing by using systematic principles. Maninji et al. (2020).

In addition to methods, materials, and resources for teaching creative writing, Ochako et al. (2019), teachers are also a vital component for input toward learning imaginative writing. Studies revealed that approaches like games, role-play, simulation, mime, and language-game have a significant impact on the learners' acquisition of imaginative skills. However, Ochako et al. (2019) stated that teachers find it challenging to implement these approaches and methods of teaching due to the large class size and teachers' inability to integrate technology in teaching creative writing. It is therefore suggested that discussion groups be monitored by the teacher so that he or she can deal with each group. The reviewed literature used the input hypothesis as its research theory, while the proposed study uses the cognitivist

constructivist and social learning theories to anchor the study. The previous research was based on gender imaginative writing while this study focused on creative writing.

The above studies revealed several methods of teaching creative writing. However, this study used the jigsaw cooperative learning strategy as the strategy for teaching creative writing. This study showed that the excitement of students being taught using this strategy is adequate to enhance their creative writing skills. Students who used this strategy became more active learners than passive learners.

A study done by Mwangi (2016) as cited Ochako et al. (2019) states that in Kenya, one of the strategies used by teachers to teach creative writing is the dramatization teaching strategy which promotes learners' achievements in building their creativity. The process approach is also a strategy used by teachers to teach creative writing. This strategy considers all writing as creative arts which must be given time and positive feedback for perfection of the writings.

### **2.2.2 Impact of Creative Writing Skills on Learners' Performance**

According to Kuvanc (2008), referenced in Turkel & Cetinkaya (2020), creative writing technique is essential to students' development of their creative writing abilities and has the potential to improve their performance. It was shown that Turkish pupils who used the creative writing approach improved good attitudes and creativity. According to Beydemir (2010), who was quoted by Turkel & Cetinkaya (2020), students' attitudes about writing are positively impacted when they participate in creative writing exercises. They engage in meaningful, critical, and creative thought. They are prepared for the subsequent higher class and college. Turkel & Cetinkaya (2020), recommended that creative writing be incorporated into the curriculum and course book due to the significant impact it has on students' performance in all disciplines, particularly English as a Foreign Language. Additionally, teachers ought

to employ exercises and methods that can foster creative writing abilities. To employ these strategies that will improve creative writing abilities, pre-service teachers in elementary and high schools should receive proper training. This assessment of the literature's gap has revealed that the focus of the research was a primary school in Turkey. This current study focused on secondary schools in Machakos sub-county, Kenya.

The relevance of creative writing in the advancement of contemporary English education in the twenty-first century was emphasized by Pentury et al. (2020). It is emphasized that Creative Writing can improve students' moods, sense of inspiration, creativity, and motivation. This is based on the methods and approaches that the teacher will employ, according to Pentury et al. (2020). This is so that students are prepared to write creatively across various courses and disciplines, including English, Biology, Mathematics, Psychology, and even Sociology.

One gap identified in the reviewed research literature is seen from where the research was carried out as the study locale. It was conducted in Indraprastha PGRI, Jakarta. Another gap is that the population was University students. The past study focused on gender level of performance using CW techniques. This study concentration was on secondary school learners in Machakos sub-county in Kenya. Students who were part of the experimental groups and used the JCLS had a significant level of improvement in their creative writing skills as compared to the control groups. This signifies that there was a significant impact that the learning strategy made on the learners' performances.

## **2.3 How Jigsaw cooperative learning strategy supports creative writing skills?**

### **2.3.1 Principles of cooperative learning strategy**

According to Jason (2019), learner-centred pedagogy which is based on John Dewey's work from the 20th century, may be found directly alongside literature on cooperative learning. This depends on Dewey's ideas and methods. Cooperative learning was popularized by psychologists, many of whom also established its guiding concepts and theories. Cooperative learning has two guiding beliefs, Jason (2019). These two principles, interdependence, and accountability go hand in hand whenever students collaborate. Differentiation in large mixed-ability courses, preventing some students from dominating group work, and promoting communication are all necessary for these principles to be completely upheld Jason (2019).

### **2.3.2 Cooperative Learning Strategy as a Teaching Strategy**

Cooperative learning, Wang (2018), is a new learning model that is important to enhance the advancement of learners' skills. Students learn and develop in all aspects of their education. In China, cooperative learning has achieved tremendous results in diverse fields including English language teaching. Wang (2018) contends that the study methods and resources used by students for learning the English language can foster the formation of a cohesive team. learning where teachers help guide learners to get satisfactory results instead of traditional teaching. The gap that the researcher identified in this reviewed literature is that the previous study centred on multimedia environment tools that promoted students' English cooperative learning. This study focuses on a cooperative learning strategy to develop learners' creative writing skills.

According to Letina & Vasilj (2021), cooperative learning is important in the instruction of pupils and their learning. It enhances encouraging assertiveness of students toward teaching and learning. It helps to maintain prolonged memory in

learners and high-order thinking in students. Letina & Vasilj (2021) stated that even though cooperative learning is found to be conducive to advancing students' creative writing skills, critical thinking skills, and cooperative skills, it has also been found to have challenges and disadvantages. CL has been found to have negative effects on the learners' motivation where some group members pay less attention to participating in the group tasks.

The gap identified is contradictory. The first study suggests that Cooperative Learning has a more positive attitude of learners toward teaching and learning while the second study shows that Cooperative Learning has been found to have negative effects on learners' motivation because some group members may not give the necessary support that others in that group need to develop their abilities. This study addressed this contradiction by creating the enabling environment for the students to mingle with each other and compose their creative compositions both in the jigsaw and expert groups. Students were given the time to think, share and write while the teachers prompted them and ensured that they were on task. The method of using the jigsaw cooperative learning strategy agrees with the first argument that cooperative learning strategy (JCLS) creates a positive attitude which helped the students gain interest in the learning process.

Buchs et al. (2017) argue that in Switzerland, research showed that about 33% of teachers use cooperative learning frequently. This means that 67% of the teachers do not use cooperative frequently. Villingeri et al. (2018) states that 26% of the teachers were reported to have used CL weekly, while 53% used it once a month. This means, that most of the teachers do not use cooperative learning because of their limited knowledge of CL and their perceptions of it.

## **2.4 Teacher Preparedness to Use Jigsaw Cooperative Learning Strategy**

According to Kiuk et al. (2021), the application of appropriate learning strategies in not been practised by many teachers which has implications for the students' English skills acquisition and or abilities. Kiuk et al. 2021) suggest that when teachers are prepared and equipped to fully use JCLS, and when students are willing to fully participate, effective learning takes place. However, Kiuk et al. 2021) argue that not only to understand the strategy but also the classroom management and time management teacher needs to understand as well.

The study focused on “Spoken English” and not written English or Creative writing in English even though they researched teachers' preparedness to use jigsaw cooperative learning strategy. This study on the other hand investigated teachers' preparedness to use the JCLS in creative writing in English. Another gap is the demographic location of the study. This study was done in Indonesian while the current study was conducted among secondary school students in Machakos sub-county, Machakos County, Kenya.

Bacsal et al. (2022) finds out that the JCLS is an active learning strategy among various cooperative learning strategies. Using JCLS, Bacsal et al. (2022) argues that the performances of learners in Mathematics are enhanced. The study also concord with Bacsal et al. (2022) by indicating the JCLS improved students creative writing skills in English. It points to the fact that when students are engaged in the teaching and learning process using such cooperative learning strategy, the learners are fully engaged with not only the teachers, but with their peers to enable them to learn other social interactive skills. However, the reviewed literature considered Mathematics as the subject content area while the current study considered Creative Writing in English as the content area. The previous study also focused on an on-line cooperative

learning environment. There is also no document found on teachers' preparedness to use JCLS in creative writing in the English language. Therefore, this study intended to address this gap in knowledge.

## **2.4.1 Attitude and Perception of Teaching Cooperative Learning**

### **2.4.1.1 Teachers' Perception of Using a cooperative learning strategy**

Several educators in Vietnam's Mekong Delta favourable opinions about implementing cooperative learning in English classes because they have a better comprehension of it, Nguyen et al. (2021). Understanding the cooperative learning technique enables teachers to utilize it more effectively and assist pupils in acquiring the necessary skills. A study carried out by Nguyen et al. (2021) suggests that implementing cooperative learning practices might be challenging because of issues including large class sizes, disruptive students, and maintaining order in the classroom. Cooperative learning can be facilitated by explicitly defining expectations for students to follow, creating a supportive environment for learning, and closely observing the groups.

A research done by Jaocbs (2016) finds that keeping a group size of frequently five or fewer, encouraging learners to form diverse groups, seeing how those group members interact relying on each other while the teacher engages them is a part of cooperative learning. Providing them with challenging tasks, but not above their level allow them to complete their task both as individuals and the entire group. It was observed from the reviewed study that the questionnaires were administered and collected through an on-line platform which has several implications as it relates to the validity and reliability of a research instrument. The demographic location of the previous research also differs from that of the current study and the researcher did not say how the qualitative aspect of the data was analysed.

Cooperative learning is a complex paradigm that needs time to be implemented so that learners may fully utilize its potential, according to Silva et al. (2022). Greater obligations must be accepted by each student, which requires the development of a cooperative partnership. The responsibility to introduce the usage of cooperative learning practices rests with the teachers.

According to Silva et al. (2022), many teachers believe that the adoption of cooperative learning methodologies wastes instructional time and strips teachers of their responsibilities as knowledge providers and class managers. They continue to view kids' subjectivity, believing that they should be relied upon to provide all information. The reviewed literature did not address creative writing in English as a subject rather, it was done in Physical Education. This is a gap in the subject content. The current study focused on teachers' preparedness to use the cooperative learning strategy to teach creative writing in English. The methodology was action research while a mixed method was employed in this study.

According to George (2017), cooperative learning strategies can benefit English language learners. This is so that teachers may witness gains in their students' engagement and the quality of their academic work. According to George (2017), cooperative learning strategies can benefit English language learners. This is so that teachers may witness gains in their students' engagement and the quality of their academic work. George (2017), mentions that teachers now see that a participatory education strategy is useful in the learning environment for better engagement, involvement, and academic performance. The previous study used teachers as the subjects and respondents. This study used learners of Form 2 and teachers as the subjects. Furthermore, a qualitative method of data collection was used in the

previous study while a mixed method quasi-experimental design suited the current study based on its objectives.

Teachers see cooperative learning as beneficial when students are engaged in an English as a Foreign Language (EFL) classroom, according to Fitrianti (2021). He claims that teachers perceive cooperative learning as promoting the students' independence in carrying out their assignments. In addition to grabbing their attention, it enables them to learn from one another. Students' self-esteem, self-confidence, motivation, and enthusiasm for mastering English are increased by the use of a cooperative learning strategy. Fitrianti (2021) research employs a qualitative method of research while the mixed method, quasi-experimental design was used in this study.

#### **2.4.1.2 Students' Perception of Using Cooperative Learning Strategy**

Hidayati et al. (2018) carries out research in Indonesia that sought to understand how learners feel about adopting cooperative learning methodologies. It was established that 33 final-year students were the subjects of the study, and they favoured incorporating cooperative learning into their studies. Moreover, learners collaborated in small and medium-sized groups to gain the goal of the lesson through one of the approaches known as cooperative learning (Hidayati et al. 2018). Through such methods, students can learn English even though it is a foreign language. Many of them can gain the necessary skills and competencies from the cooperative work they undertake in working groups. Students can grow eager and become interested in learning from one another.

A Study by Ahmed et al. (2020), states that cooperative problem-solving instruction has a significant influence on learners' learning of mathematics to improve their learning outcomes. Teachers were required to comprehend how their students saw

their cooperative learning activities' experiences. According to Ahmed et al. (2020), cooperative problem-solving learning enhances critical thinking abilities, interpersonal and social relationships, as well as improve their social abilities.

According to Hidayati et al. (2018b), cooperative learning is one of the crucial methods that supports students to participate in small-group discussions and active learning activities where each learner contributes, engages in self-learning and peer-learning, and demonstrates accountability and communication skills. The previous study focused on Mathematics as a discipline while using cooperative learning as a strategy. Also, it focused on the impression of cooperative education (problem-solving learning strategy) to come out with the findings. This study focused specifically on a cooperative learning strategy, jigsaw cooperative learning strategy in the development learners' creative composition writing skills in secondary schools.

## **2.5 Challenges experienced in teaching and learning creative writing using the JCLS**

Keramati & Gillies (2022), mentions that Cooperative learning should be adopted widely as a teaching approach and technique to improve teaching and learning. According to a study conducted in Iran, Keramati & Gillies (2022), traditional methods used by teachers to instruct their students prevent them from adopting learner-centred strategy like the Jigsaw cooperative learning strategy. Jigsaw and other student-centred tactics provide challenges for teachers who lack the knowledge necessary to create cooperative learning environments and use updated instructional materials. While this study employed a mixed method as a design to effectuate the research, the evaluated study discloses that the methodology used was an interpretative qualitative approach. In addition to discussing the difficulties teachers encountered in cooperative learning, the reviewed study also discusses the Jigsaw

cooperative learning technique as being challenging for teachers to use. Time consumption in group formation, teachers becoming spectators in their classes, dominance of brilliant students in group discussion were the challenges teachers faced.

The gap identified from the reviewed literature points to the fact that the study did not mention how teachers and educators would overcome the challenges mentioned in the study. It did not also say to what extent teachers' challenges affect the students' creative writing skills.

The current study mentioned providing both in-service and pre-service trainings for teachers. This will aid them obtaining the requisite know about the JCLS and how to effectively use it to teach creative writing in secondary schools. In the case of this study, teachers from the experimental groups were trained to use the JCLS which yielded positive results. It also stated that teachers' challenges affected the students' cognitive and social skills. Those students in the conventional group could not think critically because their teachers were the ones who were composing the creative writing and bringing them to class for the students to copy and study.

Baloche & Brody (2017) conducted a study that reveal that cooperative learning among pre-service teachers is hampered by the complicated classroom settings. Before the teacher officially takes on the responsibility of becoming an in-service teacher, he or she needs to be aware of the many cooperative learning complications in the classroom, and how they are resolved. The gap in this literature stands out from the fact that it was conducted using pre-service teachers as respondents and the targeted population to benefit from the study. It does not also indicate a specific cooperative learning strategy and the complications that teacher face. The current study considered secondary school students (Form 2 students) as respondents and

targeted population. The JCLS was a specified learning strategy that the study used. It identified time consumption, full students' engagement, taking responsibilities and formation of groups as possible complications that teacher may face.

According to Malus (2020), education research has shown cooperative learning as a driving force that promotes pupils' acquisition of social and cognitive skills in all sectors of learning. In Italian classes, research shows that teachers face diverse and numerous challenges when they try to practice what they have learned in universities, colleges, and teaching training institutions.

The reviewed literature uses a quantitative method of data collection. It further uses middle school teachers as participants in the research. However, the utilization of the mixed methods (qualitative and quantitative data collection) to collect the data for the study was guaranteed.

Mukuka et al. (2019) mentions that despite the many advantages of cooperative learning implementation in Mathematics courses in Zambia, there are still numerous challenges that teachers face in implementing cooperative learning. From this study, findings show that most teachers prefer expository teaching as compared to cooperative learning. Evaluating learners, confirming a disciplined class environment, completing a curriculum that is already oversized, handling large classes, dealing with low reasoning abilities of learners, and preparing and huge teaching load are all challenges that prevent teachers from venturing into using cooperative learning. The research shows that additional importance is essential and is needed to be placed on the challenges teachers face in implementing their lessons using these cooperative learning strategies.

The current study identified that the previous study did not use the jigsaw cooperative learning strategy in particular to determine the challenges that the teachers would face. It focused on cooperative learning in general which is broad in terms of its scope. The reviewed study under consideration also did not focus on the English language as a discipline and creative writing as the component of English. The study decided to focus on mathematics as a discipline. The previous study which was done in Zambia demonstrates that there is a geographic gap. The current study was conducted in Machakos sub-county, Kenya.

According to research done by Effendi-Hasibuan et al. (2020), teachers face challenges using the Jigsaw Cooperative Learning Strategy with large classes. It was discovered that little attention had been placed on observing how the Jigsaw strategy might not have a positive impact on different sectors of the class because the learners are from different educational backgrounds. Challenges that might hinder the effective use of the Jigsaw Cooperative Learning Strategy also need to be dealt with properly. Moreover, Effendi-Hasibuan et al. (2020) state that the main challenges that pose a threat to the successful implementation of the Jigsaw Cooperative Learning Strategy are the complexity of the Jigsaw strategy that the teachers use, the limitation in time of completion, the large class population, the ill-size of the classroom and teachers' lack of participation to guide the students. Samsul & Mustajab (2020) claim that identifying challenges that may hinder the successful use of the jigsaw cooperative learning strategy and finding remedies for them before the teaching process is as important as the use of the strategy itself.

According to Adams (2013), teachers who use the Jigsaw Cooperative Learning Strategy face problems with learners who dominate others during group discussions. This is because the jigsaw cooperative learning strategy is a group formation-oriented

learning strategy. Having one or few students dominating the group discussions may not yield the desired outcome of the strategy. Additionally, some students are very slow to respond and participate in group activities. Bright students who are in groups with other students might become bored when they are not motivated and encouraged by the teacher during group activities and discussions Adams (2013).

Jigsaw Cooperative Learning Strategy supports and improves students' learning in different subject areas (Tsakalidou, 2021). However, teachers need to put mechanisms in place to mitigate the amount of noise and organize the discussion process during both jigsaw and expert groups. According to Tsakalidou (2021), learning takes place in an environment free from noise. In order for learners to think creatively and convey their thoughts and feelings, there should be an enabling environment free of distractions and internal interferences. Students should therefore be provided a quiet space to write down their thoughts and express their creativity. Expressing their creativity entails correct spelling, proper grammatical constructions, punctuation and free flow of thoughts and feelings.

The literature reviewed were not done in the Kenyan context. One was conducted at the Universitas Jambi, Indonesia while the others were conducted at STKIP Malawi, Indonesia, Takoradi, Ghana, Aristotle University of Thessaloniki, and Greece respectively. Also, they were not conducted focusing on Creative Writing in English.

## **2.6 Summary of Gaps in the Literature**

Tsoulfas (2021) found out that one of the most crucial difficulties in research is developing an agenda and forming the research on the study gaps. Michael & Ebube (2022), states that every study begins with research gaps that are identified from a study that already exists. Asking questions and identifying new areas of the study lead

you to discover the gaps in the research you wish to conduct. A study done by Azeez & Elegunde (2022) shows that determining a research gap is a stage that never ends in any research. This is because every research has one limitation or another. Miles, (2017) argues, that the research gap is crucial to any research that is being done as it highlights the shortcomings of the previous study which becomes an area for research. According to Miles (2017b), research gaps are questions that were not addressed by the previous study. Questions of which current or ongoing research intent to focus on and find solution or answers to.

Based on all the related literature reviewed, this study stands out to address major gaps ranging from knowledge, evidence and methodology.

### **Knowledge Gap**

The current identifies that all the related literature that were review did not provide any information about how the use of the jigsaw cooperative learning strategy contributes to the development of creative writing skills in English. The review literature created a void in the subject knowledge which the current study sought to provide. Many of the studies that used the jigsaw cooperative learning strategy as a cooperative learning strategy looked at subjects like Mathematics, Physical Education, Geography, and Social Studies. Some other studies the considered creative writing as a component of English did not use the jigsaw cooperative learning strategy as the specific learning strategy to determine its contribution to the enhancement of learners' creative writing skills. Moreover, other studies did choose other learning strategies like 'problem-solving strategy', 'progress based learning strategy' and 'dramatization strategies' to teach creative writing.

The current study filled this gap by using a specific cooperative learning strategy which is the Jigsaw Cooperative Learning Strategy to determine its contribution in developing learners' Creative Writing Skills in English. Findings from this study show that the learners' creative writing skills were developed based on the JCLS. The experimental groups performed better than the conventional groups. This study filled this gap by indicating that students' creative writing skills considering the spelling, grammar, punctuation self-expression skills were developed. The cooperative learning strategy also developed their teamwork skills. The study provided knowledge on how the teachers can deal with challenges that they may face when using the jigsaw cooperative learning strategy to teach creative writing.

### **Empirical Gap**

Empirical gap in research gap is also known as contradictory gap. Letina & Vasiji (2021) found out that cooperative learning is important and encourages assertiveness of learners toward teaching and learning. It helps maintain prolonged memory of the subject content. However, the findings from this study showed that cooperative learning strategy was found to have a negative effect on the learners' motivation because some group members do not give the necessary support to the counterpart during the discussion period.

With a different view, Wang (2018) found out that cooperative learning strategy enhances learners' skills in all aspects of education. It was mentioned that CL strategy has a positive effect on learners' motivation and encourages learners to keep engaged while they learn from each other.

The current study bridged this contradiction by being specific to use JCLS. It also placed emphasis on the student-to-student engagement (jigsaw groups and expert groups) and the students to teacher engagement during the intervention period.

### **Methodology Gap**

There were also methodological gaps identified from the related literature reviewed. It ranged from research design and methods, sample sizes, research instruments and geographic locations. Not many research concerning the use of jigsaw cooperative learning strategy was conducted in Kenya. Moreover, the few studies that were conducted in Kenya did not study the contribution of the JCLS to the development of creative writing skills in English. This study filled this gap by using Machakos sub-county in Kenya where this study has never been conducted as the geographical setting for the study.

### **Summary of chapter two**

This chapter reviewed relevant literature related to the study topic and objectives. History of Jigsaw cooperative learning strategy, Jigsaw cooperative learning strategy improves creative writing, learners' performance in creative writing, methods of teaching creative writing, the impact of creative writing techniques on learners' performance, how Jigsaw cooperative strategy supports creative writing, teacher preparedness to use Jigsaw cooperative learning strategy, attitude, and perception of teaching cooperative strategy and challenges teachers face teaching using Jigsaw cooperative strategy. A summary of the research gaps was also discussed in this chapter.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research design, variables of the study, location of the study, target population, sampling techniques, and sample size. Research instruments, piloting, reliability, data collection procedure, data analysis, and ethical considerations are also contained in this chapter.

#### **3.2 Research Design**

The research design is the first piece of information that a researcher must provide before providing further details about the methodology to be used in a particular study. The gateway through which the study is conducted, according to PV & K (2020), is the study design and methodology. The choice of research methodology is crucial since it determines how the study's key data will be obtained, examined, evaluated, and presented PV & K (2020).

Quasi-experimental research design was used in this study, which also used a mixed-method approach. According to Horgan et al (2024), quasi-experimental design enables the study to have both experimental and control groups. This is to establish the link between the use of the Jigsaw Cooperative Learning Strategy and its contribution to developing the creative writing skills of the students, their performance after the intervention. Ankunto (2002) as cited by Horgan et al (2024), mentions that quasi-experimental research is used to show if there is any effect on the respondents who were investigated. In line with a study done by Dawadi et al (2021), the mixed-method research design applies to a type of conceptual framework that is effective for planning and carrying out mixed-method studies without much difficulty. This study used qualitative and quantitative statistics to respond to the research

questions. According to Borusyak et al. (2022), the quasi-experimental research design is a design that allows the researcher to divide the respondents into the experimental and the control groups. A pre-test-post-test type of quasi-experimental research design was further used. Pre-test before intervention and post-test after intervention to measure the impact of the intervention made. Participants were randomly assigned to these groups through a number selection system.

To evaluate the effectiveness of the jigsaw cooperative learning strategy, the design chosen for this research was appropriate to determine the role of the jigsaw cooperative learning strategy on the learners' creative writing skills.

### **3.3 Variables**

Jigsaw cooperative learning (jigsaw groups, expert groups, and class discussions), traditional ways of teaching creative writing, resources, and usage are the study's independent variables. The study's intervening variables are students' background, entry behaviour, perceptions, and teachers' perceptions, and the school support variable is motivation while the dependent variable is the development of creative writing skills which is the students' achievement.

### **3.4 Location of the study**

A study location often referred to as a research locality, is the context or location where the research is carried out, according to Chua et al. (2023). Research location takes into account the specific research area and information that goes beyond generic rules or principles. This is because the location changes depending on the type of issues that need to be solved.

Machakos sub-county, in Machakos County, was the location of the research. It is the largest sub-county according to Bold et al. (2018). It served as the nation's first

Administrative Centre. Sub-counties are the decentralized units for County Service Delivery, according to Bold et al. (2018). Nairobi and Machakos Counties share a boundary. Kiambu Counties to the West, Embu to the North, Kitui to the East, Makueni to the South, Kajiado to the South-West, and Kirinyaga to the North-West. The county stretches from latitude  $0^{\circ}45'$  South to  $1^{\circ}31'$  and longitude  $36^{\circ}45'$  East to  $37^{\circ}45'$  East. It has a total population of 1,421,932 inhabitants as indicated by in the 2019 census data on people and homes. Machakos sub-county is the fourth most populated sub-counties with a population of 170,606. Being the administrative seat, and a concentrated commercial area in the county, looking into why secondary school learners performed poorly in English language, especially creative writing was what prompted this research. Furthermore, Machakos sub-county as one of the nine sub-counties that was selected as the study locale because data obtained in English from KCSE reveals that it is among the low-performing sub-counties, and mean scores in the KCSE examinations have fluctuated over the past 5 years. *See KNEC Report 2020 in Table 1.1: Candidates' Overall Performance in English (101) Paper 1, 2, and 3 in the last five years in KCSE Examinations in Kenya.* Learners have not been able to meet the 50% pass in all three papers in English and Literature. This is an area of concern that necessitated the conduct of this research.

### **3.5 Target Population**

The set of people from whom the study stands to profit depending on the study's findings is the targeted demographic population, according to Lavrakas (2013). Due to budgetary, time, and accessibility constraints, however, it was not possible to include other Forms in the study as the targeted population. However, the study's targeted population was approximately 1740 Students and teachers in Machakos sub-county. One thousand, six hundred, Eighty-three Form 2 students from the 57

secondary schools, 57 teachers of English from the 57 secondary schools in Machakos sub-county.

There are 57 secondary schools in Machakos sub-county. Forty-five public and 12 private; 158 Extra-County Form 2 students, 300 County Form 2 students, and 1225 Sub-County Form 2 students, a total of 1683 Form 2 students and 57 teachers of English in public secondary school in Machakos sub-county.

### **3.6 Sampling Techniques and Sample Size**

#### **3.6.1 Sampling Techniques**

Sharma (2017) asserted that because different studies use various sampling strategies, it is crucial to select techniques that are suited for specific research. Amos (2022) asserted that sampling entails choosing a percentage of the broader populace to research and make generalizations about the full target group. Schools in Kenya are generally put into categories which is considered to be clusters. Cluster sampling is a method of getting a sample from a population that an investigator divides into relatively similar sub-populations according to Salkind (2012). Basically, there are 57 secondary schools in Machakos sub-county. Forty-five of these schools are public schools while 12 of them are private schools. They are Sub- County, County, National and Extra-county schools. They are further classified as Day schools, Boarding schools, Mixed schools, Boys schools and Girls schools. This study randomly selected two schools from three the different clusters (sub-county, county and extra county schools) using the ticket system. This gave every school the chance to be selected to form part of the study.

The students from the six schools who formed part of the study were randomly selected for the study. Each Form 2 student in the selected schools was given ticket a

with number on it. The students were informed that there were numbers that were earmarked as a winning number to allow those students who chose them to become part of the study. After the ticket exercise, 28 students from each of the six schools were selected for the study. This was done in order to have equal representation of the selected school. Teachers who partook in this research were purposively selected because they were the same teachers of English for the Form 2 classes. They were trained for a period of one week and they served as research assistants for the study.

### **3.6.2 Sample Size**

A sample is a particular set of individuals that the researcher chooses from the target population to participate in the study, according to Rahman (2023). A sample is a subset of the population that may include individuals, objects, or events that the study is interested in (Althubaiti 2023).

The study selected 6 secondary schools; 2 sub-county schools which are mixed-day schools, 2 County schools which are also mixed-day schools, and 2 Extra County schools which are boys' and girls' boarding schools respectively found in Machakos Sub-County. The entire number of students selected to participate in the research was 168 Form 2 students; 28 Form 2 students from each of the 6 selected schools who form part of the study. The study also used 6 teachers, one participating teacher who came from each of the six participating schools.

Simple Type: Random Sampling for students

Purposive sampling for teachers

**Table 3.1: Sample Size**

No	Category	Target Population	Sample Size (n)	Percentage
1.	School	57	6	10%
2.	Teachers	57	6	10%
3.	Students	1683	168	10%
4.	Total	1740	174	10%

10% of the targeted sample size as per Mugenda and Mugenda (2003) as cited in Kimazi (2018).

### **Student Sampling**

S= 10% of 1683

$$10/100 \times 1683$$

$$(0.1) \times (1683) = 168$$

### **Teacher Sampling**

S= 10% of 57

$$10/100 \times 57$$

$$(0.1) \times (57) = 6$$

### **Entire population sampling**

S= 10% of the targeted population

$$= (.10) (1740)$$

$$= 174$$

## Sampling Frame

No	School Cluster	# of School	# of Student	# of school sampled	Category of school	# of students sampled	Assign category
1.	National	2	0	0	Boys sch. boarding	0	x
					Mixed boarding	0	x
2.	Extra-county	6	158	2	Girls boarding	28	Exp. Sch.
					Boys boarding	28	Control sch.
3.	County	9	300	2	Mixed day	28	Exp. sch.
					Mixed day	28	Control sch.
4.	Sub-county	28	1225	2	Mixed day	28	Exp. Sch.
					Mixed day	28	Control sch.

### 3.7 Research Instruments

Research tools, also known as data collection tools, are employed in a study to acquire data from the sampled respondents, Taherdoost (2021). Research instruments are means for acquiring, measuring, and analysing data relevant to the study, according to De Trigueros (2017).

The data for this study were collected from the respondents using a variety of tools. Pre- and post-creative writing skills achievement tests (CWSAT), pre- and post-interview schedules for teachers, students' questionnaires, and students' focus group discussions guide based on the goal of the study.

#### 3.7.1 Students' Creative Writing Skills Achievement Test

An achievement test was given to the experimental and control groups before and after the intervention. The test was developed by the researcher, and it contained one item of writing a composition on creative writing. The test sought to measure the following competencies of the learners: Creativity and originality, innovation

considering the content and message, grammar and choice of words, paragraphing, and use of correct register. The total score of the instrument was 100 points. A standardized creative writing analytical scoring scale helped the researcher assess the pre-test and post-test. The scoring scale (*see Appendix E*) was designed by the researcher after observing and examining many rubrics developed by other scholars such as (Lucas et al., 2013) and (Tung, 2015). To suit the study, the rubric was developed and it consists of scoring scales of 10 criteria each worth 10 points totalling 100 points. The Creative Writing skills Achievement pre and post-tests were given for 1 hour to give the students enough time to complete their compositions. Pre-test and post-test instruments are suitable for a quantitative investigation according to Dimitrov & Rumrill (2003). The outcomes of the pre-test and post-test provided evidence of how well the two groups performed. Statistically significant difference in both scores before and after the intervention of the JCLS were analysed.

### **3.7.2 Teachers' Interview Schedule**

Zohrabi (2013) mentioned that a good tool for gathering data that helps gather primary data in research is the interview schedule. This instrument allows the researcher to gather verbal information from the respondents through interview schedules. It can be either done by the researcher meeting the respondents face to face or via phone calls. The study employed a semi-structured interview where there were lists of questions, (the interview guide) which were addressed throughout the interview. The pre-interview intends to provide evidence about the teachers' previous methods of teaching creative writing, the strategies they use, and the activities they use when teaching creative writing. The post-interview was a follow-up about the new knowledge and the experiences they are using the JCLS during the experimental process. This instrument was used to collect statistics about the use to determine

whether the JCLS plays in the development of creative writing abilities in the learners of secondary school in Machakos sub-county. The teachers' responses were gathered. Since it was already coded into yes or no, it was descriptively analysed and presented.

### **3.7.3 Students' Questionnaire**

A student questionnaire is one of the tools used to collect qualitative data in this study. According to Mumu et al. (2022), one of the vital rating scales used as a qualitative measurement tool in social science research is the Likert scale. Alkadi et al. (2022) mentioned that this scale was introduced in 1932 by Renin Likert and it is still the most popular response format used to evaluate subjective dimensions in questionnaires. This study used a Likert scale questionnaire to complement the Creative Writing Skills Assessment Test. This provides qualitative data to answer objective two (determine whether the jigsaw cooperative learning strategy supports the development of creative writing skills in the learners) of the study.

In this study, after the students wrote the post-test, all 168 of them were issued the Likert scale questionnaire to tick their opinions that best suited the statements. The scale had five responses to each statement made. Those responses were *strongly disagreed, disagree, undecided, agreed, and strongly agreed*. The completed questionnaires were collected, categorized into similar responses and coded into the five responses. The means and standard deviations were generated and descriptively presented as the findings of the statements.

### **3.7.4 Students' Focus Group Discussion Guide**

According to Tümen Akyildiz (2021), one of the fundamental methods for gathering data in qualitative research is the Focus Group Discussion since it gives the researcher a possibility of speaking with respondents directly. More data were obtained using this tool and was descriptively analysed to solidify the study's third objective. It

enabled the establishment of the challenges the learners experienced during the learning process while using the Jigsaw cooperative learning strategy. It also helped to determine how the jigsaw cooperative learning strategy supports the development of creative writing skills, the second objective of the study. The responses from the students were collected and grouped into categories based on their similarity. Those categories were coded and analysed using descriptions to interpretation the findings.

### **3.8 Pilot Study**

Based on Malmqvist et al (2019), when research is piloted appropriately according to the procedures, the findings of the study that was piloted point out a weakness that needs to be corrected before the actual study. The quality of the research is guaranteed depending on how well the study's instruments are piloted (Malmqvist et al. 2019). Before the actual study is completed, a pilot study investigates and identifies areas that need to be changed, paraphrased, and restructured. For a pilot study, a more condensed sample of participants and location is selected. Mugenda and Mugenda (2003) as cited in Kimanzi (2018) suggest that 10% of a research populace is an appropriate sample for piloting a study.

The study was piloted with Form 2 students in one co-educational institution in Machakos sub-county. This co-educational institution that was used for the pilot study was not used during the actual study. Creative Writing Skills Achievement tests, interviews scheduled, and focus group discussion questions were piloted. The interview schedule for teachers contains questions that were piloted to make sure they are ready for the actual study. The questions on the interview schedule were meant to evaluate the status-quo of teaching creative writing to Form 2 students, and teachers' prior knowledge of the use of the JCLS which gives a signal of teachers' preparedness to apply the jigsaw method of cooperative learning. The teachers were asked to

participate in a pre-interview and post-interview and the discussions were recorded and analysed. The student's questionnaire containing 8 questions was also piloted to generate students' responses using the Likert scale. It was piloted in the same co-educational institute to enable the researcher make adjustment of the instrument and make it ready for the actual study. A total of 17 respondents, 1 teacher, and 16 students participated in the pilot study which assisted the investigator to test the validity and reliability of the research instruments. The researcher approximated the time it would take to administer the instruments during the actual study. The instruments were modified and became appropriate for the investigation after a period of test and retest.

### **3.8.1 Validity of the Instruments**

Following Tiberious et al. (2016), the degree to which strongly a theory or proof substantiates a certain clarification of an influence, claim, or conclusion is known as validity. The developed tools were revised consistently to address the set of objectives of the study. Content validity was used to measure the extent to which the items on the research instruments became accurate to measure the information that was being assessed. The items on the achievement test were assessed questions that could not test creative writing skills were eliminated and the appropriate questions were chosen for the study. The teacher's interview schedule and focus group discussion underwent a similar process of validation. Items on both the instruments were reviewed and items that were not significant in answering the research question were eliminated after they were presented to supervisors and experts of the Department of Educational Communication and Technology to assess the content validity. Significant comments were made by them which were assimilated into the instruments thereby modifying them before proceeding to the field. Their intervention in the validation process

proved that the instruments were specific and comprehensive to yield the desired nature of data to determine the achievement of the study's objective.

### **3.8.2 Reliability of the Instruments**

The reliability of a study is determined by how consistent its findings are Zamrodah (2016). In other words, a study conducted in one location ought to produce comparable results when conducted in another area. Similarly, the extent to which research tools yield the same results regardless of how frequently they are used or tested, according to Mohajan (2017). Piloting the study before the authentic study shows the reliability of the tool and the preparedness for its use is evident. (Bolarinwa, 2015) mentioned that the more reliable we have the test, the more we have the assurance and confidence that the scores obtained will be reliable when it is administered. We can obtain the same result when it is re-administered. The test was piloted, and the question was adjusted and re-piloted to eliminate the high level of flaws. The Creative Writing Skills Assessment Test was pilot tested in a school that was not used in the study in Machakos Sub-county. Similarly, the Focus Group Discussion schedule and the Teacher Interview questions were also piloted at this same school. The questions were piloted to examine the instrument to eliminate ambiguous questions that could have caused flaws in these research instruments. According to Kimberlin & Winterstein (2008), Cronbach's Alpha ( $\alpha$ ) is the most suitable method for measuring the internal consistency of an instrument. A 0.70 and above Cronbach alpha shows how consistent the responses of the respondents are. The result of the reliability estimated was acquired as 0.73 and the instruments passed the minimum reliability coefficient test of 0.70, the recommended threshold.

### **3.9 Data Collection Procedures**

The investigator received information that came from those participants who were selected for the study. Students received pre and post-achievement tests. They filled in a questionnaire containing statements based on their knowledge about the JCLS and they finally participated in focus group discussions while teachers participated in teacher pre and post-interview.

#### **3.9.1 Data Collection from Students**

Initially, the researcher and assistant visited the schools to speak and familiarize themselves with the authorities and inform them about the objectives of the research. After meeting with school Principals and Deputy Principals, the researcher was introduced to the Heads of the Department for Languages who further introduced the investigator to the Teachers of English for the selected Form 2 classes. During the second visit, each selected cluster school sampled respondents comprising of 28 students using the ticket system. Those students who were selected based on choosing the lucky numbers were not made known to the entire class to maintain confidentiality which is an ethical practice. These students committed themselves to form part of the study. During the third, visit to the schools, the investigator and the teachers collaborated to distribute the pre-achievement tests along with extra sheets of paper to the students. They wrote the test for 1 hour and the papers were collected from the students. The fourth visitation was scheduled for three weeks. This visit was intended to use the conventional methods of teaching and the jigsaw cooperative learning strategy to teach creative writing compositions to control groups and experimental groups. This was the intervention that was made after the administration of the pre-test and before the administration of the post-test. The last visit was to administer the

post-achievement tests to the pupils after the use of the JCLS and the conventional method with the control group.

A student questionnaire was administered to all of the 168 students to solidify the results obtained from the Creative Writing Skills Achievement test before conducting the Focus Group Discussion. The questionnaire was given to the learners to either agree, strongly agree, disagree, strongly disagree or remain undecided with statements based on their opinions. Each student was given the questionnaire and instructed to fill in the bio data portion. It was made clear that they should use their study's assigned ID Numbers instead of their names. They were also instructed that each statement has five column options (*agree, strongly agree, disagree, strongly disagree, and undecided*) and they should tick the column bearing only one option to each statement. After the student questionnaire administration, there were focus group discussions with the students. Out of the 28 students who were selected from each school, 50% which was fourteen students were randomly sampled to form part of the FGD which climaxed the data collection process.

The teachers of English were included in the Focus Group discussions. The study sought the consent of the respondents to do audio recordings of the discussions so that they would serve as references during the data analysis process. They were glad and consented to the request. During the discussions, three Focus Group discussion questions were asked. The participants responded to them based on the interventions that were made during the time of teaching and learning and based on their own opinions. They also asked questions during the period of discussion to seek clarity, and their question were answered. The teachers also gave their inputs during the discussions.

### **3.9.2 Data Collection from Teachers**

Data was also collected from the teachers using a pre- and post-teacher interview schedule. As for the teachers, the study conducted a pre-interview with them before the students could write the pre-achievement test during the third visit to the schools. This interview paved the way for the investigator to assess the teachers' knowledge of the use of the JCLS and to ascertain whether they have used it before to teach creative writing. The interview also helped the researcher to discover whether the educators are prepared to use the JCLS to teach creative writing. It was a face-to-face interview where teachers were asked questions and they responded to the questions. After the FGD with the students during the last visit, the post-interview was conducted with the teachers. This ended the data collection process of the study.

### **3.10 Intervention in Experimental and Control Schools**

Consideration for the selection of intervention in experimental research is very crucial for a study. Capili (2023) found out that intervention focuses on presentation to both the experimental and the control groups. These interventions reinforce the concepts and skills before another assessment is done. Melnyk & Morrison-Beedy (2018) mentioned that learning what treatments and strategies work best to improve the outcome and make a difference in the outcome of the final result of the data collected is essential.

This study administered intervention to both the experimental and control groups of the study. Generally, the entry behaviours of the experimental and control groups were not the same. This was because the groups were from different cluster (sub-county, county and extra-county schools) who had different entry behaviour. Their entry behaviours were different in terms of Forms, marks earned and syllabus to be covered. To control the behaviour of these groups, two schools from each cluster with

the same entry behaviour were selected. One as experimental and the other as control. In the experimental groups, a three-week teaching of creative writing compositions were done using the jigsaw cooperative learning strategy. Firstly, students were taught how to form jigsaw and expert groups. They were given materials containing elements of creative writing that they used when they were writing their creative writing compositions. Secondly, the groups were assigned a series of creative writing composition topics, and titles to write and they were discussed. This activity lasted for three weeks and was followed by a post-intervention evaluation. The control groups were given the same materials on the elements of creative writing. In these groups, learners did not work with one other but independently. The teacher explained the notes while the students listened to the teachers' explanations. With the same creative writing composition titles that were given to the experimental groups, the teacher developed teacher-made creative compositions and took them to class. They read those compositions that were already written by them and explain them to the students. Thereafter, students were assigned similar titles to develop their creative writing which were assessed by the researcher and the teacher.

During the assessment of the students' creative writing, their originality, mechanism used, creative writing elements used, basic writing format, vividness, voice or tone, use of images, style, and conclusion were assessed. Feedback was made on their papers and returned to them. After this process, other creative writing titles were assigned to students to the previous ideas to develop their writing. This was done to allow the students to apply their knowledge of writing to develop these new titles to see their level of creativity. This process lasted for three weeks and students were assessed by a post-creative Writing Skills Achievement Test.

### 3.11 Data Analysis

Data analysis in research, according to Kimazi (2018), is the stage where the researcher classifies, codes, and enters the data only for the goal of analysing and interpreting it to determine the potential outcome. The information acquired from the research instruments is examined, evaluated, and presented as the study's conclusions.

The Statistical Package for Social Sciences (SPSS) 25 Version and Excel were used to analyse the quantitative data collected from respondents according to the study's objectives. From the second objective which was *to determine whether the jigsaw cooperative learning strategy supports the development of creative writing*, the basic statistics (frequencies, means, and test scores) were computed and analysed. The examination of the nature of the link between variables may be warranted in an actual experiment in which one is controlled, according (Stigler, 1989) & (Curran-Everett, 2010). The strong point of the rectilinear connection amid two variables. A correlation analysis of the study's second objective was also done to test the level of significance of the scores obtained from the experimental group and the controlled group as a result of the use of the jigsaw cooperative learning strategy.

Alpha Cronbach of below 0.05 was considered as the level of significance to establish discrepancies between the means of the two groups based on the inferential statistical procedures. The data were analysed using paired sampled T-test, and independent sampled T-test. The first and third objectives were analysed qualitatively using coding of the respondents' responses followed by descriptive analysis. The data was presented in tables illustrating responses from teachers concerning their preparedness to use the JCLS. Similarly, bar graphs were used to highlight the percentages of students' and teachers' responses to challenges they experienced during the teaching and learning of CW using the JCLS. Take this table to a new page. Do not break

tables.

**Table 3.2: A Summary of Data Analysis**

<b>N o.</b>	<b>Objective</b>	<b>Type of data</b>	<b>Instrument</b>	<b>Data Analysis</b>	<b>Data Present</b>
1.	To evaluate teachers' preparedness in the use of the Jigsaw cooperative learning strategy.	Qualitative	Interview schedule	Descriptive Statistics, Measure of Central Tendency  (mean & standard deviation)	Table
2	To evaluate the effectiveness of the jigsaw cooperative learning strategy in the development of creative writing skills in Secondary School students.	Quantitative	Achievement Test/  Student Likert scale questionnaire  /Focus group schedule	Descriptive Statistics, T-test, and independent T-test	Table, percentage
3.	To investigate the challenges experienced in teaching and learning creative writing using the jigsaw cooperative learning strategy	Quantitative	Interview schedule  Focus group schedule	Descriptive Statistics, Measure of Central Tendency  (mean & standard deviation)	Bar graph, Percentage

### **3.12 Logistical and Ethical Considerations**

#### **3.12.1 Logistical Considerations**

As it relates to the logical consideration, the investigator acquired the necessary materials and supplies before the intervention to improve the study procedure.

Approval letters from the county's education introducing the researcher to schools of concern were obtained. Other instructional materials such as posters, markers, and ream of paper. These materials made it easier to communicate with the teacher and produce the jigsaw group formulation for the students. Interaction with the Heads of

Departments and teachers of English about the objective and the intent of the study also helped to better understand the appropriate style of the school. Furthermore, the researcher applied reasonable skills to conduct the research and investigate the issues empirically and this aided the researcher to come to a logical conclusion toward the process.

### **3.12.2 Ethical Considerations**

If research ignores ethical concerns, it loses integrity. Drolet et al. (2022) assert that ethical issues are just as important to contemporary research as any other aspect. There are some rules and conventions applied to rewarding responses, respecting privacy, and getting permission in advance Yip et al. (2016).

All ethical considerations were properly followed in the research. The study ensured that all ethical procedures remained in place to preserve the respondents' confidentiality. To verify their agreement to take part in the study, the participants were needed to fill out an agreement document (*consent forms*) agreeing to take part in the study for the period of the study. Respondents, however, had the freedom to exit the research whenever they were pleased to do so. They were further told that every piece of information gathered from them will be kept with the highest level of confidentiality and will not be used for any other purpose(s) apart from this study. The researcher received a letter from his affiliating institution and then obtained a research permit originating from the National Council for Science and Technology and Innovation (NACOSTI) authorizing the conduct of the research. Additionally, the investigator obtained a letter from the Machakos Sub-County Education office and the principals before engaging the participants. Respondents were identified through a number system to preserve their identity. Ethics were considered in the design and data analysis.

### **Summary of chapter three**

This chapter presents the research design, variables of the study, location of the study, target population, sampling techniques, and sample size. Research instruments, piloting, reliability, data collection procedure, data collection from students, data collection from teachers, intervention in experimental and control schools, and data analysis. A summary of data analysis, ethical considerations were all presented in this chapter.

## **CHAPTER FOUR**

### **PRESENTATION OF FINDINGS, INTERPRETATIONS, AND DISCUSSION**

#### **4.1 Introduction**

Chapter 4 presents the findings, interpretation of the findings, and discussion of the findings. The study aimed to investigate the use of jigsaw cooperative learning strategy and its contribution in developing creative writing skills among secondary school students in Machakos sub-County, Machakos County, Kenya. The specific objectives of the study were to: Evaluate teachers' preparedness in the use of the Jigsaw cooperative learning strategy to teach creative writing; evaluate the effectiveness of the jigsaw cooperative learning strategy in developing of creative writing skills; and investigate the challenges experienced in teaching and learning creative writing using the jigsaw cooperative learning strategy.

#### **4.2 Response Rate**

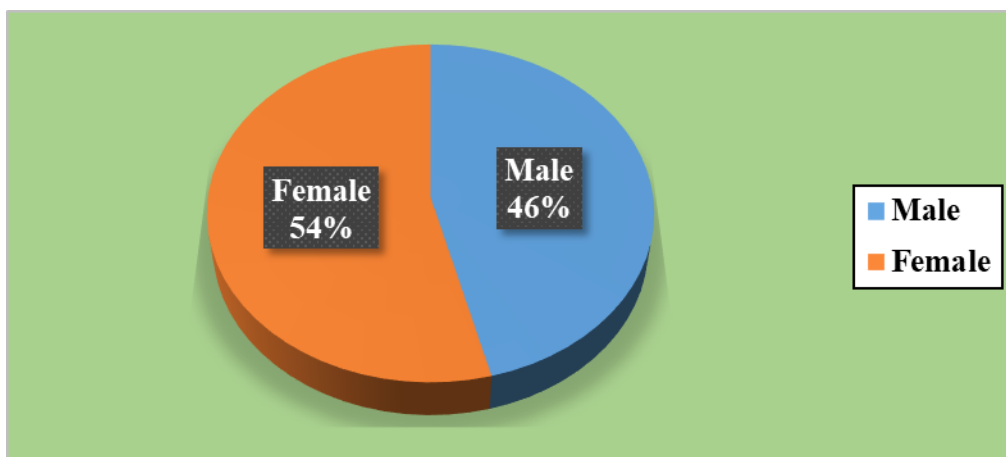
The study used four different instruments to collect data from the targeted respondents during the conduct of the actual study. One hundred, seventy-four respondents both students and teachers. Creative Writing Skills Achievement test (pre-test and post-test), students' questionnaire, teacher pre-interview and post-interview schedules, and students' focus group discussion. Respondents from the six selected schools were given 168 papers with pre-test questions for them to write their creative writing. All of the 168 papers were collected from the students and marked. Their grades were recorded. After the intervention to experimental and control groups, 168 post-test papers were also given to the students to compose their creative writing. All of the 168 papers were collected from the students and marked. Grades were also recorded and analysed. Also, 168 student questionnaires were distributed to students to solicit their opinions. All of them received the questionnaires, filled them and submitted

them. Six teachers participated in the pre-interview and the post-interview and their responses were recorded. Finally, 14 students out of 28 from each experimental and control groups shared in the focus group discussions, and the discussions were recorded. The response rate above shows that 100% of the instruments were collected and analysed.

### 4.3 Background Information of the Respondents

This section presents the background information about the teachers of English and the Form 2 students who participated in the actual study. It presents Figure 4.1, gender of students, Figure 4.2, gender of teachers; Figure 4.3, qualification of teachers; Figure 4.4, subject areas of teachers; and Figure 4.5, experience of teachers in teaching English.

The below figure 4.1 shows the learners' distribution in terms of gender from the 6 selected secondary schools in Machakos sub-county.



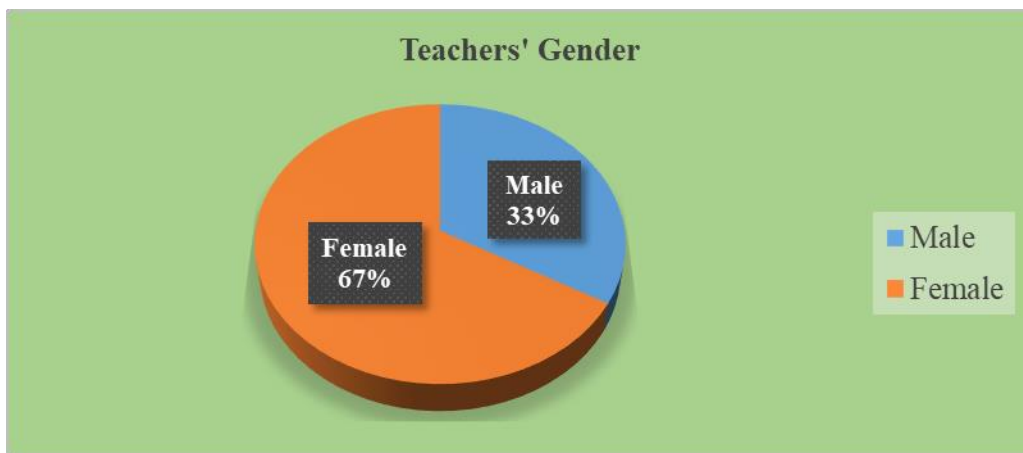
**Figure 4.1: Gender of Students**

The outcomes indicate that feminisms (54%) were more compared to masculine (46%). However, the difference was small indicating that there was a fair

representation of either gender in this study. This means that the study data comprised views from both male and female students.

**The teachers' distribution in terms of gender is presented in Figure 4.2**

The below figure 4.2 shows the teachers of English distribution in terms of gender from the 6 selected secondary schools in Machakos sub-county.

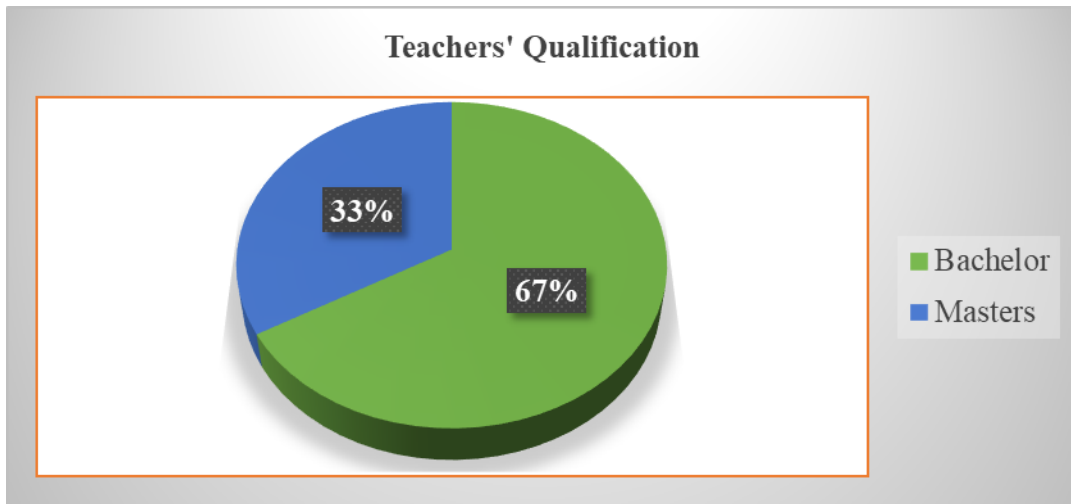


**Figure 4.2: Gender of Teachers**

The discoveries made by Figure 4.2 imply that female teachers (67%) were more compared to males (33%). This demonstrated that female teachers outnumbered male teachers, who taught the Form 2 classes. It also indicates that more female teachers are assigned to teach English Literature in Form 2 classes than males.

**The teachers' distribution in terms of Qualification is shown in Figure 4.3**

The below figure 4.3 shows the qualification of the teachers of English who participated in the study from the 6 selected schools in Machakos sub-county.

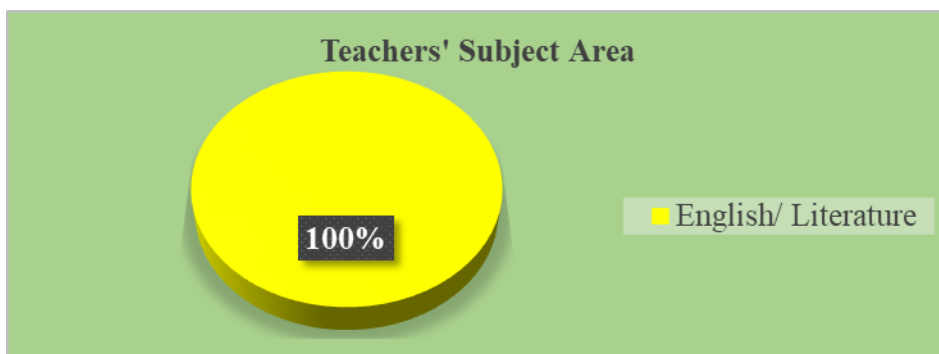


**Figure 4.3: Qualification of Teachers**

The outcomes in Figure 4.3 point out that 4 out of the 6 teachers representing (67%) have acquired a bachelor's degree in education. On the other hand, 2 educators representing (33%) hold a master's degree in education. This confirms that all the teachers have obtained the requisite qualification to teach secondary school.

**The teachers' distribution in terms of Subject Area is shown in Figure 4.4**

The below figure 4.3 introduces the distribution of the teachers of English in terms of their subject areas.

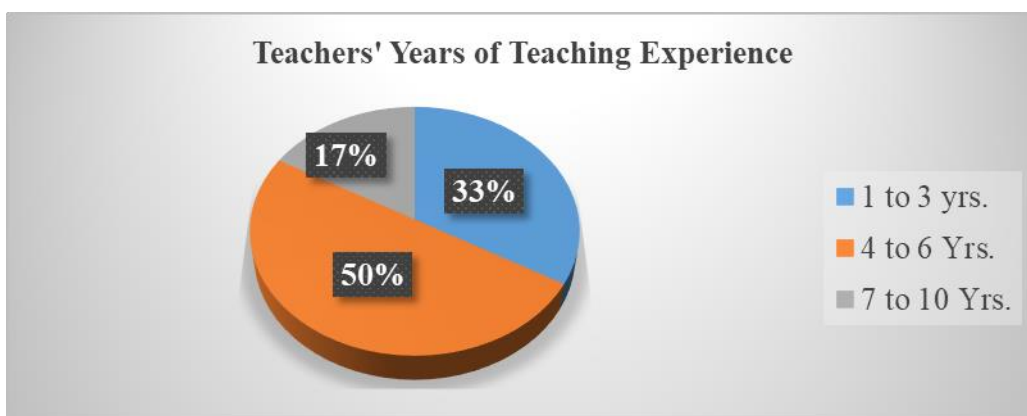


**Figure 4.4: Subject Area of Teachers**

The outcomes indicated in Figure 4.4 confirm that 6 teachers representing (100%) of the teachers teach English and Literature as their respective subject areas. This means that they are rightfully assigned the subjects that they got their academic degrees.

**The teachers of English distribution in terms of teaching experience is shown in Figure 4.5**

Figure 4.5 below shows the dissemination of the teachers in terms of their teaching Experience.



**Figure 4.5: Experience of Teachers in Teaching English**

The findings indicate that 3 of the 6 teachers representing (50%) have acquired 4 to 6 years of teaching experience. Similarly, 2 teachers representing (33%) have acquired 1 to 3 years of teaching experience while 1 teacher representing (17%) has acquired 7 to 10 years of teaching experience. This indicates that the bulk of the teacher have

between 4 to 6 years of teaching experience that help them discharge their teaching duties. Even though they had the experiences to teach secondary school pupils, most of them were not knowledgeable about the JCLS and could not use it to teach creative writing to their learners.

#### **4.4 Teachers' Preparedness in the Use of the Jigsaw Cooperative Learning Strategy to Teach Creative Writing**

The first objective of the study was to evaluate teachers' preparedness in the use of the Jigsaw cooperative learning strategy to teach creative writing. Responses from teachers who taught both experimental and control groups were obtained and made vivid through a pre- and post-interview to ascertain the knowledge of jigsaw cooperative learning strategy, whether they have used it before to teach creative writing to students of Form 2 and to see how well they are prepared to use the strategy to teach creative writing to secondary school students. Four questions were developed in the teacher interview schedule and asked during the teacher pre-interview and those same four questions were asked during the teacher post-interview. This was done to allow the researcher to match the responses from the pre-interview with the post-interview during the analysis period of the research. *See outcome as mentioned in Table 4.1.*

Though the responses were coded and presented in a table, the description of the teachers' knowledge of the jigsaw cooperative learning strategy and how to use it to teach creative writing were qualitatively presented, interpreted and discussed.

In the table 4.1 below, six educators’ responses to the teacher pre-interview and post-interview were presented. These responses were presented in a dichotomous (yes or no) data to determine teachers’ preparedness in the use of the jigsaw cooperative learning strategy.

**Table 4.1: Teachers’ Interview Responses on Preparedness to use Jigsaw Cooperative Learning Strategy to teach Creative Writing**

	Response	# of Teacher Response Pre-interview	# of Teacher Response Post-interview
Have you heard about Jigsaw Cooperative Learning Strategy?	Yes		3
	No	6	3
Have you had formal training on the use of the JCLS?	Yes		3
	No	6	3
Have you used JCLS to teach creative writing to secondary school students?	Yes		3
	No	6	3
Are you prepared to use the JCLS to creative writing to secondary school students?	Yes	3	3
	No	3	3

With regards to teachers’ pre-interview questions one (Have you heard about Jigsaw Cooperative Learning Strategy?), two (Have you had formal training on the use of the Jigsaw Cooperative Learning Strategy to teach Creative Writing?), and three (Have you used Jigsaw Cooperative Learning Strategy to teach creative writing to secondary school students?), all of the six teachers’ responses were “No”. This means that all the teachers had not heard about the Jigsaw cooperative learning strategy before the study, had no formal training on the use of the Jigsaw cooperative learning strategy to teach Creative Writing, and had not used Jigsaw cooperative learning strategy to teach creative writing to secondary school learners before the study. For the fourth question (Are you prepared to use the Jigsaw Cooperative Learning Strategy creative writing

for secondary school students?), three out of the six teachers answered noted that they were prepared to use the Jigsaw cooperative learning strategy to teach creative writing, while the remaining three teachers were not prepared to use JCLS to teach creative writing. This result represents 50% who were prepared to use JCLS. The results denote that the half of teachers were prepared to use the Jigsaw cooperative learning strategy in developing creative writing skills for students.

Moving on to the teachers' post-interview responses, three teachers responded "Yes" to question one (Have you heard about Jigsaw Cooperative Learning Strategy?), and the same three teachers answered "yes" to question two (Have you had formal training on the use of the JCLS to teach Creative Writing?), and three teachers answered "yes" to question three (Have you used Jigsaw Cooperative Learning Strategy to teach creative writing to secondary school students?). Similarly, three teachers responded "No" to question one (Have you heard about Jigsaw Cooperative Learning Strategy?), three teachers answered "no" to question two (Have you had formal training on the use of the Jigsaw Cooperative Learning Strategy to teach Creative Writing?), and three teachers answered "no" to question three (Have you used Jigsaw Cooperative Learning Strategy to teach creative writing to secondary school students?). For question four (Are you prepared to use the JCLS to teach creative writing to secondary school students?), three respondents expressed preparedness to use the Jigsaw cooperative learning strategy to teach creative writing. The result shows 50% of teachers were in favour of the preparedness to use the strategy. The outcomes imply that half of the teachers were prepared to use the Jigsaw cooperative education approach in increasing creative writing abilities for learners. The study findings agree with the assertion by Nguyen et al. (2021) that many teachers are prepared to use JCLS to teach English classes. Maninji et al. (2020)

found that teachers' gap in knowledge to use cooperative learning strategy created shortcomings in learners' ability to perform well in creative writing. According to Kiuk et al. (2021) when teachers are not prepared and equipped to fully use the JCLS, effective learning will not take place.

#### **4.5 Use of Jigsaw Cooperative Learning Strategy to Support the Development of CWS.**

The second objective of the study was to evaluate the effectiveness of the jigsaw cooperative learning strategy in the development of creative writing skills in secondary school students in Machakos sub-county. Each student was given a questionnaire and asked to rate the statements on the use of the jigsaw cooperative learning strategy to support the development of creative writing skills. Likert scale used was: Strongly disagree (1), disagree (2) undecided (3), agree (4), and strongly agree (5). *Results are shown in Table 4.2.*

The statistics in Table 4.2 show responses of students' opinions on whether the use of the jigsaw cooperative learning strategy contributes to the development of their Creative Writing Skills. The Likert Scale questionnaire contained 8 questions. These questions were coded with numbers from 1 to 5. Strongly disagree is represented by number 1, disagree is number 2, undecided is number 3, agree is number 4, and strongly agree is number 5. The mean represents the average of the respondents as per a given statement and the standard deviation indicates how close or far the results are away from the mean.

**Table 4.2: Use of JCLS and its contribution to the Development of Creative Writing Skills**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Mean</b>	<b>SD</b>
Jigsaw Cooperative learning strategy improves creative writing skills in learners	14.9%	6.5%	11.3%	22.0%	45.2%	3.8	1.5
The conventional method of teaching improves creative writing skills in learners	16.7%	24.4%	3.7%	13.7%	31.5%	3.2	1.5
Poor performance in creative writing is caused by the strategy used to teach CW to learners	25.0%	19.0%	4.8%	20.2%	31.0%	3.1	1.6
Writing individually builds CW skills	20.8%	10.1%	7.1%	21.4%	40.5%	3.5	1.6
Practicing writing cooperatively builds CW skills	10.1%	9.5%	6.5%	26.8%	47.0%	3.9	1.4
Teachers writing paragraphs of Creative essays and stories on a chalkboard for students to re-write improve CW skills	11.9%	16.1%	9.5%	30.4%	32.1%	3.6	1.4
Exercise books that are being used to teach CW are appropriate to build CW skills in Form 2 learners	14.9%	10.7%	11.9%	30.4%	32.1%	3.5	1.4
Teaching English and Literature is one factor that is leading to poor performance in writing creatively	29.2%	10.7%	13.1%	10.7%	36.3%	3.1	1.7

The results in Table 4.2 shows that the bulk of students agreed with the declaration that Jigsaw cooperative learning strategy improves creative writing skills in learners (mean=3.8, Std dev=1.5), writing individually builds CW skills (mean=3.5, Std dev=1.6), practicing writing cooperatively builds CW skills(mean=3.9, Std dev=1.4), teachers writing paragraphs of Creative essay and stories on a chalkboard for students

to re-write improves CW skills (mean=3.6, Std dev=1.4), and exercise books that are being used to teach CW are appropriate to build CW skills in Form 2 learners (mean=3.5, Std dev=1.4). The findings imply that the use of JCLS enhances the improvement of creative writing skills among students. The findings support Mbacho's (2013) assertion that JCLS enhances the social interaction between the pupils. Moreover, it is crucial for meeting the requirements of exposed to risk learners.

### **Students' Performance (Composition Scores)**

This section shows the correlational result of the student Pre-test and Post-test for all of the 168 learners from both Experimental and Control groups. The Pre-test and Post-test comprised one creative writing composition question that tested the Creative Writing Skills (originality, mechanism used, creative writing elements used, basic writing format, vividness, voice or tone, use of images, style, and conclusion) of the respondents in the Experimental groups as well as the Control groups before the intervention was made and after the intervention was made.

Below in Table 4.2, the number of Students, Minimum and Maximum scores, the Means, and the Standard Deviation was presented showing the comparison between the Experimental and Control groups.

**Table 4.3: Effectiveness of the Jigsaw Cooperative Learning Strategy in the Development of Creative Writing Skills**

Category	Objective	N	Min.	Max.	Mean	SD
	Pre-test@ Jigsaw					
Control Group	Cooperative Learning					
	Strategy effectiveness	84	7	71	34.81	16.26
	Post-test@ Jigsaw					
	Cooperative Learning					
	Strategy effectiveness	84	14	86	41.3	15.85
	Pre-test@ Jigsaw					
Experimental Group	Cooperative Learning					
	Strategy effectiveness	84	15	75	36.19	14.14
	Post-test@ Jigsaw					
	Cooperative Learning					
	Strategy effectiveness	84	19	90	58.46	15.30

The outcomes in Table 4.3 point out that in the pre-test for the control group, there was a Standard Deviation of 16.26 with a mean score of 34.81. In the post-test for the same control group, the Standard Deviation was 15.85 with a mean score of 41.3. This shows that the Standard Deviation for the pre-test was greater than the Standard Deviation for the post-test of the control group. Thus, making the pre-test score not to be consistent while the post-test score is consistent ( $16.26 > 15.85$ ).

Table 4.3 similarly presents the findings for the experimental group. It indicates that the Standard Deviation for the pre-test was 14.14 with a mean score of 36.19, while the Standard Deviation for the post-test was 15.30 with a mean score of 58.46. This suggests that the Standard Deviation for the pre-test was lesser than the Standard Deviation for the post-test of the experimental group. This means there was consistency in the pre-test score. On the other hand, there was no consistency in the post-test score ( $14.14 < 15.30$ ). The result from the pre and post-test of the control

group shows that there was an increase of 6.49 in the mean score of the post-test as compared to the pre-test. This means that there was little enhancement in the learners' performance in the post-test as compared to the pre-test. This was as a result of the intervention that was done using the conventional method of teaching creative writing. This increase could be as a result of students putting in more time for extra practice in their free time haven been made aware that they would have written a post-test.

The result further revealed that there was a significant increase in the post-test mean of the experimental group. There was 22.3 points increase in the post-test mean which was as a result of using the Jigsaw Cooperative Learning Strategy to teach Creative Writing in English to the experimental group.

The findings in Table 4.3 agree with Akkuş & Doymuş (2022) that students who were in the experimental group performed statistically better in the post-test as compared to the pre-test. The implication of the reviewed study revealed that the jigsaw technique greatly improved students' academic achievement. Moreover, consistent result was reported by Bafadal, (2015) shows that jigsaw technique proved to be an effective teaching technique which allowed learners to cover many topics and build many skills at the same time. This investigation was done through a pre-test and post-test analysis where the experimental groups performed better than the control group.

#### **Independent T-Test; Treatment Groups and Composition scores (Pre-test)**

This section presents independent t-test results for the pre-test on differences in creative writing composition scores of students in the experimental and the control groups. Results showed how both the experimental and control groups performed on the pre-test that was administered. Table 8.1 presents the Treatment Groups

considering experimental and control groups, the number of students, the mean, Standard deviation, the Standard Error mean, the F Statistics, and the P-value of the scores.

**Table 4.4: Independent T-Test; Experimental Groups and Control Groups Creative Writing Composition Scores (Pre-test)**

	<b>Treatment _groups</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Std. Error Mean</b>	<b>F statis.</b>	<b>P value</b>
Pre-test: Jigsaw Cooperative Learning Strategy effectiveness	Control Group	84	34.81	16.264	1.775	2.411	0.558
	Experimental Group	84	36.19	14.135	1.542		

\* Statistically significant at p-value ( $p < 0.05$ )

The findings in Table 4.4 disclose that there is no significant difference in students' performance (pre-test) with treatment groups. The results are indicated by F statistics (2.411) and p-value (0.558) > 0.05 at a 95% confidence interval. The implication is that there is no statistically significant difference in the mean score regarding how control and experimental groups performed in creative writing skills (pre-test). The control group (mean of 34.81) performed more or less the same as the experimental group (mean of 36.19). This result showing no statistically significant difference between the experimental and control groups could be because they were both taught using the conventional method of teaching creative writing at the time the pre-test was administered. In a study conducted by Bağcı & Pekşen (2018), no statistically significant difference was found in the outcome of the pre-test amongst both the experimental and the control groups before the intervention to both groups. This was because both groups were receiving the same instruction on *Mobile Learning*

*Applications* before the intervention. As seen in the results presented in Table 8.1, the study recorded absolutely no statistically significant difference in the pre-test scores of both groups. This implies that using the conventional method of teaching learners of Form 2 Creative Writing has little impact on students' creative writing skills. Thus, allowing them to perform more or like the same way. The findings further agree (Kiuk et al., 2021) that when the appropriate learning strategy is not being practised by students will continue to perform poorly in the English Language. They will not fully acquire the necessary competencies and skills they need.

**Independent T-Test; Experimental Groups and Control Groups Composition scores (Post-test)**

This section presents independent t-test results for the post-test on differences in creative writing composition scores of students in the experimental and the control groups. Results showed how both the experimental and control groups performed on the post-test that was administered. Table 9.1 presents the Treatment Groups considering experimental and control groups, the number of students, the mean, Standard deviation, the Standard Error mean, the F Statistics, and the P-value of the scores.

**Table 4.5: Independent T-Test; Treatment Groups and Composition Scores (Post-test)**

	<b>Treatment groups</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Std. Error Mean</b>	<b>F statis</b>	<b>P value</b>
Post-test: Jigsaw Cooperative Learning Strategy effectiveness	Control Group	84	41.3	15.845	1.729	0.014	0.001
	Experimental Group	84	58.46	15.304	1.67		

\* Statistically significant at p-value ( $p < 0.05$ )

The findings in Table 4.5 indicate that there is a significant difference in students' performance (post-test) with treatment groups. The results are supported by F statistics (0.014) and p-value (0.000)  $<0.05$  at a 95% confidence interval. The implication is that there is a statistically significant difference in the mean score regarding how control and experimental groups performed in creative writing abilities (post-test). The experimental group (mean of 58.46) performed significantly higher compared to the control group (mean of 41.3). This outcome suggests that the cooperative learning approach known as the "jigsaw" can be used to improve learning. Enhances the improvement of creative writing abilities among learners. This is owing to the fact that when the experimental groups were taught creative writing using the jigsaw cooperative leaning strategy, they had a better performance in the post-test as expected to that of the control groups that were educated using the conventional method of teaching creative writing.

The findings are consistent with Matthew Abiodun Michael (2022) assertion learners who used the JCLS performed better than those who used the conventional approach to teaching. It agrees with Avramenko et al. (2018) that because creative writing is crucial for strengthening the language skills of both the teachers as well as students, an effective learning teaching and learning strategy must be put into place to help improve the learners' performance. This is equally true because the English Language is being spoken and written by many nations around the world. In order for effective communication to take place through creative writing, effective learning strategy like the JCLS should be used to help develop the potential learners' creative writing skills. According to Hanso (2016), it is not only the content of the subject that develops students' creativity but also the strategy and methods used during teaching.

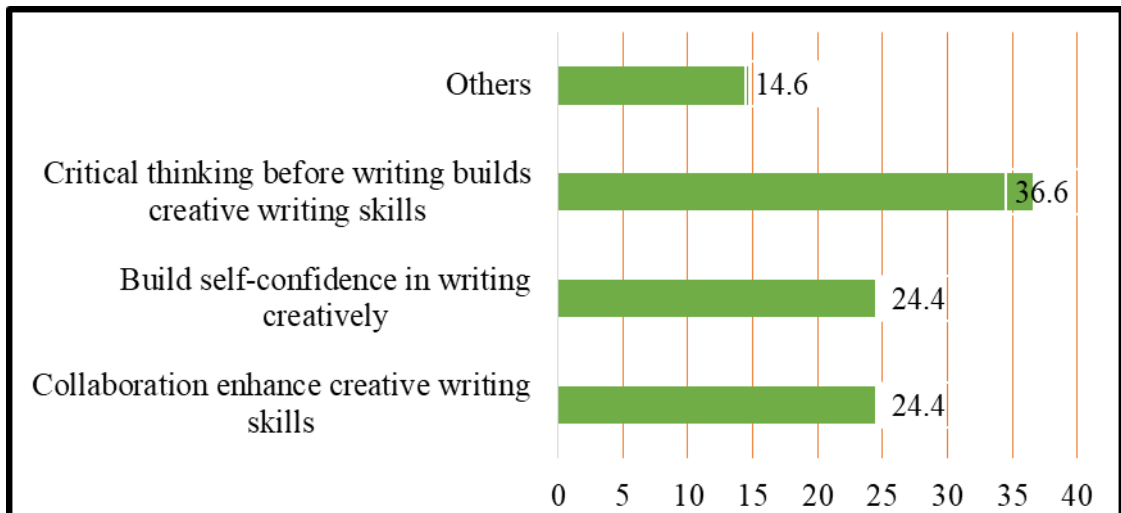
#### **4.6 Challenges Experienced in Teaching and Learning Creative Writing Using the Jigsaw Cooperative Learning Strategy**

This section presents responses from students about the ways that the Jigsaw Cooperative Learning Strategy improved their Creative Writing Skills. It also presents responses from the students and the teachers concerning the challenges they face when using the JCLS during the teaching and learning of Creative Writing.

This section is sub-divided into 4.6.1: Responses on ways that JCLS improved their Creative Writing Skills; 4.6.2: Responses from students as to the challenges experienced during the teaching and learning of Creative writing by means of the use of the Jigsaw Cooperative Learning Strategy and 4.6.3: Responses from teachers as to the challenges experienced during the teaching of Creative writing using the Jigsaw Cooperative Learning Strategy.

##### **4.6.1 Responses on ways Jigsaw Cooperative Learning Strategy improved Learners' Creative Writing Skills.**

The third objective of the study was to investigate challenges faced in teaching and learning creative writing using the jigsaw participatory learning approach. The students were asked to explain how the Jigsaw cooperative learning strategy helped in improving their creative writing skills. Figure 4.6 highlights the students' responses, and the frequencies to which they responded to the questions that they were being asked.



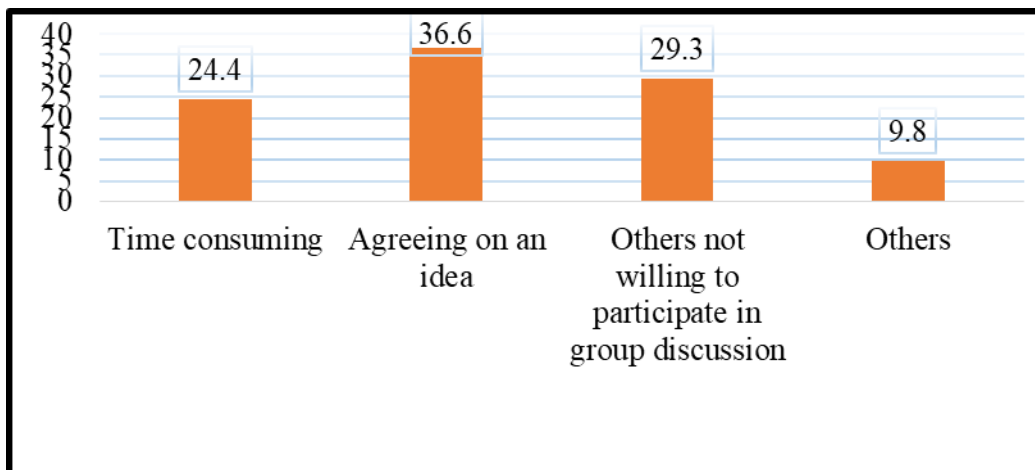
**Figure 4.6: Jigsaw Cooperative Learning Strategy Improvement on Creative Writing Skills**

The results in Figure 4.6 show that 36.6% of students reported that Jigsaw collaborative learning strategy helps students to think critically, build self-confidence in writing creatively (24.4%), and improve collaboration among the students (24.4%). The findings from the results in Figure 4.6.1 display the bulk of the learners expressed that the jigsaw cooperative learning strategy helped to develop their critical thinking and builds their creative writing skills. That is one has to think critically before they are able to write creatively. This study agrees with Wang (2018); agreeing that the Jigsaw Collaborative Learning Strategy is a new learning model developmental essential to essence to enhance the advancement of the learners' creative writing skills through their interaction and collaboration. Similarly, the findings agrees with Letina & Vasilj (2021) that cooperative learning strategy like the JCLS has been found effective in fostering collaboration in the pupils, and building the assurance level of the learners through their constant collaboration in the learning environment. A study that was conducted by Buchs et al. (2017) revealed that in Switzerland, 33% of the teachers used cooperative learning strategies which had a positive impact of the

students' performance as compared to 67% of the teachers who did not use cooperative learning strategies. The findings agree with the findings from Buchs et al. (2017) because majority of the students expressed ways in which the JCLS had a positive influence in the development of their creative writing skills. The general implication of the findings in Figure 4.6. is that the Jigsaw cooperative learning strategy is essential in attracting and developing the students' creative writing skills.

#### 4.6.2 Challenges experienced by students using the Jigsaw Cooperative Learning Strategy to learn Creative Writing

The students were further asked to indicate challenges faced when learning using the jigsaw cooperative learning strategy. Figure 4.7 presents the responses and frequencies of the students concerning the challenges that they faced during the teaching and learning of creative writing using the jigsaw cooperative learning strategy.



**Figure 4.7: Challenges Students Face using the Jigsaw Cooperative Learning Strategy to learn creative writing.**

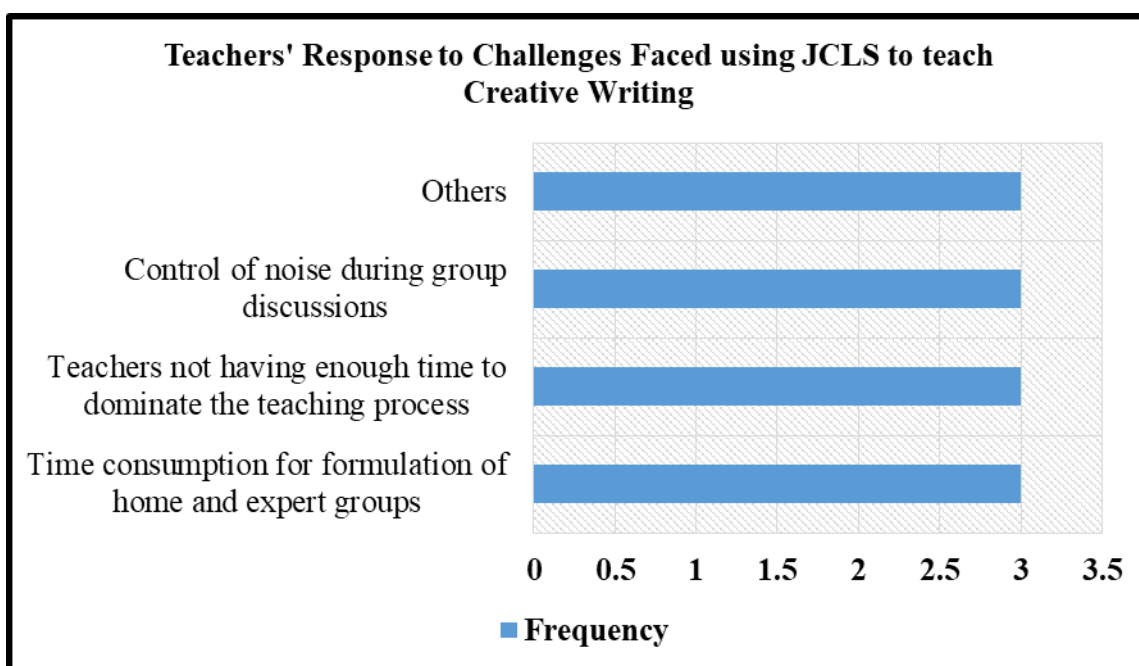
According to the results presented in Figure 4.7, 36.6% of students indicated that agreeing on an idea is a challenge, some students are unwilling to participate in group discussions (29.3%), and time-consuming (24.4%). The result also shows that 9.8% of

the students had other views which included, misunderstanding of some keywords and movement between the various jigsaw and home groups. These challenges may hinder the successful execution of the jigsaw cooperative learning strategy resulting in slow or lack of development of students' creative writing skills. The findings agree with the work of Abdalla Elhussien Mohammed (2019) that the issue of using more time for group formation is a major encounter that learners face when they are working collaboratively, especially in the formation of groups. Similarly, Avramenko et al. (2018) found that psychological issues like fear, lack of desire or interest, and self-confidence contribute to poor creative writing abilities in learners. Additionally, Czerniawska et al. (2021) found out that individualism promotes individual freedom, but narrows the human perspective on cooperation and collaboration which give room for poor or no participation and interaction with others. The findings indicate that though the jigsaw participatory learning strategy helps in ensuring the development of creative writing skills in learners, students need to agree with one another in both their jigsaw (home) groups and their expert groups for the success of every member of the groups. Teachers encouraging and ensuring that every student fully participate in the group discussion is also another challenge that must be addressed to have a fruitful result from the use of the jigsaw cooperative learning strategy.

#### **4.6.3: Challenges Teachers experienced using the Jigsaw Cooperative Learning Strategy to teach Creative Writing.**

Figure 4.8 presents teachers' responses on the difficult that they faced during the teaching of creative writing using the Jigsaw Cooperative Learning Strategy.

Three of the 6 teachers who used the jigsaw cooperative learning strategy responses are captured in Figure 4.8 below.



**Figure 4.8: Challenges Teachers Face using Jigsaw Cooperative Learning Strategy to Teach Creative Writing**

According to the findings in Figure 4.8, three teachers expressed that the challenge that they encountered using the jigsaw cooperative learning strategy to teach creative writing was the consumption of time to formulate both the jigsaw and expert groups. Moreover, 3 of them also agreed that teachers did not have the time to fully dominate the teaching process since most of the tasks were left to the students to do leaving them as monitors during the process. Lastly, 3 of the teachers mentioned that another challenge that they faced was the control of noise from the group discussions. These challenges identified by the teachers may hinder the successful implementation of the jigsaw cooperative learning strategy if they are not properly addressed by the teachers who are using the JCLS. This study agrees with Effendi-Hasibuan et al. (2020) that teachers face challenges when using the Jigsaw cooperative Learning Strategy to instruct learners how to write Creative compositions. This is evident because the

majority of the teachers who used the JCLS to teach students mentioned that they faced challenges with the limitation of time, and not being fully in charge of the class as a dominant teacher. The study similarly agreed with Tsakalidou (2021) that the teachers also faced the challenge of controlling the noise from students' discussions in their various jigsaw and expert groups. This could have been caused due to the inexperience of the teachers who were using the JCLS. It was their first time using this cooperative learning strategy.

#### **4.7 Summary of the Chapter**

This chapter presented the findings, interpretation of the findings, and discussion using reviewed related literature. This chapter was organized sequentially as per the three study objectives. The findings revealed that the use of the jigsaw cooperative learning strategy contributed to the enhancement of creative writing skills among secondary school students. In furtherance of the discoveries obtained from the findings, it is evidence that bulk of the teachers were not prepared to use the Jigsaw cooperative learning strategy in developing creative writing skills for students. However, they expressed their willingness to use the jigsaw cooperative learning strategy if they are given the opportunity to be trained to use this teaching strategy to teach their learners creative writing. Further, the findings showed that challenges experienced in teaching and learning creative writing using the jigsaw cooperative learning strategy include a lack of agreement on ideas, students' unwillingness to participate in group discussions, and time consumption. In the subsequent chapter, the researcher highlighted a summary of key findings, conclusions, and recommendations.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATION**

#### **5.1: Introduction**

Chapter five of this study presents the summary, conclusion, recommendations, and suggestions for further research based on the study's objectives and the result of the research. The study underpins the results on teachers' preparedness in the use of the jigsaw cooperative learning strategies to teach creative writing, to evaluate the effectiveness of the jigsaw cooperative learning strategy in the development of creative writing skills in secondary school students and investigate the challenges faced in the use of the jigsaw cooperative learning in teaching and learning of creative writing. It has been suggested that capacity building for teachers through In-Service training, workshops, and seminars on the use of the jigsaw cooperative learning strategy to teach creative writing should be an issue of concern and focus if students' creative writing skills must significantly develop.

#### **5.2: Summary of the Findings**

This section of the research presents a summary of the entire research findings capturing the first objective of the study which was (to evaluate teachers' preparedness to use the jigsaw cooperative learning strategy to teach creative writing) to Form 2 students. Similarly, the summary captured the second objective (to evaluate the effectiveness of the jigsaw cooperative learning strategy in the development of creative writing skills in secondary school students), and the third objective (to investigate the challenges experienced in teaching and learning creative writing using the jigsaw cooperative learning strategy).

From the three objectives mentioned above, the study addressed three research questions as stated below.

- i. Are teachers prepared to teach students creative writing using the Jigsaw cooperative learning strategy?
- ii. How effective is the jigsaw cooperative learning strategy in the development of creative writing skills in secondary school students?
- iii. What are the challenges experienced in teaching and learning creative writing using the Jigsaw cooperative learning strategy?

#### **5.2.1: Objective One: Evaluate teachers' preparedness in the use of the Jigsaw cooperative learning strategy to teach creative writing**

This research found that half of the teachers expressed their willingness and preparedness to use the jigsaw cooperative learning strategy to teach their learners creative Writing. This is because they were trained before the intervention to teach the Experimental groups using the jigsaw cooperative learning strategy. From the teachers' pre-interview conducted with the three teachers, out of the six teachers who were trained to use the jigsaw cooperative learning strategy expressed their preparedness to teach creative writing using the Jigsaw Cooperative Learning Strategy. They mentioned that despite, the challenges they faced while using the JCLS, the teaching strategy played a positive role in developing their learners' creative writing skills.

This study also found that contrary to the views of the three teachers who were trained to use the jigsaw cooperative learning strategy to teach creative writing to their students, the three teachers who taught the control groups mentioned that they were not prepared to use the jigsaw cooperative learning strategy. One of the three teachers who were assigned to one of the control groups mentioned that this strategy was being

heard about during undergraduate studies but did not have the opportunity to use the strategy to teach students Creative Writing. The other two teachers who were assigned to the two control groups declared that they did not hear about the Jigsaw Cooperative Learning Strategy, nor did they have the opportunity to use it to teach their studies creative writing. Despite the three teachers' assertions that they are not prepared which is based on the findings, half of the teachers who use the JCLS to teach creative writing mentioned that this Jigsaw Cooperative Learning Strategy is effective in not only supporting the improvement of creative writing abilities but also fostering teamwork and collaboration. Just like the Jigsaw puzzle, each student in the learning environment takes responsibility for the other's success in the learning process. The findings imply that when secondary school teachers who teach Creative Writing to students in Machakos sub-county are fully trained and equipped to use the Jigsaw Cooperative Learning to teach creative writing, students will build a high level of creativity which would be applied to their creative writing compositions.

### **5.2.2 Objective Two: To Evaluate the Effectiveness of the Jigsaw Cooperative in the Development of Creative Writing Skills in Secondary School Students.**

The findings of the second objective showed that indeed the Jigsaw Cooperative Learning Strategy was effective in developing of creative writing in Form 2 learners in Machakos sub-county. The six schools were distributed into three experimental groups and three control groups, and a pre-creative writing skills achievement test was administered. The CWSAT was meant to determine the creative writing skills of the learners from the various selected schools before using the jigsaw learning strategy with the experimental groups, and teaching the control groups using the conventional method of teaching creative writing. This pre-test result shows that there was not a statistically significant difference in the mean scores of the experimental and the conventional groups.

Subsequently, a post-test and a post-test were administered. This time, the findings show that there was a statistically significant difference in the mean score of the experimental group as compared to the control group. The investigator proceeded further to analyse the data utilizing the Independent T-Test to determine the P-value of the data. The findings show that there was no statistically significant difference in the performance of both groups in the pre-test owing to the p-value  $0.558 > 0.05$  obtained. This could be a result of the learning strategy (conventional method) that teachers have been using to teach their students. An Independent T-Test was also for the post-test and results show that there was a statistically significant difference in the p-value  $0.001 < 0.05$ . From the outcomes, it is evident that the experimental groups performed better in the post-test than in the pre-test. They also had a better performance than the control group in the post-test.

A student questionnaire was also administered to the students after they wrote the CWSAT. This questionnaire aimed to generalize the students' scores from the pre-and post-test into a descriptive analysis which would solidify the second objective. A statement was written for students to strongly agree, agree, strongly disagree, disagree, or state whether they had an undecided opinion as to whether the JCLS improves creative writing skills. The outcome shows that 42% of the pupils strongly agreed that the JCLS improves creative writing skills in learning. The findings imply that students who were taught using the jigsaw cooperative learning strategy expressed that the collaborative strategy increased their performances in creative writing rather higher unlike the learners who were taught using the traditional style of teaching.

### **5.2.3: Objective Three: Investigate the challenges experienced in teaching and learning creative writing using the jigsaw cooperative learning strategy**

Finally, the findings from the third objective, to investigate the challenges experienced in teaching and learning creative writing using the jigsaw cooperative learning strategy, identified key difficulties that both teachers and students faced when teaching and learning creative writing using the jigsaw cooperative learning strategy.

During the Focus Group Discussions, all three teachers expressed that time consumption to formulate jigsaw and expert groups, and less time allocated for teachers to dominate the teaching process. Moreover, the same three teachers explained that the group discussions were noisy, and three of them found difficulties controlling the students who were discussing in their expert groups and their home groups. They further exclaimed that because it was their first time using the jigsaw cooperative learning strategy, the majority of the groups did not have time to fully complete their designated exercise because of the limitation of time.

The findings from the students identified similar findings that were identified by the teachers.

The students' responses to the Focus Group Discussion indicated that 36.6% of the students faced a little challenge in deciding on an idea during group discussions. Moreover, 29.3% of the students mentioned that others would rather prefer to remain passive participants than active members of the group. Noting this point is essential because each member of the expert groups serves as an ambassador for his/her jigsaw groups.

Therefore, by not participating in the expert groups, they will not have any knowledge from their expert groups to share with their jigsaw groups. Similarly, 24.4% of the students also stated that forming the jigsaw group and navigating between the jigsaw

groups and the expert groups consumes time while 9.8% of the students mentioned some other challenges like misunderstanding some keywords in the text and moving between groups.

### **5.3: Conclusions**

The below are subsequent conclusions based on the study's findings of the three unique study objectives.

Study objective one: *Evaluate Teachers' Preparedness in the use of the Jigsaw Cooperative Learning Strategy to teach Creative Writing.*

The findings for objective one revealed that 6 teachers were purposively selected for this study. Three of these teachers of English taught experimental groups and 3 taught control groups. Despite teaching experimental or control schools, they were all interviewed using a teacher pre-interview schedule and teacher post-interview schedule. The findings shows that all 6 of the teachers did not know about the jigsaw cooperative learning strategy and how it is used to teach creative writing to Form 2 students.

At the end of the study, it was established by the teacher post-interview schedule that 3 teachers out of the 6 teachers of English were prepared to use the jigsaw cooperative learning strategy to teach creative writing because they were trained about the strategy and the usage of the strategy to teach creative writing to Form 2 students.

However, the general implication is that educators in Kenya are not prepared to use the jigsaw cooperative learning strategy to teach creative writing, even though they are willing to use the jigsaw cooperative learning strategy to teach their learners Creative Writing. From a pre and post-interview, they declared that the training which was conducted with them by the researcher prepared them to use the jigsaw cooperative learning strategy to effectively teach their learners. On the other hand,

three of the teachers expressed their unpreparedness to use the jigsaw cooperative learning strategy due to the lack of understanding as to how the jigsaw cooperative learning strategy is being used to teach learners creative writing. They used the conventional method of teaching creative writing to their learners. Therefore, they are not knowledgeable and prepared. However, they expressed their willingness to try out the jigsaw cooperative learning strategy to teach their students creative writing in English if they are opportune to be trained on how to use the jigsaw cooperative learning strategy.

The study concludes that fifty percent of the teachers were willing to use the jigsaw cooperative learning strategy which improved the creative writing skills of their learners as compared to those teachers who were not prepared to use the jigsaw cooperative learning strategy but were willing to be trained to use it.

Study objective two: *To evaluate the effectiveness of jigsaw cooperative learning strategy in the development of creative writing skills in secondary school students.*

Relative to the outcome of objective two, the study concludes that the jigsaw cooperative learning strategy supports the development of creative writing skills in secondary school students. This logical conclusion derives from the high achievement of the experimental groups as compared to the control groups in the post-test results of the CWSAT. There was a statistically significant difference in the means and p-value of the experimental groups as compared to the control groups from their post-test. This suggests that when instructors use a cooperative learning strategy like the jigsaw cooperative learning strategy, it will help develop their creative writing abilities and their cooperation skills.

Study objective three: *To investigate the challenges experienced in teaching and learning creative writing the jigsaw cooperative learning strategy skills.*

Finally, in furtherance to the third and last objective, the teachers expressed multiple challenges that they experienced during teaching and learning creative writing. In like manner, the students also mentioned the challenges that they faced during the teaching and learning of creative writing using the jigsaw cooperative learning strategy. These are all major challenges that the study identified and would recommend possible solutions to be put into place to create an enabling environment where the jigsaw cooperative learning strategy can be effectively used to teach students creative writing and help build their skills.

The use of the jigsaw cooperative learning strategy in teaching results in better student performance in creative writing. The jigsaw cooperative learning strategy is therefore suitable as a teaching strategy for teaching creative writing. This study also implies that for teachers to fully implement the teaching of creative writing using the Jigsaw Cooperative Learning Strategy, they have to be fully trained to attain a meaningful result from the use of the JCLS. Lastly, challenges that both teachers and students faced during the teaching and learning of creative writing using the Jigsaw Cooperative Learning strategy need to be addressed, and positive measures put in place to mitigate the influences they have on students' achievement.

### **5.5: Recommendations**

The summary of the findings of the study suggests that the use of the Jigsaw Cooperative Learning Strategy to teach creative writing develops the creative writing skills of learners in secondary schools. However, teachers of English need to be trained to effectively use this cooperative learning strategy to help students improve their creative writing skill. As it relates to these discoveries obtained from the

investigation, the study proposes the following recommendations. The significance of these recommendations is to help solve identified gaps and make intervention policies.

**These recommendations are:**

- a. The Education Schools or Departments at the various universities and colleges with the consent of the Ministry of Education in Kenya include the teaching of the jigsaw cooperative learning strategy to teach creative writing in English and Literature to their teachers in training. This will ease the burden of training teachers for just a few days or months in an In-service workshop/training and asking them to use the JCLS to teach their learners. When they are taught for a whole semester or two utilizing various approaches to the jigsaw cooperative learning strategy, they will be in a better prepared to use the learning strategy effectively.
- b. Jigsaw Cooperative Learning Strategy should be incorporated during the in-service training of teachers organized by the Ministry of Education (MoE) Kenya. This is because the quality of teachers and the kind of training they have is a major determinant of the quality of education in any nation.
- c. Curriculum developers specialized in the development of the English curricula include the jigsaw cooperative learning strategy as one of the effective teaching and learning strategies to teach creative writing in English to secondary school students. It should be made an inclusion into the secondary school English curriculum to address the challenges that the teachers and students face during the time of teaching and learning. In the wake of teachers being prepared to overcome the many challenges of jigsaw and home groups formulation, use of minimum time

for maximum activities, noise control, students full participation, the strategy would be effectively used for reduce dismal performance in creative writing.

- d. Principals and Heads of English Department should encourage teachers to use the jigsaw cooperative learning strategy to teach creative writing. Where applicable, it should be used as a topic to also help students get acquainted with the strategy and how it is used effectively. When the students are aware of the strategy and how it is used, the challenge of utilizing the time, full participation of the group members, and agreement on action points will be solved.
- e. Book writers should write books and develop materials on jigsaw cooperative learning strategy so that it can become easy to use the jigsaw cooperative learning strategy.

### **5.6 Suggestions for Further Research**

This study suggests that the Jigsaw Cooperative Learning Strategy is effective in developing creative writing skills in secondary school learners. However, some areas were not covered by this research that need further research.

- i. An investigation on the Effectiveness of Jigsaw Cooperative Learning Strategy in the Development Descriptive writing skills among secondary school students. This will help to compare to what extent the jigsaw cooperative learning strategy is effective to enhance both creative writing skills in English and descriptive writing skills in English.
- ii. The Effectiveness of the Problem-solving Based study in the development of creative writing skills among secondary school students in Machakos sub-county, Kenya. By conducting this study, teachers of English in secondary schools will decide as to whether they are comfortable using the jigsaw cooperative learning

strategy or the problem-solving based study to teach creative writing to their students.

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## APPENDICES

### Appendix A: Teachers' Pre-Interview

Date:

Duration: 1 hour

Gender:

Qualification:

Teaching Experience

Subject Area:

1(a). Have you heard about the Jigsaw Cooperative Learning Strategy?

a. Yes

b. No

1(b) What have you heard about JCLS?

2a. Have of had formal training on the use of jigsaw cooperative learning strategy to teach creative writing?

a. yes: \_\_\_\_\_

b. No \_\_\_\_\_

2 (b) Briefly explain how the training was conducted and how you can relate it to creative writing.

3. Have you used a jigsaw cooperative learning strategy to teach creative writing to secondary students?

a. Yes \_\_\_\_\_

b. No \_\_\_\_\_

3(b). How did you use the strategy to teach creative writing?

4 (a) Are you prepare to use the jigsaw cooperative learning strategy to teach?

4 (b) How well you prepared to use the Jigsaw Cooperative Learning Strategy to teach creative writing to secondary school students?

## Appendix B: Teachers' Post-Interview

Date:

Duration: 1 hour

Gender:

Qualification:

Teaching Experience

Subject Area:

1(a). Have you heard about the Jigsaw Cooperative Learning Strategy?

c. Yes

d. No

1(b) What have you heard about JCLS?

2a. Have of had formal training on the use of jigsaw cooperative learning strategy to teach creative writing?

a. yes: \_\_\_\_\_

b. No \_\_\_\_\_

2 (b) Briefly explain how the training was conducted and how you can relate it to creative writing.

3. Have you used a jigsaw cooperative learning strategy to teach creative writing to secondary students?

a. Yes \_\_\_\_\_

b. No \_\_\_\_\_

3(b). How did you use the strategy to teach creative writing?

4 (a) Are you prepare to use the jigsaw cooperative learning strategy to teach?

4 (b) How well you prepared to use the Jigsaw Cooperative Learning Strategy to teach creative writing to secondary school students?

## **Appendix C: Students Focus Group Discussion Interview Guide**

Participation ID: \_\_\_\_\_ Date: \_\_\_\_\_ Gender: \_\_\_\_\_  
Duration: 1 hour

How do you feel about being selected for this study?

How did the Jigsaw Cooperative Learning Strategy help in improving your creative writing skills?

What are the challenges you faced during the teaching and learning of CW using the JCLS?

## **Appendix D: Creative Writing Skills Achievement Test (CWSAT)**

**(For Students only)**

Instruction: The test consists of 1 question that is worth 100%.

Answer this question appropriately on the attached sheet to this test.

Participation ID: \_\_\_\_\_ Date: \_\_\_\_\_ Gender: \_\_\_\_\_

Duration: 1 hour

The Ministry of Education in Kenya has announced a one-day event for parents to discuss issues that will improve the learning conditions of students in secondary school.

You are a parent with a student(s) in Form 2 who will be attending the event. Write a composition identifying problems that you think students of Form 2 are faced with and suggest solutions to solve those problems.

## Appendix E: Ten Criteria, Distribution of Marks, and Scoring Scale

### 5 Criteria and Distribution of Marks

Marks	10	10	10	10	10
The Criterion	Originality & adding details	Mechanism	Advanced creative writing elements	Basic writing format	Imagination & vividness

### 5 Criteria and Distribution of Marks

Marks	10	10	10	10	10
The Criterion	Voice & tone	Images	Style	Originality	Conclusion

### Grading Equivalent

Very Creative	Creative	Routine/ordinary	Imitative
100 - 88	87 - 75	74 - 60	59 - 0

## Appendix F: Students' Questionnaire

Participation ID: \_\_\_\_\_ Date: \_\_\_\_\_ Gender: \_\_\_\_\_

Duration: 1 hour

Instructions: The intention of using this form is to generate the views of the learners about the use of participatory learning strategies to teach creative writing and the use of the jigsaw cooperative learning strategy to teach creative writing. Please, as satisfactory as you can be, kindly provide the requested statistics that will aid this study. Be assured that the information you are providing will be kept private.

NAME: (optional)..... STUDENT FORM..... SCHOOL .....

TYPE OF SCHOOL (tick appropriate)

1. DAY MIXED [ ]
2. MIXED BOARDING [ ]
3. BOYS" [ ]
4. GIRLS" [ ]

GENDER: Boy [ ] Girl: [ ]

You are required to provide an opinion-based response to the claims below. Responses and marks associated with each statement are shown on the right. Mark the best response from the list of possibilities next to every declaration.

**SD-** Strongly Disagree; **D-**Disagree; **U-**Undecided; **A-**Agree; **SA-**Strongly Agree.

No.	Declaration	SD	D	U	A	SA
		1	2	3	4	5
1	Jigsaw as a cooperative learning strategy improves creative writing skills in the learners.					
2	The conventional method of teaching works better than the cooperative method of teaching.					
3	Poor performances in creative writing are caused by the strategy the teacher uses to teach creative writing.					
4	Writing individually builds creative writing skills.					
5	Practising writing cooperatively builds creative writing skills.					
6	Teachers writing paragraphs of creative essays and stories on the chalkboard for students to re-write and master can help to improve creative writing skills.					
7	Exercise books that are being used to teach creative writing are appropriate for building creative writing skills in Form 2 learners.					
8	Teaching English and Literature is one factor that is leading to poor performance in writing creatively.					

## **Appendix G: Training Manual for Teachers of English on Jigsaw Cooperative Learning Strategy**

A five-day training session to train teachers of English how to use the jigsaw cooperative learning strategy to teach Creative Writing. This training was facilitated by the Researcher.

### **Purpose of the Manual**

The function of this guide to this work is to help teachers of English to learn and use this cooperative learning strategy known as the Jigsaw Cooperative Learning Strategy to plan and implement lessons in creative writing taught to Form Two students.

This strategy anticipated investigating the effectiveness of the Jigsaw Strategy in the development of creative writing skills in secondary school students.

This guide aimed at minimizing the inconsistency among teachers when they teach creative writing using the Jigsaw Cooperative Learning Strategy. This is a cooperative learning strategy that incorporates cooperation and collaboration amongst students and students as well as students and teachers.

Using this strategy, learners are placed in groups of 4 to 6 members and give every learner a job where they will work at home and in expert groups.

Training outline and timetable

Topic/Days	Trainer/Teachers
<p><b>Monday, Day 1: 9 am - 12 noon</b></p> <ol style="list-style-type: none"> <li>1. Meaning of JCLS</li> <li>2. How JCLS is conducted</li> <li>3. Activities that a teacher can use to develop learners' creative writing skills.               <ol style="list-style-type: none"> <li>i. Anticipation</li> <li>ii. Building Knowledge</li> <li>iii. Consolidation</li> <li>iv. Group activities</li> </ol> </li> </ol>	The Researcher/ teachers
<p><b>Tuesday, Day 2: 9 a.m. - 5 P.M. based on schedule.</b> Creative Writing activities using JCLS.</p>	The Researcher/ teachers
<p><b>Wednesday, Day 3: 9 a.m. - 5 P.M. based on schedule.</b>  Creative Writing activities using JCLS</p>	The Researcher/ teachers
<p><b>Thursday, Day 4: 9 a.m. - 5 P.M. based on schedule.</b>  Creative Writing activities using JCLS</p>	The Researcher/ teachers
<p><b>Friday, Day 5: 9 a.m. - 5 P.M. based on schedule.</b>  Creative Writing activities using JCLS</p>	The Researcher/ teachers

***Resources***

1. Secondary English Form 2/Students' Book
2. An Integrated Approach Third Edition
3. Posters/makers
4. Sheets/notepad/pencil/pen

## What is Jigsaw and how it is used?

### Step 1: Learners are divided into 4 to 6 people per group.

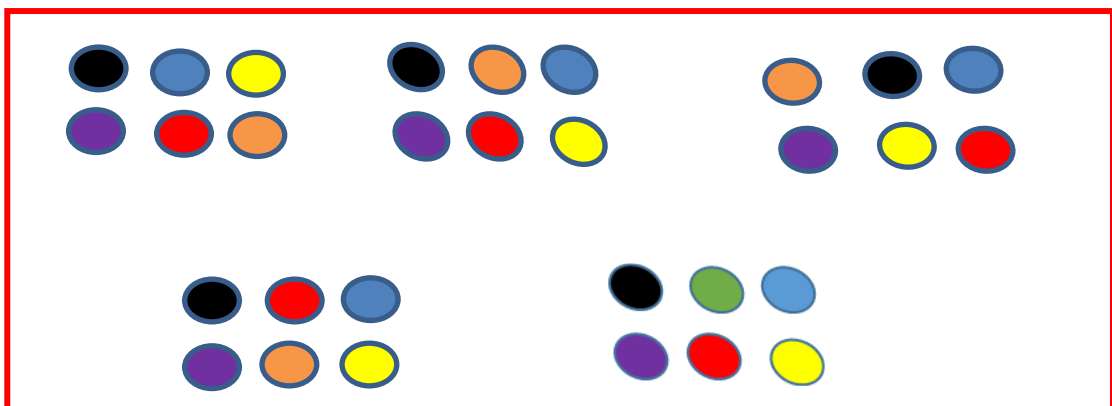
Avoid creating some groups of four, some of five, and some of six learners for jigsaw since it is effective when each team has the same number of learners. We will make the supposition for this example that you are instructing a class comprising exactly 30 people who can be evenly divided into groups of six. These groups will be called the Jigsaw Group or the Home Group. It is called the Jigsaw group because it is in this group that they put all the pieces of ideas that were gathered in the expert groups together to form a complete thought or understanding of the entire topic being taught during that lesson.

### Step 2: The content to be taught is divided into 4 to 6 chunks.

It is crucial to separate the content into the same number of pieces as the learners in each class. Therefore, divide your content into six chunks if there are six learners in each group. There will only be a need for five chunks if each group only contains five students.

### Step 3: Allocate one content piece to each member of the Jigsaw Group.

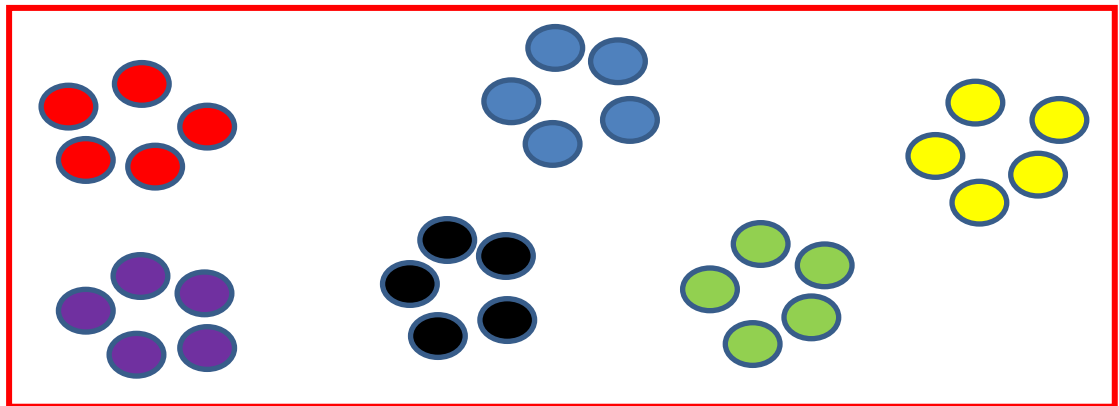
Each group has a leader who is responsible for a certain component of the content. The original home or jigsaw group will be counting on that individual to pass what he or she learned from this expert section to the others in his or her home group.



Students are now reading and studying their assigned subject or chunk separately, without interacting with other group members. The next action strengthens their independent study and gets them prepared for the next group stage.

**Step 4: Form expert groups and have students meet.**

After studying that chunk alone, each student meets with the other students who were assigned to the same chunk. This group is called the Expert Group.



The students collaborate to create a presentation that will be presented to their Jigsaw Groups from each Expert Group, where they compare ideas. These opportunities allow for the filling of knowledge gaps, the dispelling of myths, and the reinforcement of key ideas for each learner. Once every pupil has completed studying separately for his or her chunk, they come together with the other students who were given that chunk. Expert Groups are what they are called.

**Step 5: The class reconvenes in Home or Jigsaw Groups.**

Students return to their original jigsaw groups after studying their chunks in their expert groups, where they take turns delivering their pieces of knowledge. While this expert teaches the other students, the other students pay close attention, take notes, and ask numerous questions because this is their chance to make sure they understand everything.

Following the first expert's complete explanation, the others take their turns. Each "expert" presents their portion of the information while the rest of the group learns it. Each "expert" presents their portion of the information while the rest of the group learns it. The others take turns speaking after the first expert has finished. The other members of the group are learning the material as each "expert" explains it.

### **Step 6: Every learned is accessed on the content being taught**

To ensure sure all students have a fundamental comprehension of all the information, the assessment can be a quick quiz. In this quiz, make sure to answer all of the questions.

## **Troubleshooting**

### **What happens in the case learners don't divide evenly?**

You ought to have a group that is entirely divided up. But as we all know, perfection like that happens infrequently, and even then, one missing child can completely derail your plan. To start, keep in mind that you can divide pupils into chunks of 4, 5, or 6 (and some jigsaw proponents even permit groups of 2 or 3), which should help reduce "excess" learners. However, if you have a few excesses, just give the same piece to two pupils in the same group.

### **What happens in case some "experts" do not teach their chunk of the material very well?**

When making your groups, take note of this problem. If you do have an unbalanced number of learners, one thing you may do is match two students on the same piece who could be stronger together than they would be alone.

Additionally, the Expert Group must guarantee that everyone is willing to offer their piece to the appropriate Jigsaw Group. Make sure the other group members allow the student who isn't understanding it more time to catch up so they can teach the information to their Jigsaw Group.

*(Gonzalez, 2015)*



**THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013 (Rev. 2014)**  
Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing) Regulations, 2014

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

**CONDITIONS OF THE RESEARCH LICENSE**

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way;
  - i. Endanger national security
  - ii. Adversely affect the lives of Kenyans
  - iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
  - iv. Result in exploitation of intellectual property rights of communities in Kenya
  - v. Adversely affect the environment
  - vi. Adversely affect the rights of communities
  - vii. Endanger public safety and national cohesion
  - viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. The license any rights thereunder are non-transferable
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6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
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9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

National Commission for Science, Technology and  
Innovation(NACOSTI),  
Off Waiyaki Way, Upper Kabete,  
P. O. Box 30623 - 00100 Nairobi, KENYA  
Telephone: 020 4007000, 0713788787, 0735404245  
E-mail: dg@nacosti.go.ke  
Website: www.nacosti.go.ke

## Appendix I: Letter from Kenyatta University Graduate School



### KENYATTA UNIVERSITY GRADUATE SCHOOL

E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)

Website: [www.ku.ac.ke](http://www.ku.ac.ke)

P.O. Box 43844, 00100

NAIROBI, KENYA

Tel. 020-8704150

**Our Ref:** E55F/20107/2021

**DATE:** 15<sup>th</sup> February 2023

Director General,  
National Commission for Science, Technology and Innovation  
P.O. Box 30623-00100  
**NAIROBI**

Dear Sir/Madam,

**RE: RESEARCH AUTHORIZATION FOR MR. JOEL DENNIS – REG. NO. E55F/20107/2021**

I write to introduce Mr. Joel Dennis who is a Postgraduate Student of this University. He is registered for M.Ed. degree programme in the **Department of Educational Communication and Technology**.

Mr. Joel Dennis intends to conduct research for a M.Ed. Thesis Proposal entitled, **“Role of Jigsaw Cooperative Learning Strategy in Developing Creative Writing Skills Among Secondary Schools Students in Machakos County, Kenya.”**

Any assistance given will be highly appreciated.

Yours faithfully,

  
**PROF. ELISHIBA KIMANI**  
**EXECUTIVE DEAN, GRADUATE SCHOOL**



## Appendix J: Letter from Machakos Education Office

**MINISTRY OF EDUCATION  
DEPARTMENT OF EARLY LEARNING & BASIC EDUCATION**

Telegram(SCHOOLING) Machakos  
Telephone Machakos (044)21800  
Fax: Machakos (044) 20646  
Email: officemachakos@yahoo.com  
When replying please quote



**SUB-COUNTY EDUCATION OFFICE  
P.O Box 28-90100  
MACHAKOS**

**Our Ref: MKS/ED/RESEARCH/VOL.1/17**

2<sup>nd</sup> March 2023

ALL PRINCIPALS,  
**MACHAKOS SUB- COUNTY.**

**RE: RESEARCH AUTHORIZATION FOR MR. JOEL DENNIS**

The above mentioned person is a student in Kenyatta University pursuing Masters of Education in Language Education.

This office authorizes him to conduct research of M.Ed Thesis Proposal entitled , “Role of Jigsaw Cooperative Learning Strategy in Developing Creative Writing Skills among Secondary School students in Machakos County Kenya” in your institution.

Kindly accord him the necessary assistance.



**SIMON K. MUTEKI  
SUB-COUNTY DIRECTOR OF EDUCATION  
MACHAKOS.**

## Appendix K: Letter of Approval of Research Proposal



### KENYATTA UNIVERSITY GRADUATE SCHOOL

E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)

P.O. Box 43844, 00100  
NAIROBI, KENYA  
Tel. 020-3704150

Website: [www.ku.ac.ke](http://www.ku.ac.ke)

#### Internal Memo

**FROM:** Executive Dean, Graduate School      **DATE:** 15<sup>th</sup> February 2023  
**TO:** Joel T. Dennis      **REF:** E55F/20107/2021  
Ed. Comm.Tech

**SUBJECT: APPROVAL OF RESEARCH PROPOSAL**

=====  
This is to inform you that Graduate School Board, at its meeting on 15<sup>th</sup> February 2023, approved your Research Proposal for the M.Ed. Degree entitled, "Role of Jigsaw Cooperative Learning Strategy in Developing Creative Writing Skills Among Secondary Schools Students in Machakos County, Kenya."

You may now proceed with your Data collection, subject to clearance with the Director General, National Commission for Science, Technology & Innovation and Ethics Review Committee, Kenyatta University.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking and Progress Report Forms per semester. The Forms are available at the University's Website under Graduate School webpage downloads.

Also, please ensure that you publish article(s) from your thesis before submitting it to Graduate School for examination as per the Commission for University Education and Kenyatta University guidelines.

Thank you.

  
JOHN OBONGI

**FOR: EXECUTIVE DEAN, GRADUATE SCHOOL**

CC. Chairman, Ed. Comm.Tech

**Supervisors:**

1. Dr. Aldheid Bwire  
C/o Ed. Comm.Tech  
**Kenyatta University**
2. Dr. Harrison Mulwa  
C/o Ed. Comm.Tech  
**Kenyatta University**

32/4/cm/1

## Appendix L: Map of Machakos County



Source: [www.maphill.com](http://www.maphill.com)