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Learning Resource Material for Recreatory Reading and the Cognitive Thinking Skills of Grade 7 Students

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ABSTRACT: Effective learning materials can mean the difference between students' difficulties, learning independence, and improved academic achievement in the teaching and learning process. Thus, this study is designed to bridge the gap between the learning process and the appropriate learning material for English use. Specifically, this study on Learning Resource Material for Recreatory Reading and the Cognitive Thinking Skills of Grade 7 Students aimed to determine the effectiveness of the developed learning resource material in teaching English in developing the cognitive thinking skills of the learners. The study used an experimental research design utilizing the pretest and posttest assessment as the main instruments, which led to achieving its objectives with 38 Grade 7 students as respondents of the school year 2023-2024. The result of the study revealed that the use of learning resource material for recreatory reading is highly effective in improving the students' cognitive thinking skills. The pretest results indicate that the student's cognitive thinking skills are from developing proficiency. However, posttest results in cognitive thinking skills show that the students achieved advanced and proficient levels, indicating mastery of the competencies. Further, findings resulted in a significant difference and an increase in the cognitive thinking skills assessment on remembering, understanding, applying, analyzing, evaluating, and creating, which implies that the use of learning resource material for recreational reading helped the students to develop cognitive thinking skills. This result suggests incorporating learning resource material into students' recreational reading improved their cognitive thinking skills.

KEYWORDS - Cognitive Thinking Skills, Learning Resource Material, Recreatory Reading,

INTRODUCTION

The Department of Education (DepEd) is continuously fulfilling its mandate to produce productive and responsible individuals who possess fundamental competencies and skills for lifelong learning. Meanwhile, the goal of the new curriculum is to enhance Filipinos' knowledge, skills, attitudes, and values so that they can live productive lives and lead successful lives (DepEd Mandates).

The educational system is often regarded as the most efficient and effective catalyst for a country's development, primarily cultivating globally competitive individuals, hence stimulating innovation and progress. Consequently, curriculum development and education professionals persistently implement diverse innovations to realize these educational objectives, effectively responding to the dynamic global landscape and timely challenges.

Article 3 of the Professional Code of Ethics for Teachers states that the teacher plays a great part in mentoring and developing the youth. One of these is providing appropriate and suitable materials to master the learning competencies.

Teachers need help addressing the needs of various types of learners through their approach to instruction. Teachers' roles extend beyond simply transmitting information and play a vital role in developing students' cognitive thinking skills. Furthermore, in English teaching, teachers face dynamic challenges in cultivating linguistic proficiency and developing students' cognitive thinking skills within the context of the English topic. Thus, teachers seek explicitly developed materials to satisfy students' difficulties where they can and extend assistance to enable them to work to their appropriate level. Teachers need research-based learning material with comprehensive evaluations, engaging exercises, and activities to ensure the quality of the teaching-learning process. Effective learning resources can make the difference between a student's struggle and academic success.

However, in implementing the K-12 curriculum, students have a great transition in the learning process. The unavailability of learning material is one of the perennial problems encountered in teaching and learning (Legaspi, 2014). In addition, inadequate teaching and

learning resources impacted the teaching and learning process (Venuste, 2021). Poor academic performance yielded poor teaching due to a gap between materials used in teaching and evaluation instruments, especially those used for international purposes (Fontalvo, 2015). Also, the 2018 Program for International Student Assessment (PISA, 2018) revealed that students lowered their test scores in reading, science, and math.

In connection, Kaphur (2019) explained that developing teaching-learning materials is one of the major aspects that promote student learning and help achieve academic goals and objectives. Further, TLMs substantially contribute to bringing relevance and quality to the learning environment (Unit 7: Teaching Learning Materials, n.d.). Hence, with a new educational framework, there has been notable progress in the development of materials; therefore, teachers must possess the necessary knowledge and information about teaching-learning materials. Likewise, teachers must prioritize improving teaching and learning resources and ensure that implementing learning objectives effectively assists students in achieving their goals.

Moreover, learning material constitutes supplementary educational material strategically developed to enhance student's academic experiences and provide intellectual challenges. The intention is to enhance, not replace, the core curriculum. Learning to read and write and add and subtract is no longer confined to education. Instead, the focus has shifted towards incorporating engaging activities that mentally and physically stimulate students. The learning paradigm has evolved beyond the traditional teacher-centered lecture format, acknowledging students as active participants in their education. Learning materials are an intentional approach to fostering active participation and creating a more dynamic and participatory learning environmentAccording to Darrel and Oberholzer (2005), as cited by Mohammed and Amponsah (2018), reading is the cornerstone of success in education today. Reading and understanding are essential skills for developing and achieving academic success. Understanding what you read is more important than identifying written or printed words. Reading is perceived as one of the most helpful and enriching habits because it is not just an entertainment or hobby that gives pleasure and satisfaction. Still, it is an educational activity that builds a better understanding and brings boundless life-transforming ideas and knowledge.

Furthermore, Litscape (2002), as cited in the study by Dalila (2018), stated that recreational reading includes cognitive effects such as enhancing skill and strategy, developing fluency, and expanding vocabulary. Hence, integrating learning material into recreational reading can significantly enhance students' cognitive thinking skills. More so, developing learning material specifically designed for recreatory reading improves students' academic performance and enhances their cognitive thinking skills, promoting critical analysis, creativity, and effective problem-solving abilities and obtaining meaningful and desirable knowledge.

Developing cognitive skills is the ability to facilitate thinking, reading, and learning, as well as students' information, reasoning, and responses. Cognitive skills contribute to improving academic performance. Learning is the result of connecting new experiences with existing information and integrating newly acquired knowledge with previous experiences.

According to Askar & Altun (2009), as cited by Sundar (2012), cognitive skills are defined as mental skills used to acquire knowledge. Moreover, cognitive skills are a determining factor in an individual's learning ability. Cognitive skills enable students to create their own design concepts, which support depth thinking skills by representing knowledge. Learners understand that they can acquire the knowledge they desire in ways that they can initiate, manage, and execute on their own and that such knowledge is empowering. Thus, these components play a vital role in the teaching-learning domain.

One of the most common concerns among educators is students' lack of cognitive or brain-based abilities to handle a curriculum and instruction, which is brought about by the current educational system. The new mode of learning delivery seems unsatisfactory for students needing help understanding the lesson, relying only on the provided learning modules to attain the target competencies and desired outcomes indicated in the curriculum. As a result, the learners' ability to understand the lesson is at risk due to the current situation

Likewise, the field of English encounters difficulties in the teaching and learning process, which results in low academic performance among students. Some encounter problems with analyzing the learning content, accomplishing the specific tasks, and attaining the learning objectives.

As a result of this difficulty, especially in Grade 7, the researcher tends to develop a Learning Resource Material for Recreatory Reading that is parallel to the interests and needs of the students. The focus of this study is to align the content of the developed material to the nature and learning environment of the students. Further, it aimed to determine its effectiveness in developing cognitive thinking skills. Furthermore, the researcher knows that the developed Learning Resource Material will help improve the students' cognitive learning and provide a unique learning experience by delivering instructions.

OBJECTIVES OF THE STUDY

This study aimed to determine the effectiveness of the developed Learning Resource Material for Recreatory Reading in teaching English and developing cognitive thinking skills among Grade 7 students of Callejon National High School. Specifically, it sought answers to

the following questions: What are the mean pretest scores on cognitive thinking skills of the student respondents in terms of:1.1 Remembering; 1.2 Understanding; 1.3 Applying; 1.4 Analyzing; 1.5 Evaluating; and 1.6 Creating? 2. What are the mean posttest scores on cognitive thinking skills of the student respondents using the developed Learning Resource Material for Recreatory Reading in terms of :2.1 Remembering; 2.2 Understanding; 2.3 Applying; 2.4 Analyzing; 2.5 Evaluating; and 2.6 Creating? 3. Is there a significant difference between the mean pretest and posttest scores on cognitive thinking skills assessments of the student respondents?

METHODOLOGY

Research Design

The study employed experimental research methods to determine the effectiveness of using Learning Resource Material for Recreatory Reading in developing cognitive thinking skills among Grade 7 students. This research approach focuses on the effectiveness of using learning resource material. Specifically, this research utilized the correlational research design. A correlational study design evaluates the connection between two factors without requiring the specialist to control one (McCombes, 2020). This study used this design to see if there is a connection between the student respondents' cognitive thinking skills. The respondents were selected based on the common characteristics of the overall population.

Sampling Technique

This study used cluster sampling to choose one section as respondents out of three sections of Grade 7. The researcher chose Callejon National High School, Callejon, San Antonio, Quezon, Junior High School Students, School Year 2023-2024, as study respondents, specifically Grade 7 students. Out of the total population of 112 Grade 7 students, the researcher came up with 38 respondents, 19 males and 19 females. The researcher utilized this group of respondents for the study since the students' skills and nature are identical at this grade level. Furthermore, the researcher was aware that the factors she chose to analyze were the same for both groups.

Research Procedure

The researcher observed the following procedures in conducting the study.

Conceptualization and Preparation of the Proposal. The researcher conceptualized and completed the requisite preliminary procedures to perform the analysis. Through a letter detailing the study's intent and goals, the researcher sought permission from the school principal to conduct the study; once accepted, the researcher prepared the necessary elements for conducting the study.

Formulation and Validation. The first procedure dealt with the formulation and validation of the research instruments used in the study, which included learning resource material, pretest and post-tests, and lesson exemplars. To ensure that the study's target objective aligned with the curriculum's goal, alignment with the most essential learning competencies and content of DepEd's self-learning module was considered when designing the learning resource material. Likewise, in designing the developed Learning Resource Material, the researcher considered the nature and learning environment of the students. Hence, the developed learning resource material features were patterned to the ICARE Model, which is parallel to the student's learning needs. Similarly, equal weight and allocation were assigned to remembering, understanding, applying, analyzing, evaluating, and creating skills in developing the pre-test and post-test. In addition, English teachers and experts were asked to evaluate and validate each instrument. The validators were given a written validation tool as a guide in evaluation. The researcher considered comments, suggestions, and recommendations for improving and revising the learning resource. After revision and necessary improvement, the panel experts checked and validated the instruments for instrumentation and implementation.

Ethical Considerations. The researcher requested permission to conduct a study, permission for English teachers to evaluate the Learning Resource Material for Recreatory Reading in English 7, permission to use student participation in the pretest and posttest, and permission to pilot test the developed Learning Resource Material in a letter addressed to the principal of Callejon National High School. The respondents had written consent forms of participation, and their identities were kept confidential. Test protocol results were encoded without the names of the respondents. Beforehand, they were given an orientation on the purposes of the study. The instrument was personally distributed to the participants upon approval to answer their questions. A letter of request was secured, and the participants' voluntary participation was obtained.

Implementation of the Learning Resource Material for Recreatory Reading. The following procedure dealt with the study's instrument implementation. First, the researcher gave the respondents a pre-assessment test to see if they had any prior awareness of the contents of the learning resource material. After administering the pretest, the researcher used the learning resource material for four consecutive weeks to discuss the lessons in English 7. The learning resource material was only intended for the Quarter 3 lessons. Understanding literature, making simple inferences and predictions, determining conflicts presented in the literary texts, and the tone, mood, and purpose of the authors in writing were the topics covered. During the implementation, the developed learning resource material was used in the lesson as part of the students' recreatory reading. In addition, Learning Resource Material was integrated into the Grade 7

curriculum, aligning with the subject content to foster interdisciplinary learning. Similarly, it included the most essential learning competencies and specific lesson objectives, as presented in the Introduction phase. Moreover, the researcher incorporated Recreatory Reading to the students through a learning session by reading researcher-made stories or selections of students' choice, fostering a sense of recreation over students' learning through various learning activities. Likewise, the lessons and learning activities aided students' learning by connecting prior knowledge to new existing knowledge presented in the Connect phase. The next learning activities, presented in the Application phase, allow the students to understand, comprehend, and master the lesson by further integrating the stories and activities to stretch students' cognitive thinking skills to real-life application. Various activities were also provided so that learning activity that allowed students to reflect on their learning and apply it in a real-world scenario. Therefore, by integrating Recreatory Reading, this Learning Resource Material captured students' interests, making the learning process more enjoyable and positively influencing students' academic and cognitive excellence. Lastly, a written posttest was given at the end to evaluate the effectiveness of the learning resource material.

Evaluation and Data Presentation. The next procedure involved evaluating the results. The researcher measured the learners' improvement in cognitive thinking skills, including remembering, understanding, applying, analyzing, evaluating, and creating, through the post-test assessment test. Lastly, the data gathered were encoded, tallied, classified, computed, analyzed, and interpreted statistically.

Statistical Treatment

To obtain accurate data in response to the specific question, the researcher used the following statistical techniques to arrive at the correct data interpretation and analysis.

Frequency and percentage were utilized to assess the cognitive thinking skills among Grade 7 students in the pretest and posttest assessment using the developed Learning Resource Material.

The mean and standard deviation were employed to determine the impact of the developed Learning Resource Material for Recreatory Reading and the students' cognitive thinking skills.

A Wilcoxon test was used to examine whether there is a significant difference in student respondents' pretest and post-test scores on cognitive thinking skills.

RESULTS AND DISCUSSION

Table 1. Pretest and Posttest Scores on Cognitive Thinking Skills Assessment of the Student Respondents in Terms of Remembering

Scores	Pretest		Post	est	Verbel Interpretation	
Scores	Frequency	Percent	Frequency	Percent	Verbal Interpretation	
4-5			33	86.6	Advanced	
3	7	18.4	5	13.2	Proficient	
2	14	36.8	-	200 A	Approaching Proficiency	
1	10	25.3			Developing	
0	7	18.4			Beginning	
Total	38	100.0	38	100.0	1733 B)	

Table 1 shows the cognitive thinking skills assessment of Grade 7 students regarding remembering.

Based on the pretest assessment shows that most of the students were approaching proficiency and developing levels. Hence, most of the students had only basic and limited knowledge of the lesson about literature, predictions, conflicts, tone, mood, and purpose of the authors in writing, implying that they need to familiarize themselves with the topics to answer each question accurately. The data reveals that most students' pre-test scores in remembering was 2 points, with the highest frequency of 14 being 36.8 % of all respondents. There is also a frequency of 10 in the developing level, representing 26.3% of the respondents. This signifies that before implementing the learning resource material for recreatory reading, students have limited knowledge of retrieving relevant concepts and ideas on various topics to obtain accurate and correct answers. This demonstrates that students' knowledge is insufficient to recall each statement and respond correctly to each question. Additionally, 18.4% scored 0, indicating a beginning level of proficiency. These respondents need to gain basic knowledge of various topics and display adequate ideas and concepts to gain the targeted learning competencies, requiring specific assistance and instructional learning materials to be used.

On the other hand, it can be seen that after implementing the learning resource material for recreatory reading, most of the students in the class got a score of 4-5, interpreted as advanced, and five students fell in the proficient level. This result implies that after utilizing the learning resource material, most students could remember and recall basic facts in each question to arrive at the correct answer. It

also inferred that the student's cognitive skills, specifically in the remembering stage, were revealed through the posttest, with the majority of students demonstrating mastery of the important concepts of the lesson in such a way that they were able to remember and recall the provided question and provide the proper answers in each question. Furthermore, according to Huitt 2004, cited in Anees 2017, the easiest level of thinking is remembering or knowledge, which often involves recalling facts, explaining concepts, or solving problems using learned procedures. Similarly, teachers find it easy to construct and evaluate as it is more subjective and measurable than higher-level cognitive skills. In connection with the findings, the student's experience in using and understanding the lessons provided in the learning resource material assisted them with retrieving and recalling relevant knowledge of the lesson, which led them to achieve a higher result in their posttest in terms of remembering. According to Toralba (2014), the learning module as instructional resource material enables learners to manage their own learning pace based on their ability to complete the lesson. The module includes instructional elements such as defined objectives, topics, teaching-learning activities, and evaluation using a criterion-referenced measure. The lessons in the learning resource material allowed students to study and learn independently. Thus, utilizing the learning material assisted students in recalling facts and recognizing the lesson provided, which led to a higher post-test score.

Table 2. Pretest and Posttest Scores on Cognitive Thinking Skills Assessment of the Student- Respondents in Terms of Understanding

Scores	Pretest		Post	est	Verbal Interpretation	
Scores	Frequency	Percent	Frequency	Percent	verbal interpretation	
4-5	2	5.3	25	65.8	Advanced	
3	8	21.1	13	34.2	Proficient	
2	8	21.1	-		Approaching Proficiency	
1	14	36.8			Developing	
0	6	15.8			Beginning	
Total	38	100.0	38	100.0		

Legend: 4-5- Advanced, 3- Proficient, 2- Approaching Proficiency, 1- Developing, 0- Beginning

Table 2 depicts the respondents' cognitive thinking skills assessment performance regarding understanding during the pre-test and post-test.

As reflected, only 2 out of 38 respondents scored 4-5. This shows that only 5.3% of the total number of respondents had a better cognitive skills performance in terms of understanding. Further, scores of 2 and 3 for proficient and approaching proficiency remarks were obtained by 8 respondents, corresponding to 21.1% of their total number. Moreover, 14 students got a score of 1, which implies that in terms of understanding skills, 36.8% of the students are in the developing stage. Lastly, the pretest score shows that 6 out of 38 respondents got a score of 0. Students' understanding skills were assessed by responding to pre-assessment questions requiring them to reconstruct information using their statements, interpret knowledge into new contexts, and compare and differentiate information and concepts.

According to Bloom (1956), this level is concerned with understanding the significance of information and the ability to analyze, infer, group, and explain. The pretest findings demonstrated that the student's understanding skills before utilizing the learning resource material were at a developing level. This suggests that students' ability to compare and differentiate concepts could improve. Students need help understanding and interpreting topics and identifying the differences between concepts. Therefore, teachers must develop students' comprehension skills to increase their cognitive thinking abilities.

Moreover, after utilizing learning resource material for recreatory reading, most students are from proficient to advanced levels. Thus, the significant increase in the number and percentage of students categorized as advanced level from the pretest percentage of 5.3% to the posttest percentage of 65.8% indicates substantial improvement in cognitive thinking skills regarding understanding among the respondents. This improvement suggests the effectiveness of the learning resource material implemented between the two assessments. Furthermore, no one appears in the approaching proficiency, developing, and beginning level on the results of the test assessment. Thus, the result inferred that most of the students, after utilizing the learning resource material, had effectively promoted a higher cognitive level in terms of understanding English topics.

Moreover, students' understanding and memory of concepts are improved by active teaching and learning, which helps them build problem-solving skills and critical thinking (Education, 2011). However, the study by Rosa Cossa & Alexandre Uamusse (2015), suggested that to help students distinguish between facts and concepts, students can conduct necessary experiments facilitated by the use of laboratory equipment and learning materials, which are found to be in short supply in schools. With this, the developed learning resource material for recreatory reading contributed to the needed instructional material in the teaching-learning process. It helped students bridge the gaps in understanding complex ideas and concepts, improving their cognitive thinking skills.

Table 3. Pretest and Posttest Scores on Cognitive Thinking Skills Assessment of the Student- Respondents in Terms of Applying

Scores	Pretest		Postt	est	Verkel Interpretation	
	Frequency	Percent	Frequency	Percent	Verbal Interpretation	
4-5	3	7.9	22	57.9	Advanced	
3	14	35.8	14	35.8	Proficient	
2	11	28.9	2	5,3	Approaching Proficiency	
1	3	7.9			Developing	
0	7	18.4		-	Beginning	
Total	38	100.0	38	100.0		

Legend: 4-5- Advanced, 3- Proficient, 2- Approaching Pitificiency, 1- Developing, 0- Beginning

Table 3 demonstrates learners' performances in applying skills during the pre-test and post-test. By definition, applying skill refers to the ability of the learner to apply and use a procedure in a given situation (Krathwohl, 2002, p.215).

On the pretest result, the table illustrates that the majority of the students ranged from proficient to approaching proficiency level. These results depicted that the majority of the students possessed the capability of applying the concepts in the given statements to solve the given situation. Furthermore, 3 students demonstrated advanced in this skill which resulted in 7.9% of the total number of respondents. This implies that this particular student has a score of 4-5. This result shows that they have the potential to develop more of their applying skills.

On the other hand, the result indicates that 3 out of 38 respondents got a score of 1, or 7.9% of them belong to the developing level. Lastly, it is observable that under the score of 0, there is 18.4% or 7 of the 38 respondents belong to the beginning level in applying skill. This can be projected that the respondents need more knowledge of applying the given situations and concepts. Likewise, students need more knowledge in applying and relating the situations to solve the given situations and achieve the targeted competencies. It also implies that most of the students were struggling to provide any alternative or suitable solutions to the situation.

However, it can be seen in the table that the posttest assessment result after exposing the students to the learning resource material for recreatory reading expresses a high increase of 57.9% in the advanced level in terms of applying. This explains that more than half of the respondents have a score of 4-5 or a ratio of 22 to 38 and have advanced knowledge in solving and applying the concepts and topics. In addition, the ratio of 14 out of 38 is also a good impression that the next 36.8% of the respondents are classified as proficient as having a score of 3. The remaining 5.3% which corresponds to only 2 students gained a score of 2. It is quite a good revelation that these students' remarks are approaching proficiency which implies that they have an average rating in this skill. However, there were no students categorized in developing and beginning levels in the posttest assessment. This suggests that the learning resource material for recreatory reading enabled students to acquire improvement in relating situations to topics such as conflicts, predictions, and the author's tone, mood, and goal, allowing them to achieve this level of proficiency.

The learning resource material developed through this study assists students in developing connections between ideas by utilizing their prior knowledge and experiences and applying them to practice. The findings clearly emphasized fostering cognitive skills that enable students to apply the knowledge gained from the lesson effectively. This application of knowledge is particularly valuable as it allows students to establish meaningful connections between their learning and real-life circumstances. In addition, by applying the concepts learned and incorporating actual situations into the curriculum, the educational materials taught in schools can be effectively instilled in the student's memory, resulting in long-lasting retention (Ritonga, 2020). This demonstrates that students' reading engagement and learning activities contribute to developing their ability to apply the concepts they have acquired.

Table 4. Pretest and Posttest Scores on Co	gnitive Thinking Skills Assessment o	of the Student- Respondents in Terms of Analyzing

Scores	Pretest		Postt	est	Verbal Interpretation
Scores	Frequency	Percent	Frequency	Percent	verbal interpretation
4-5	3	7.9	17	44.8	Advanced
3	10	26.3	18	47.4	Proficient
2	11	28.9	3	7.9	Approaching Proficiency
1	8	21.1	-		Developing
0	6	15.8	-		Beginning
Total	38	100.0	38	100.0	
amont A	E Advanced 3	Declaring	2 Annonaching	. Chief Kashington	1 Developing / Decipping

Legend: 4-5- Advanced, 3- Proficient, 2- Approaching Proficiency, 1- Developing, 0- Beginning

Table 4 illustrates learners' performances in analyzing skills during the pre-test and post-test. By definition, analyzing skill refers to the ability of the learner to differentiate, organize or attribute material (Krathwohl, 2002, p.215).

As presented in the table, most of the students in analyzing skills falls under proficient to approaching proficiency level and some learners met the developing and beginning level with 14 learners respectively in the pretest result. It only means that most of the learners have least learned in the analyzing skills and some slightly and moderately learned the skill.

On the other hand, the post-test result manifests an advanced level of the students in analyzing skills after implementing the learning resource material for recreatory reading. As it reveals, posttest assessment increases from 7.9% to 44.8%% at the advanced level which is shown in Table 4. This explains that 17 out of 38 respondents scored 4-5. It can be inferred that in the post-test, these respondents have sufficient knowledge to analyze the situation, use logical reasoning, and explain, and organize the topics and lessons. On the proficient level, the post-test result illustrates an increase in the number of respondents from 10 to 18 which corresponds to the same increase in the percentage of respondents from 26.3% to 47.4%. Likewise, it can be inferred that their ability to analyze their ideas is more than enough to compare with that of their performance in the pre-test.

Table 5. Pretest and Posttest Scores on Cognitive Thinking Skills Assessment of the Student- Respondents in Terms of Evaluating

· · · · · ·	Prete	est	Postt	est	March at Independenting	
Scores	Frequency	Percent	Frequency	Percent	Verbal Interpretation	
4-5		-	14	36.9	Advanced	
3	4	10.5	17	44.7	Proficient	
2	12	31.6	7	18.4	Approaching Proficiency	
1	13	34.2			Developing	
0	9	23.7	-	-	Beginning	
Total	38	100.0	38	100.0		

Legend: 4-5- Advanced, 3-- Proficient, 2- Approaching Proficiency, 1- Developing, 0- Beginning

Table 5 shows the cognitive thinking skills assessment of Grade 7 students in terms of evaluating skills during the pre-test and post-test. By definition, evaluating skill refers to the ability of the learner to make judgments based on criteria or standards (Krathwohl, 2002, p.215)

As a result, no one performs exceptionally well in terms of evaluating during the pretest. Students' evaluation skills were assessed by asking questions in the pre-assessment test that challenged students to evaluate the provided statements in contexts. Most of the students struggled and failed to evaluate presented situations, including conflicts, and identify the writers' purpose and intents in writing. The findings of the pretest demonstrated that students' evaluation skills before employing the learning resource material are in approaching proficiency to the developing level. This indicates that students' ability to evaluate the information that is shown in the table is low. This result find support from the study by Sulisworo (2017) claims that the abilities to analyze, evaluate, synthesize, and generate ideas are considered to have a higher level in Bloom's Taxonomy Skills than the ability to memorize facts and concepts.

However, the table illustrates the distribution of post-test scores in evaluating skills among students. The proficient level with score of 3 had the highest frequency count of 17 or 44.7% during the posttest. It was followed with the advanced level ranged the scores of 4-5 had a frequency count of 14 or 36.9%. Furthermore, a few students met the approaching proficiency in the evaluating stage of cognitive thinking skills.

Table 6. Pretest and Posttest Scores on Cognitive Thinking Skills Assessment of the Student- Respondents in Terms of Creating

Scores	Pretest		Post	est	Verbal Interpretation
	Frequency	Percent	Frequency	Percent	verbarinterpretation
4-5	17777793577777777 27		9	23.7	Advanced
3	4	10.5	20	52.6	Proficient
2	6	15.8	9	23.7	Approaching Proficiency
1	18	47.4	1.7	17	Developing
0	10	25.3			Beginning
Total	38	100.0	38	100.0	

Legend: 4-5- Advanced, 3- Proficient, 2- Approaching Proficiency, 1- Developing, 0- Beginning

Table 6 shows the cognitive thinking skills assessment of Grade 7 students in terms of creating skills during the pre-test and post-test. By definition, creating skill refers to the ability of the learner to combine elements to form an engaging, meaningful whole (Krathwohl, 2002, p. 215). (Krathwohl, 2002, p.215).

It can be gleaned in the table that most students demonstrated lower levels of proficiency, with 47.4% classified as developing and 26.3% at the beginning stage in the pretest result. This initial assessment implicates areas where students require improvement in their cognitive abilities, particularly in creating skills. Thus, among the domains of cognitive, creating skill scored very low, suggesting that the students have difficulties of generating new ideas through applying, analyzing, and synthesizing, information from actual observations. In connection, Thomas (2011) explains that cognitive thinking is a crucial skill to synthesize concepts, explain reasons, and solve problems.

Likewise, a noteworthy shift in proficiency level is observed. The posttest results reveal a significant increase in students categorized as proficient, rising from 10.5% to 52.6%. This significant improvement suggests that recreatory reading through learning resource material has improved students' cognitive thinking skills. Furthermore, the percentage of students at the advanced level increased to 23.7% after the utilization, indicating that a substantial percentage of the population improved their creating skill of cognitive.

	Pretest			Posttest				
Cognitive Thinking Skills	Mean	sp	Verbal Interpretation	Mean	SD	Verbal Interpretation	z	Asymp Sig. (2 tailed)
Remembering	1.55	1.01	Developing	4.24	0.68	Advanced	-5.425*	.000
Understanding	1.63	1.15	Developing	3.92	0.78	Proficient	-4.973*	000
Applying	2.08	1.24	Approaching Proficiency	3.66	0.78	Proficient	-4.630*	000
Analyzing	1.89	1.20	Developing	3.50	0.83	Proficient	-4.001*	000
Evaluating	1.29	0.96	Developing	3.24	0.82	Proficient	-6.138*	.000
Creating	1.11	0.92	Developing	3.05	0.80	Proficient	-5.211*	.000
Overall	1.59	0.51	Developing	3.60	0.41	Proficient		

 Table 7. Test of Difference between the Pretest and Posttest on the Dependent Variable

Overall 1.59 0.51 Developing 3.60 0.41 Legend: p<0.05- Significant, p>0.05 Not Significant

Table 7 reveals the test difference between the pretest and posttest scores of the learners in cognitive thinking skills. It can be gleaned from the table that the overall mean score of 1.59 as developing to 3.60 as proficient for cognitive thinking skills increased notably from pretest to posttest, indicating significant improvement across all cognitive stages. The decrease in standard deviation of 0.51 to 0.41 suggests that post-test scores were more tightly clustered around the mean than the pretest, indicating greater consistency in performance. Analyzing the data presented in the table showed that after using the developed learning resource material for recreatory reading, proficiency and mean value increased. This implies that there has been a significant improvement in their cognitive thinking skills. Students achieved an advanced level of remembering from developing and a proficient level in applying from approaching proficiency. Meanwhile, student-respondents reached proficient levels in understanding, analyzing, evaluating, and creating from a developing level, which denotes mastery of the competencies.

The mean pretest score for remembering is 1.55 in the developing level, increased to 4.24 in the advanced level, indicating a substantial improvement in the student's ability to recall information. Like remembering, the mean score for understanding also increased notably from 1.63, or developing, to 3.92, or proficient level. Additionally, the mean score for applying increased substantially from approaching proficiency of 2.08 in the pretest to proficiency of 3.66 in the posttest, indicating improved performance in applying cognitive skills to new situations or contexts. The mean analysis score also increased significantly from 1.89 development to 3.50 proficiency, which enhanced the ability to break down complex information into smaller components to understand the lessons better. Likewise, evaluating the mean score of 1.29 to 3.24 demonstrated an improvement, indicating an improved ability to assess the quality or value of information and concepts. Lastly, the mean score for creating increased significantly from 1.11 to 3.60, indicating enhanced ability to generate new ideas or solutions. However, the standard deviation remained relatively consistent, suggesting similar variability in scores before and after the implementation.

Moreover, the data from Table 7 demonstrates a consistent and significant improvement in students' cognitive thinking skills across various dimensions, such as remembering, understanding, applying, analyzing, evaluating, and creating from the pretest to the posttest. This improvement suggests the effectiveness of the learning resource material for recreatory reading implemented between the assessments in enhancing students' cognitive skills.

The notable increases in mean scores across all cognitive dimensions indicate that students retained and understood information better and demonstrated improved abilities in higher-order cognitive thinking skills such as applying, analyzing, evaluating, and creating. This improved overall cognitive skill is a positive outcome of the developed learning resource material for recreatory reading. It has implications for educational practices that foster deeper understanding and cognitive thinking among learners, as shown by the increase in proficiency and p-value.

The study conducted by Garillos (2012) corroborates the findings of this study regarding the development and validation of a Biology module for second-year high school students. After introducing the instructional material, the results indicate significant improvements in the students' pretest and post-test scores. The instructional materials are a significant educational innovation and teaching method.

Furthermore, the study conducted by Duraippah et al. (2021) supports the study's results on the utilization of instructional materials. The results reveal that using instructional materials for a learning environment develops higher-order cognitive thinking skills. The study's findings encourage teachers to develop instructional materials and incorporate higher-order thinking skills into instruction and learning. Using innovative teaching methods and developing higher-order thinking skills may promote a culture of critical thinking and enhance students' ability to analyze and evaluate information collaboratively, leading to innovative solutions.

The table shows a significant difference between the pretest and posttest scores assessment of the student respondents before and after utilizing the learning resource material for recreatory reading from the reflected significance value of 0.000 in all cognitive thinking skills, which is less than 0.05. It implies a profound and statistically significant impact on all measured cognitive thinking skills in remembering, understanding, applying, analyzing, evaluating, and creating from the pretest to the posttest. The consistently negative Z-scores across all skills indicate performance improvements, with the associated p-values confirming the statistical significance of these improvements. It is not due to chance but is likely due to utilizing Learning Resource Material.

Based on the highly significant results observed in this analysis, it can be concluded that the use of learning resource material for recreatory reading increased the performance of the students in their learning process and helped them to improve cognitive thinking skills such as remembering, understanding, applying, analyzing, evaluating and creating.

This implies that improvement has transpired in the students' cognitive skills performance. The study proved that using Learning Resource Material positively influenced the learning process and provided the students a much higher cognitive thinking skills performance.

The study's results were supported by Dalila's study (2018), which revealed that recreational reading includes cognitive effects such as enhancing skill and strategy, developing fluency, and expanding vocabulary. Hence, integrating learning material into recreational reading can significantly enhance students' cognitive thinking skills. More so, developing learning material specifically designed for recreatory reading improves students' academic performance and enhances their cognitive thinking skills, promoting critical analysis, creativity, and effective problem-solving abilities and obtaining meaningful and desirable knowledge.

Additionally, the result implies that designing learning resource material and instructions to use in the teaching process and learning instructions can promote academic success and the full development of the students. Thus, the study's findings were supported by Rudman (1957), as cited by Dalila (2018), who stated that reading interests often refer to the selection of subject matter or preference for a genre of literature being read. In this context, it implies that when students choose and engage with learning resource materials— such as textbooks, learning modules, or educational content—as part of recreatory reading, it indicates a meaningful integration of academic knowledge into students' interests. It implies that cognitive thinking is developed by aligning academic material with students' reading interests. Likewise, when the students find the material's content engaging and personally relevant, students are more inclined to invest time and effort in understanding and learning resource materials depending on students' reading preferences and leisure reading habits. Likewise, the Royal Society of Chemistry (2023) suggested that an effective teacher must have various educational tools or elements that can be drawn upon and used in the classroom to facilitate students creating knowledge.

In addition, according to the study of Mahri et al. (2020), recreational reading is defined as a voluntary reading of self-selected materials, either for information or pleasure. This notion suggests that when students engage with learning resource material voluntarily and for leisure as motivated by either a desire for knowledge or enjoyment, it can contribute positively to students' cognitive development. Furthermore, the study emphasizes the significance of incorporating recreational reading into educational strategies for cognitive ability development. It suggests that educators might create a more engaging and effective learning environment by encouraging students to use various learning resource materials for independent reading. This strategy encourages academic advancement and fosters a lifetime passion for reading and self-improvement. Likewise, utilizing learning resource material is essential in improving the teaching-learning process and appropriate learning material for students and teacher improvement. These enhanced educational materials make education more engaging, useful, realistic, and desirable. These further enable teachers and students to engage effectively and actively in classroom lessons (Olainka, 2016). Further, learning materials can improve teaching and learning quality. Hence, it allows teachers to engage students by assisting them, giving them ideas, and explaining new concepts through various references and learning materials, resulting in better academic success.

Generally, this study proved that using learning resource material for recreatory reading greatly affects and motivates the acquisition of learning of students. Likewise, the developed learning material was found to be an effective tool for improving the cognitive performance of the learners. Teachers can use the study's findings as a reference in designing learning resource material to foster student learning and actively engage in achieving academic and cognitive objectives. Likewise, to obtain the effectiveness of the learning material, teachers must consider that learners have various needs, interests, levels, and learners' styles of learning.

CONCLUSION

Based on the findings of the study, the conclusion is drawn:

There is a significant difference between the pretest and posttest assessment of the student-respondents in cognitive thinking skills. Therefore, the null hypothesis stating that "there is no significant difference between the pretest and posttest assessment on cognitive thinking skills of the student-respondents" is not sustained.

RECOMMENDATION

Based on the results and conclusions posted in the study, the following recommendations are hereby formulated:

- 1. Since the researcher only had 38 respondents for the study, the researcher suggests that all Grade 7 students in the school will be the respondents for the study to be more reliable.
- 2. Since the study revealed the effectiveness of the Learning Resource Material for Recreatory Reading in improving the students' cognitive thinking skills, it is suggested that the study be conducted at a different grade level.
- 3. The school administrators may support the reproduction of the Learning Resource Material as it can aid in developing the cognitive thinking skills of the students in the school.
- 4. Teachers may provide more relevant, enjoyable, interesting, challenging, yet attainable learning activities and assessments in the learning material with more specific objectives, illustrations, and graphical representations. It may be suggested that teachers develop their learning resource material in their field of specialization to promote and integrate learning so that learners can relate clearly to every lesson phase.
- 5. Future researchers may as well consider using learning resource material and incorporating recreatory reading into their studies to further validate the study's findings.
- 6. Training and seminars on creating instructional materials, workbooks, and modules are recommended to school administrators to train teachers to create instructional materials to help learners improve their cognitive skills.

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