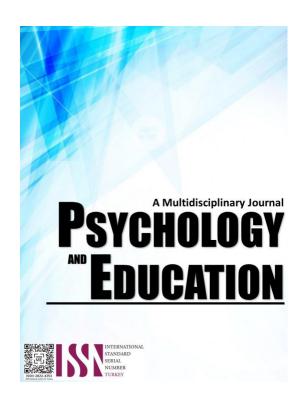
# READING COMPETENCY ENHANCEMENT MATERIAL USING METACOGNITIVE APPROACH FOR GRADE 7 STUDENTS



# PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

2023 Volume: 11 Pages: 182-196

Document ID: 2023PEMJ951 DOI: 10.5281/zenodo.8181392 Manuscript Accepted: 2023-23-7



# Reading Competency Enhancement Material Using Metacognitive Approach for Grade7 Students

Jenny Lou M. Calim\*
For affiliations and correspondence, see the last page.

#### **Abstract**

This study is limited to the development and evaluation of reading competency enhancement material using metacognitive approach for grade 7 students. The data gathering instruments used were a researcher-made diagnostic test in determining the ten (10) least mastered competencies which served as topics to be included for the development of the reading competency enhancement material and an evaluation questionnaire which has six criteria namely; authenticity, clarity, clarity, comprehensibility, meaningfulness and usefulness. For the readability of the literary texts adopted in the reading material, SMOG Readability Formula was used. To determine the reading least mastered competencies as topics for the reading competency enhancement material, frequency, percentage and ranking were used; to determine the evaluations of the respondents, weighted mean was utilized; and to determine the difference between the evaluations of the respondents, the student's t test was used. The salient findings of the study are as follows: The developed reading competency enhancement material for grade 7 students was very acceptable for the junior high school English teachers and expert-respondent. Based on the findings, the following conclusions are drawn: The developed reading competency enhancement material using metacognitive approach is valid for the respondents and is suited to the readability level of the grade 7 students.

**Keywords:** grade 7 students, reading competency, metacognitive approach, enhancement material

# Introduction

Living in 21st century comes with challenges which are brought by the society becomes higher in number more so the educational challenges and concerns that we must immediately address. Thus, capacitating learners by enhancing their reading skills turns out to be a solid solution. DepEd Memorandum no. 173, s. 2019 stipulates that The Department of Education (DepEd) is actively supporting the implementation of the K to 12 Basic Education Program, aiming to create capable and accountable individuals equipped with necessary abilities and knowledge for lifelong learning. As part of this effort, schools nationwide have been assigned the responsibility of assisting learners in enhancing their reading abilities. Despite these endeavors, the current outcomes of national assessments for student learning indicate that these measures alone are insufficient.

Insufficient progress is evident based on the overall results of national assessments. There are numerous early grade learners who continue to struggle in meeting the learning standards for early language, literacy, and numeracy. The low levels of achievement in English, Math, and Science can be attributed to deficiencies in learners' reading comprehension. This suggests that many underperforming students face challenges in understanding Math and Science word problems presented in English, thereby hindering their

ability to showcase their knowledge in these subjects. Both elementary and high school students still lack proficiency in literacy skills, particularly in reading, both in languages and content areas. To address these gaps, it is crucial to strengthen thereading proficiency of every learner and foster a reading culture, as reading is an essential skill across all subject areas.

In consideration with national assessments results which were stated in the memorandum, reading proficiency of learners must be sharpened. Hence, reading enhancement materials should be developed to hone students' reading skills. According to the Program for International Student Assessment (PISA), the Philippines obtained scores of 353 in mathematics, 357 in science, and 340 in reading, all of which fall below the average scores of participating countries in the Organisation for Economic Co-operation and Development (OECD). These results indicate that the Philippines is lagging behind, particularly in terms of reading proficiency. The PISA outcomes also reflect the learners' performance in the National Achievement Test, further emphasizing the need for urgent action to address the issues and gaps in achieving quality education in the country. Consequently, the Department of Education (DepEd) acknowledges the importance of prioritizing the development of reading materials to support the learning process. The creation of more reading materials would greatly benefit to 12 learners and contribute to improving their educational experience.

Jenny Lou M. Calim



In Paez (2022) stated that as the as the Philippines gets ready to start classes, the World Bank informs us that 9 out of 10 kids there are not reading proficient by the time they reach the end of elementary school. The paper, titled "The State of Global Learning Poverty: 2022 Update," sparked a frenzy in numerous internet communities. And with good reason. Even before the Covid-19 outbreak, low- and middle-income countries were experiencing a learning crisis. More than two years of distance learning in the Philippines deteriorated the already poor quality of the public education system.De Vera (2022) revealed that according to a report by the United Nations Children's Fund (Unicef), less than 15% of schoolchildren in the Philippines, or roughly three out of every twenty, are able to read simple texts. This is largely because the country's schools have been closed for the longest period of time-more than 70 weeks as of the middle of February—due to the COVID-19 pandemic.

The new Unicef evaluation equates to a learning poverty of more over 85%, which is marginally better than the World Bank estimate of as high as 90% in November of last year. Learning poverty is defined by the World Bank as the fraction of 10-year-olds who cannot read or understand a simple tale.D' Souza on (2021) states that as pupils return to school, it is critical to evaluate the impact of the pandemic on students who might not have developed their reading skills as predicted. This is so because the development of early literacy skills—the ability to move from learning to read to reading to learn—lays the groundwork for future academic achievement. According to studies, many kids have lacked these key skills. In a study comparing information from fall 2020 with fall 2019, the university-based research organization PACE discovered that reading fluency in second and third graders slipped around 30% behind the typical norm.

In addition, being a Grade 7 English teacher for six (6) years the researcher got to witness reading challenges among the students. That being said, the researcher would like to be a catalyst of change through the reading enhancement material that the researcher had developed. Laying the stated facts into consideration; it is highly evident that there should be substantial revitalization when it comes to reading. Wherefore, this Study aims to develop and evaluate a reading competency enhancement material for Grade 7 students.

# **Research Questions**

This study aimed to develop and evaluate reading

competency enhancement material in Philippine Literature for Grade 7 students of Kasiglahan Village National High School, District of Rodriguez, Division of Rizal during the school year 2022-2023. More specifically, it sought answers to the following questions:

- 1. What were the ten (10) least mastered reading competencies in English 7 based on the diagnostic test results that were used in developing a Reading Competency Enhancement Material?
- 2. How did the Junior High School English teachers and the expert respondents evaluate the developed instructional material based on the following criteria?
  - 2.1Authenticity
  - 2.2 Appropriateness
  - 2.3 Clarity
  - 2.4 Comprehensibility
- 2.5 Meaningfulness
- 2.6 Usefulness
- 3. Was there any significant difference between the evaluation of the two groups of respondents on the developed reading enhancement material based on the enumerated criteria?
- 4. What was the reading readability level of the texts used in the developed reading competency enhancement material using SMOG formula?
- 5. What comments and suggestions did the Junior High School English teachers, and the experts offer to improve the developed reading enhancement material?

# **Literature Review**

# **Self-Concept and Academic Performance**

Manlapig (2021) mentioned in his article that comprehension is more important than literacy as the main problem. She backed up her allegation with quotes from Frederick S. Perez, president of the Reading Association of the Philippines (RAP). The NCAT and NEAT statistics demonstrate that [our pupils] actually receive low marks on standardized tests, according to Perez. This is a result of the inadequate reading and numeracy. Perez emphasized that the sample texts in the Program for International Student Assessment (PISA) test results, which show that more than 80% of Filipino students around the age of fifteen did not achieve the minimum level of proficiency in reading, are mostly expository texts and call for the processing of information, including information gathering, fact checking and crosschecking, and graph interpretation. In order to help students visualize, synthesize, and draw connections to and beyond the content they are taught, the emphasis

Jenny Lou M. Calim 183/196



of learning should change

According to Bekhta (2018), there are different definitions of readability, ranging from legibility, comprehensibility, and clarity to a more subjective assessment of being simple, entertaining, or engaging to read, written in a lively or interesting style. To ensure that the generated material will be used by the intended learners, the factors indicated to achieve readability must be taken into account. A book won't be necessary unless students are using it to improve their reading abilities.Based on "New reading strategies in the twenty-first century: Transmedia storytelling via app in Marisha Pessl's Night Film" by Weigel (20) remarkably, many people still favor printed books, even though buying e- books online with just one click is actually much easier which tells the researcher that even e-book and stuffs that are posted online are the trends nowadays for they are much accessible; it is still good idea to developed a physical book of instructional material to aid teaching learning process in reading.

As stated by Rutzler (2020) on "Importance of Reading Comprehension" parents make the mistake of assuming Reading Comprehension only influences English / Language Arts. However, comprehension is crucial for basic survival in the education system. Through passages and word problems, the requirement to comprehend what you read is omnipresent in every student's life, from Math Class to History. Without comprehension concepts in other subject areas cannot be understood and absorb by learners which is practically the reason why the said writer gave highlight on how crucial reading is in our education system.

Moreover Gilbas (2022) said on "Reading Enhancement Advocacy in Dep Ed (R.E.A.D): Teachers' Life- Changing Task" that reading is one of the most essential factors in learning. It is also one of the four basic skills which needs to be developed in every learner. Through the years, several programs were launched to cater the reading needs of the learners. They include, Every Child a Reader Program (ECARP), an institutionalized program by DepEd which enforce the policy that every child a reader by Grade 3; Philippine Informal Reading Inventory (PhilIRI), a national assessment tool to determine the reading level of pupils from Grades I-VI; Bright Minds Read (BMR)Program, a regional initiative fund by MCDonald's House of Charities focused on Teaching Beginning Reading in accordance with ECARP; Read-A-Thon, a contest for the best storyteller, reader, and interpreter of oral reading; and Reading Recovery

Program (RRP), a central office-funded program to identify literacy issues early on before they start to impede a child's academic progress.

The article of Malipot (2018) stressed out that the Department of Education (DepEd) advised educators to keep making efforts to instill the value of education in their students and learners. Angelika Jabines, Senior Education Program Specialist from the DepEd-Bureau of Learning Delivery-Teaching and Learning Division (BLD-TLD), was quoted in the same article as encouraging everyone to give books and other reading materials as gifts to people who haven't yet discovered the joy of reading.

An online article by Albano (2019) also expressed concern about the reading crisis in Philippines. It draws attention to the fact that the media is likewise concerned about the literacy crisis, as shown in the GMA program on March 18 network, Lumalala ba bawal ang Pasaway ni Kalidad ng Edukasyon sa Pilipinas? Winnie Monsod is the host. Ironically, as was already indicated, the matter at hand had nothing to do with the DepEd's production and procurement of educational materials. As further mentioned in the same article, the department does not appear to be prioritizing the expanding non-reader population even if Secretary Briones considered reviewing the textbooks. The article made the point that the department should concentrate more on the effects of the careless manufacturing of textbooks and educational materials, which, for example, misspelled Banaue Rice Terraces as Banana Rice Terraces.

In an article from The Learning Center of University of Carolina (2023) metacognition is defined as thinking about one's own thinking and learning processes. Asking oneself self-reflective questions is the key to metacognition. These questions are effective because they help students assess where they are right now (thinking about what they already know), how they learn (what is working and what isn't), and where they want to be (exactly determining if he has mastered the material). One can solve problems more effectively and take charge of your learning with the aid of metacognition. One can approach his studies strategically by employing metacognition. He will be able to evaluate what had already known, what one needs to work on, and the most effective strategy for acquiring new information. The following are some techniques for employing metacognition during studying: using the syllabus as a road map, drawing upon prior knowledge, speaking aloud, asking questions of oneself, using writing, organizing one's thoughts, taking notes from memory, reviewing

Jenny Lou M. Calim 184/196



examinations, taking a break, testing oneself, and determining how one learns.

Furthermore, an article from Center for Teaching Innovation (2022), states that metacognitive strategies are techniques to help students develop an awareness of their thinking processes as they learn. These strategies support students in developing better learning habits, reflecting on their prior knowledge versus material they still need to acquire, identifying thinking errors, and focusing with greater intention. Some metacognitive techniques include having students write reflections on a subject before reading a text and then going back to them to reflect on how the reading affected their thinking afterward, posing a problem and having them participate in a think- pairshare on the approach they would take to solving it while also sharing your approach, and having students write reflections on how they came up with an answer to a question.

According to Chou (2022), providing kids with realistic materials can help them gain confidence and expose them to "real" language while receiving helpful criticism. Children will undoubtedly be exposed to culture through authentic sources, allowing the teacher to examine context in addition to linguistic usage.Garner (2018) asserts that selecting a text for kids to engage with should take into account how easily readable the text will be for the children given their grade level. When choosing texts for a grade, consider the text's complexity, topic, and level of interest. It might be challenging as a teacher to select informational and fictional materials that are suitable for the students. If the teacher ever spent any time in a classroom, he knows that each student is different and that not every student will respond well to a material designed for that grade level.

Jordan (2020) defines writing clarity as the reader's ability to easily understand a text. Avoiding inadvertent ambiguity or perplexing language construction is what it entails. The following are the top 7 writing tips: memorize knowledge rules by heart, practice conclusions, look for typical ambiguity reasons, and more. Read the passages out loud while being specific, concise, and connecting. Write while intoxicated and revise sober. According to Friedrich and Heise (2022), comprehensibility (readability) is defined as the ease with which a particular reader can carry out the procedures necessary to comprehend a particular text in a particular scenario. Fluency in a specific way called comprehension has been found to have a significant impact on comprehension. Saub (2022) stated that learning and memory are made

easier when the material is meaningful. It has often been demonstrated that words are more easily remembered than meaningless sounds, and that scientific concepts and interpretations are more easily remembered than discrete facts. The familiarity and frequency of use, the number of connections produced in a given length of time, and the relationships between the terms in the list all play a role in how significant the materials are. Meaningful materials are simpler to recall than meaningless ones (nonsense syllables) because they make connections with knowledge stored in the LTM.According to Wang (2021), materials must include features that teachers want and that are simple to implement or modify to meet the needs of their pupils. So, the purpose of educational materials is to give pupils opportunities to learn.

# Methodology

Shona McCombes (2022) said that descriptive research aims to accurately and systematically describe a population, situation or phenomenon. It can answer what, where, when and how questions, but not why questions. She also said that descriptive research design can use a wide variety of research methods to investigate one or more variables. Unlike in experimental research, the researcher does not control or manipulate any of the variables, but only observes and measures them.

Moreover, Sirislla (2023) said that descriptive research provides a detailed and accurate picture of the characteristics and behaviors of a particular population or subject. By observing and collecting data on a given topic, descriptive research helps researchers gain a deeper understanding of a specific issue and provides valuable insights that can inform future studies. The said method was chosen because it is about determination of the present condition or evaluation of the developed instructional material which perfectly fit this study. This study will use the said method of research to validate the constructed enhancement reading material in English 7.

# **Participants**

The sources of data for the determination of the least mastered competencies that could be developed into reading competency enhancement material were the 475 grade 7 students. The sources of data for the evaluation of the developed material were the ten (10) expert teachers and the twenty (20) English teachers Montalban Sub- office. The expert teachers refer to the

Jenny Lou M. Calim 185/196



group composed of Master Teachers (MT), Department Heads, Head Teachers, Subject Coordinator/s, School Principal/s, and who are knowledgeable in English pedagogy and instruction. The group also included those who had finished their master's degree or at least completed the academic requirements in any Graduate Program. While the identification of the other group of respondents, teachers of English were those teachers who are currently teaching the English subject. The respondents were selected using convenience sampling from the District of Montalban. In convenience sampling, the respondents were selected based on their availability and willingness to respond. The respondents were chosen for this study to evaluate the developed reading enhancement material based on the following criteria: appropriateness, authenticity, clarity, comprehensibility, meaningfulness, and usefulness.

# **Instruments of the Study**

This study utilized a diagnostic test in identifying ten (10) least mastered skills as topics to be included for the development reading competency enhancement material. The study also made use of SMOG Readability Formula to determine the readability score of the literary texts that were included in the material. This was utilized to ensure that literary texts are suitable and appropriate to the level of the target learners. Evaluation questionnaire was also used in this study. It was validated by expert teachers and the researcher's adviser and critic. The developed module in literature was evaluated based on the criteria of authenticity, appropriateness, clarity, comprehensibility, meaningfulness, and usefulness. Each criterion has sub- characteristics which were rated according to the general guideline for each category. The developed enhancement material was evaluated using the Likert Scale.

# **Procedure**

The researcher got the permission of the Schools Division Superintendent or SDS of the Division of Rizal to conduct the study before the administration of the evaluation questionnaire. The researcher preceded to administering diagnostic test for identification of the topics to be included in the reading competency enhancement material. After the ten 10 least mastered reading competencies were identified, the reading enhancement material was developed. The researcher made use of SMOG Readability Formula.

After the development of the material, it was distributed to the English teachers and experts who

scrutinized and evaluated it was based on the criteria of authenticity, appropriateness, clarity, comprehensibility, meaningfulness, and usefulness. Data were gathered by administering an evaluation questionnaire via google forms to the respondents in District of Rodriguez, Division of Rizal. This was accomplished using a cover letter addressed to the respondents. Retrieval of evaluation form was in real-time to avoid any mishaps that can be encountered. The evaluations of the two groups of respondents were collected and underwent statistical treatment of data.

#### **Ethical Considerations**

This researcher applied principles that guided this research design of this study. The principles that were used include voluntary participation, informed consent, anonymity, confidentiality, and results communication which protect the respondents, enhance research validity, and maintain integrity.

### **Results**

Least Mastered Reading Competencies in English 7 Based on Diagnostic Test in the Results that were Developed into a Reading Competency Enhancement Material Using Metacognitive Approach

The table below presents the results of the diagnostic test on reading competency of the target learners.

Table 1 presents the summary of the least mastered competencies in reading of the target learners. It can be observed from the table that the least mastered reading competencies are using appropriate reading strategies for various text types with 139 correct responses out of 475 respondents (29.2%) ranked 1 followed by classifying text types (narrative, expository, explanation, recount, persuasive) with 154 correct responses out of 475 respondents (32.4%) ranked 2. Meanwhile, distinguishing between general and specific statements with 161.4 correct responses out of 475 respondents (34%) ranked 3. Making generalizations from different text types with 209 correct responses out of 475 respondents (44%) ranked 4. Sequencing/reorganizing ideas or information with 223 out of 475 respondents (46.8%) ranked 5 Organizing information read into an outline with 228 correct responses out of 475 respondents (48 %) ranked 6. Making a stand with 233 correct responses out of 475 respondents (49.1) ranked 7. Reading extensively to find answers to specific questions with

Jenny Lou M. Calim 186/196



258 correct responses out of 475 respondents (54.3%) ranked 8. Narrating events with 260 out of 475 respondents (54.7%) ranked 9. Lastly, using the card catalog, *the* online public access catalog, or electronic search engine to locate specific resources with 262 correct responses out of 475 respondents (55.1 %) ranked 10.

Table 1. Least-Mastered Reading Competencies

Competencies	Correct Response	Percentage	Rank
Using appropriate reading strategies forvarious text types	139	29.2	1
Classifying text types (narrative, expository, explanation, recount, persuasive)	154	32.4	2
Distinguishing between general and specific statements	161	34.0	3
Making generalizations from different texttypes	209	44.0	4
Sequencing/reorganizing ideas or information	223	46.8	5
Organizing information read into an outline	228	48.0	6
Making a stand	233	49.1	7
Reading intensively to find answers to specific questions	258	54.3	8
Narrating events	260	54.7	9
Using the card catalog, the online public access catalog, or electronic search engine tolocate specific resources	262	55.1	10

These findings imply that students are still having difficulties with several reading competencies; thus, there is a need to develop enhancement material that will address these competencies that are considered as least mastered or difficult to the learners.

Evaluation of the Junior High School English Teachers and Expert Respondents on the Developed Reading Competency Enhancement Material Using Metacognitive Approach for Grade 7 Students

The following tables present the evaluation of the English teachers and expert teachers on the developed enhancement material on the different criteria: authenticity, appropriateness, clarity, comprehensibility, meaningfulness, and usability.

**Authenticity.** Table 2 presents the evaluation of the English teachers and expert teachers on the developed enhancement material according to its authenticity.

It can be drawn from the table the evaluations of the two groups of respondents on the authenticity of the developed instructional material that both the Grade English teachers and expert teachers agree that the learning objectives, initial tasks, learning contents, learning tasks and assessments were very acceptable in terms of authenticity as indicated in the given average weighted mean of 4.81 and 4.64 respectively

Table 2. Respondents' Evaluations on the Developed Reading Competency Enhancement Material Using Metacognitive Approach for Grade 7 Students with regard to Authenticity

	Respondents					
Indicators	Tead	chers	Exp	erts		
	WM	VI	WM	VI		
1. Learning objectives provide wide- ranging exposure to authentic use of English through meaningful and purposeful writing and reading activities. 2. Initial tasks are realistic:	4.95	VA	4.70	VA		
topics, eventsand real- world situations are reflectedin the different activities and reading texts.	4.70	VA	4.70	VA		
3. Learning contents relate to the learners'interests and are considered "real- life tasks".	4.70	VA	4.60	VA		
4. Learning tasks allow the learners toparticipate in "real-life" communication.	4.95	VA	4.60	VA		
5. Assessments give learners opportunityto apply learning in real-life context.	4.75	VA	4.60	VA		
Overall Weighted Mean	4.81	VA	4.64	VA		
Standard Deviation	0.	27	0.4	48		

This implies that the learning objectives, initial tasks, learning contents, learning tasks and assessments are realistic. Developed enhancement material and all its parts are authentic; learning objectives provide wideranging exposure to authentic use of English through meaningful and purposeful writing and reading

Jenny Lou M. Calim 187/196



activities. Initial tasks are realistic: topics, events and real- world situations are reflected in the different activities and reading texts. Learning contents relate to the learners' interests and are considered "real- life tasks". Learning tasks allow the learners to participate in "real-life" communication. Assessments give learners the opportunity to apply learning in real-life context. Moreover, Chou (2022) said that giving your students authentic materials to boost their confidence and experience "real" language with the support of constructive feedback.

**Appropriateness.** Table 3 presents the evaluation of the English teachers and expert teachers on the developed enhancement material according to its appropriateness.

The table shows the evaluation of the two groups of the developed enhancement material. Both the English teachers and expert teachers agree that the learning objectives, initial tasks, learning contents, learning tasks and assessments were very acceptable in terms of appropriateness as indicated in the given average weighted mean of 4.77 and 4.50 respectively.

This implies that the learning objectives, initial tasks, learning contents, learning tasks and assessments are suited to the learners. Developed enhancement material and all its parts are appropriate; learning objectives of the enhancement material cater to the needs, wants, and interests of the target learners through various reading texts and activities. Initial tasks are suited to the maturity level of the target learners. Learning contents match with the level of understanding of the learners. Learning tasks are suited to the learners' level of comprehension and understanding. Assessments provide diversified and interesting activities capable of maintaining learners' interest and attention. In addition, Chou (2022) said that as a teacher, choosing fictional and informational texts that are appropriate for your students can be a difficult task. If you've spent any amount of time at all in a classroom, you know that the students are unique and that a text meant for that grade level may not be one size-fits-all.

Table 3. Respondents' Evaluations on the Developed Reading Competency Enhancement Material Using Metacognitive Approach for Grade 7 Students with regard to Appropriateness

	Respondents				
Indicators	Teac	hers	Experts		
macators	WM	VI	WM	VI	
1. Learning objectives of the enhancementmaterial cater to the needs, wants, and interests of the target learners through various reading texts and activities.	4.75	VA	4.60	VA	
2. Initial tasks are suited to the maturity levelof the target learners.	4.80	VA	4.50	VA	
3. Learning contents match with the level of understanding of the learners.	4.70	VA	4.50	VA	
4. Learning tasks are suited to the learners' level of comprehension and understanding.	4.85	VA	4.40	A	
5. Assessments provide diversified and interesting activities capable of maintaininglearners' interest and attention.	4.75	VA	4.50	VA	
Overall Weighted Mean	4.77	VA	4.50	VA	
Standard Deviation	0.3	34	0.	0.67	

**Clarity.** Table 4 presents the evaluation of the English teachers and expert teachers on the developed enhancement material according to its clarity.

The table shows the evaluation of the two groups of respondents on the appropriateness of the developed enhancement material. Both the English teachers and expert teachers agree that the learning objectives, initial tasks, learning contents, learning tasks and assessments were very acceptable in terms of clarity as indicated in the given average weighted mean of 4.84 and 4.76 respectively.

This implies that the developed enhancement material is clear to the learners. Developed enhancement material and all its parts have clarity; learning objectives are clearly stated. Initial tasks are presented in simple language. Learning contents are presented in clear and simple words and phrases free from vague and ambiguous terms. Learning tasks are clearly and logically presented. Assessments clearly match learning objectives. Jordan (2020) assertions which stated that clarity in writing means the ease with which a reader can understand you; it means avoiding unintended ambiguity or confusing sentence structure support the interpretations.

Jenny Lou M. Calim



Table 4. Respondents' Evaluations on the Developed Reading Competency Enhancement Material Using Metacognitive Approach for Grade 7 Students with regard to Clarity

	Respondents				
Indicators	Teac	chers	Experts		
maicaioi s	WM	VI	WM	VI	
Learning objectives are clearly stated.	4.95	VA	4.90	VA	
2. Initial tasks are presented in simplelanguage.	4.85	VA	4.70	VA	
3. Learning contents are presented in clear and simple words and phrases free from vague and ambiguous terms.	4.80	VA	4.70	VA	
4. Learning tasks are clearly and logicallypresented.	4.75	VA	4.70	VA	
5. Assessments clearly match learning objectives.	4.85	VA	4.80	VA	
Overall Weighted Mean	4.84	VA	4.76	VA	
Standard Deviation	0.	28	0.3	37	

**Comprehensibility.** Table 5 presents the evaluation of the English teachers and expert teachers on the developed enhancement material according to its comprehensibility.

The table shows the evaluation of the two groups of respondents on the appropriateness of the developed enhancement material. Both the English teachers and expert teachers agree that the learning objectives, initial tasks, learning contents, learning tasks and assessments were very acceptable in terms of comprehensibility as indicated in the given average weighted mean of 4.84 and 4.62 respectively.

This implies that the developed enhancement material can be easily understood by the learners. Developed enhancement material and all its parts are comprehensible; Learning objectives are written in simple language. Initial tasks are presented in a clear and comprehensible manner. Learning contents link reading/literary selections to grammar and language use through input processing, and meaningful communicative examples. Learning tasks are varied taking into consideration different modes of learning and varied learning interests. Assessments enhance critical thinking and creative skills. Cognizant to the interpretations, Friedrich and Heise (2022) said that comprehensibility (readability) is understood as the ease with which a certain reader can conduct the

processes needed to comprehend a certain text in a certain situation. Comprehensibility is a special form of fluency and has been shown to have a considerable influence on comprehension.

Table 5. Respondents' Evaluations on the Developed Reading Competency Enhancement Material Using Metacognitive Approach for Grade 7 Students with regard to Comprehensibility

	Respondents			
Indicators	Teac	hers	Experts	
macaiors	WM	VI	WM	VI
Learning objectives are written in simplelanguage.	4.85	VA	4.80	VA
2. Initial tasks are presented in a clear andcomprehensible manner.	4.95	VA	4.70	VA
3. Learning contents link reading/literary selections to grammar and language usethru input processing, and meaningful communicative examples.  4. Learning tasks are varied	4.80	VA	4.60	VA
taking into consideration different modes of learning and varied learning interests.	4.75	VA	4.50	VA
5. Assessments bolster critical thinking andcreative skills.	4.85	VA	4.50	VA
Overall Weighted Mean	4.84	VA	4.62	VA
Standard Deviation	0.2	26	0.4	13

**Meaningfulness.** Table 6 presents the evaluation of the English teachers and expert teachers on the developed enhancement material according to its meaningfulness.

The table shows the evaluation of the two groups of respondents on the appropriateness of the developed enhancement material. Both the English teachers and expert teachers agree that the learning objectives, initial tasks, learning contents, learning tasks and assessments were very acceptable in terms of as indicated in the given average weighted mean of 4.79 and 4.64 respectively. Relative the interpretations, Saub (2022) stated that the more meaningful are the materials, the easier the learning and retention. It has been consistently shown that words are better remembered than nonsense syllables, and that the concepts and interpretations of scientific principles are retained better than the factual and separate pieces of information.

Jenny Lou M. Calim 189/196



This implies that the developed enhancement material is relevant to the learners. The developed enhancement material and all its parts are meaningful; Learning objectives address learners' need for cognitive skills and affective skills. Initial tasks provide intrinsic motivation to the learners. Learning contents are reflective. Learning tasks are sensible and relevant. Assessments are relevant to society.

Table 6. Respondents' Evaluations on the Developed Reading Competency Enhancement Material Using Metacognitive Approach for Grade 7 Students with regard to Meaningfulness

	Respondents			
Indicators	Teac	hers	Expe	erts
mateuors	WM	VI	WM	VI
1. Learning objectives address learners' needfor cognitive skills and affective skills.	4.80	VA	4.80	VA
2. Initial tasks provide intrinsic motivation to the learners.	4.70	VA	4.60	VA
3. Learning contents are reflective.	4.80	VA	4.60	VA
4. Learning contents are sensible and relevant.	4.80	VA	4.50	VA
5. Assessments are relevant to society.	4.85	VA	4.70	VA
Overall Weighted Mean	4.79	VA	4.64	VA
Standard Deviation	0.36		0.41	

**Usefulness.** Table 7 presents the evaluation of the English teachers and expert teachers on the developed enhancement material according to its usefulness.

The table shows the evaluation of the two groups of respondents on the usefulness of the developed enhancement material. Both the Grade 7 English teachers and expert teachers agree that the learning objectives, initial tasks, learning contents, learning tasks and assessments were very acceptable in terms of usefulness as indicated in the given average weighted mean of 4.84 and 4.76 respectively.

This implies that the developed enhancement material is beneficial for the learners. Developed enhancement material and all its parts are useful; Learning objectives are beneficial in enhancing the reading skills of the students. Initial tasks ignite the learners' prior knowledge about the lesson. Learning contents provide knowledge and skills in enhancing reading competency of the learners. Learning tasks are helpful in honing learners' reading skills. Assessments allow

learners to use learning in real-life situations. In addition, Wang (2021) stated that usefulness means that materials feature components that teachers desire and that are easy to enact or adapt to meet the needs of their students. Thus, instructional material is intended to provide learning opportunities for students.

Table 7. Respondents' Evaluations on the Developed Reading Competency Enhancement Material Using Metacognitive Approach for Grade 7 Students with regard to Usefulness

	Respondents					
Indicators	Teac	hers	Exp	erts		
Thateators	WM	VI	WM	VI		
1. Learning objectives are beneficial inenhancing the reading skills of the students.	4.85	VA	4.90	VA		
<ul><li>2. Initial tasks ignite the learners' priorknowledge about the lesson.</li><li>3. Learning contents provide</li></ul>	4.85	VA	4.70	VA		
knowledge andskills in enhancing reading competency of the learners.	4.85	VA	4.80	VA		
4. Learning tasks are helpful in honinglearners' reading skills.	4.90	VA	4.70	VA		
5. Assessments allow learners to uselearning in real-life situation.	4.75	VA	4.70	VA		
Overall Weighted Mean	4.84	VA	4.76	VA		
Standard Deviation	0.31		0.35			

Table 8 illustrates the summary of the evaluation of the developed enhancement material. It could be seen from the table that both the teachers and expert respondents rated the developed material in reference to the six criteria as very acceptable as revealed by the grand weighted means of 4,82 and 4.65 respectively.

This implies that the developed enhancement material is viewed as authentic, appropriate, clear, comprehensible, meaningful, and useful by the Junior High School English teacher. Likewise, the developed enhancement material is viewed as authentic, appropriate, clear, comprehensible, meaningful, and useful by the expert respondents.

Jenny Lou M. Calim 190/196



Table 8. Summary of Respondents' Evaluations on the Developed Reading Competency Enhancement Material Using Metacognitive Approach for Grade 7 Students

	Respondents					
Criteria	Teaci	hers	Experts			
Criteria	OWM	VI	OWM	VI		
a. Authenticity	4.81	VA	4.64	VA		
b. Appropriateness	4.77	VA	4.50	VA		
c. Clarity	4.84	VA	4.76	VA		
d. Comprehensibility	4.84	VA	4.62	VA		
e. Meaningfulness	4.79	VA	4.64	VA		
f. Usefulness	4.84	VA	4.76	VA		
Grand Weighted Mean	4.82	VA	4.65	VA		

Significant Difference Between the Evaluations of the Two Groups of Respondents on the Developed Reading Competency Enhancement Material Using Metacognitive Approach in English 7

The following tables present the test of the significant difference on the evaluation of the two groups of respondents on the developed instructional material in terms of the following criteria: authenticity, appropriateness, clarity, comprehensibility, meaningfulness, and usefulness.

Table 9 presents the test of difference in the evaluation of the two groups of respondents on the developed reading competency enhancement material in English 7 in terms of Authenticity.

Table 9. Test of Significant Difference in the Evaluation of the Two Groups of Respondents on the Developed Reading Competency Enhancement Material for Grade 7 Students Using Metacognitive Approach in terms of Authenticity

Respondents	и	MMO	S	Computedt Value	Critical t value	Decision	Interpr etation
Teachers	20	4.81	0.27			Fail to	Not
Experts	10	4.64	0.48	1.25	2.05	reject the H0	Significant

As exhibited in Table 9, the computed t value of 1.25 is lesser than the critical value of 2.05.

Therefore, at a 5% significance level this leads that the

null hypothesis cannot be rejected. This supports that there is no significant difference between the evaluations of the two groups of respondents on the developed Reading Competency Enhancement Material Using Metacognitive Approach in English 7 with respect to Authenticity.

It implies that the developed reading competency enhancement material has wide-ranging exposure to reality.

Table 10 presents the test of difference in the evaluation of the two groups of respondents on the developed reading competency enhancement material in English 7 in terms of Appropriateness.

Table 10. Test of Significant Difference in the Evaluation of the Two Groups of Respondents on the Developed Reading Competency Enhancement Material for Grade 7 Students Using Metacognitive Approach in terms of Appropriateness

Table 10 reflected that the computed t value of 1.48 is lower than the critical t value of 2.05. Thus, the statistical decision is to fail to reject the null hypothesis at a 5% level of significance. This means that there is no significant difference between the evaluations of the two groups of respondents on the developed Reading Competency Enhancement Material Using Metacognitive Approach in English 7 with respect to Appropriateness.

It implies that the developed reading competency enhancement material is suitable to the level of the target learners.

Table 11 presents the test of difference in the evaluation of the two groups of respondents on the developed reading competency enhancement material in English 7 in terms of Clarity.

Jenny Lou M. Calim 191/196



Table 11. Test of Significant Difference in the Evaluation of the Two Groups of Respondents on the Developed Reading Competency Enhancement Material for Grade 7 Students Using Metacognitive Approach in terms of Clarity

Respondents	N $OWM$	S Computedt Value Critical t value	Decision Interpretation
Teachers	20 4.84	0.28	Fail to Not
Experts	10 4.76	0.37 0.66 2.05	reject Not the H <sub>0</sub> Significant

As depicted in Table 13, the computed t value of 0.66 is below the critical t value of 2.05. Consequently, at a 5% level of significance the statistical decision is not to reject the null hypothesis. This implies that there is no significant difference between the evaluations of the two groups of respondents on the developed Reading Competency Enhancement Material Using Metacognitive Approach in English 7 with respect to Clarity.

It implies that the developed reading competency enhancement material is clear, simple, and concise.

Table 12 presents the test of difference in the evaluation of the two groups of respondents on the developed reading competency enhancement material in English 7 in terms of Comprehensibility.

Table 12. Test of Significant Difference in the Evaluation of the Two Groups of Respondents on the Developed Reading Competency Enhancement Material for Grade 7 Students Using Metacognitive Approach in terms of Comprehensibility

It is apparent in Table 14 that the computed t value of 1.75 is less than the critical t value of 2.05. As a result, this leads that the null hypothesis cannot be rejected at a 5% significance level. This shows that there is no

significant difference between the evaluations of the two groups of respondents on the developed Reading Competency Enhancement Material Using Metacognitive Approach in English 7 with respect to Comprehensibility.

It implies that the developed reading competency enhancement material can be easily understood by the target learners.

Table 13 presents the test of difference in the evaluation of the two groups of respondents on the developed reading competency enhancement material in English 7 in terms of Meaningfulness.

It can be viewed in Table 15 that the computed t value of 1.02 is smaller than the critical t value of 2.05. So. at a 5% level of significance the statistical decision is to fail to reject the null hypothesis. This suggests that there is no significant difference between the evaluations of the two groups of respondents on the developed Reading Competency Enhancement Material Using Metacognitive Approach in English 7 with respect to Meaningfulness.

Table 13. Test of Difference in the Evaluation of the Two Groups of Respondents on the Developed Reading Competency Enhancement Material for Grade 7 Students Using Metacognitive Approach in terms of Meaningfulness

Teachers 20 4.79 0.36 Experts 10 4.64 0.41 
$$\frac{Val_{ne}}{Val_{ne}} = \frac{Val_{ne}}{Val_{ne}} = \frac{Val_{ne$$

It implies that the developed reading competency enhancement material is relevant.

Table 14 presents the test of difference in the evaluation of the two groups of respondents on the developed reading competency enhancement material in English 7 in terms of Usefulness.

Jenny Lou M. Calim 192/196



Table 14. Test of Significant Difference in the Evaluation of the Two Groups of Respondents on the Developed Reading Competency Enhancement Material for Grade 7 Students Using Metacognitive Approach in terms of Usefulness

Teachers 20 4.84 0.31 Experts 10 4.76 0.35 
$$\frac{t}{t}$$
  $\frac{t}{t}$   $\frac$ 

As displayed in Table 14, the computed t value of 0.64 is lesser than the critical t value of 2.05. Hence, the statistical decision is not to reject the null hypothesis at a 5% level of significance. This concludes that there is no significant difference between the evaluations of the two groups of respondents on the developed Reading Competency Enhancement Material Using Metacognitive Approach in English 7 with respect to Usefulness.

It implies that the developed reading competency enhancement material is profitable in classroom instruction in improving reading skills of learners.

Table 15. Summary of Test of Difference in the Evaluation of the Two Groups of Respondents on the Developed Reading Competency Enhancement Material Using Metacognitive Approach for Grade 7 Students

	Teac	chers	Exp	erts	an		и
Criteria	MMO	Ŋ	OWM	S	tcomputedVal	Decision	Interpretation
Authenticity	4.81	0.27	4.64	0.48	1.25	Fail to Reject the H0	Not Significant
Appropriateness	4.77	0.34	4.50	0.67	1.48	Fail to Reject the H0	Not Significant
Clarity	4.84	0.28	4.76	0.37	0.66	Fail to Reject the H0	Not Significant
Comprehensibility	4.84	0.26	4.62	0.43	1.75	Fail to Reject the H0	Not Significant
Meaningfulness	4.79	0.36	4.64	0.41	1.02	Fail to Reject the H0	Not Significant
Usefulness	4.84	0.31	4.76	0.35	0.64	Fail to Reject the H0	Not Significant

Table 15 presents the summary of test of difference in the evaluation of the two groups of respondents on the developed reading competency enhancement material in English 7 in terms of the following criteria: authenticity, appropriateness, clarity, comprehensibility, meaningfulness, and usefulness.

It is summarized in Table 15 that the evaluations of the teachers and expert respondents on the developed Reading Competency Enhancement Material Using Metacognitive Approach in English 7 regarding Authenticity, Appropriateness, Clarity, Comprehensibility, Meaningfulness and Usefulness do not show significant difference with the respective computed t values which are below the critical t value. Therefore, the respondents' evaluations are the same.

Table 16 presents the level of readability of eleven (11) reading texts used in the developed reading competency enhancement material based on its polysyllabic word count.

It can be drawn in table 16 the readability scores of selected reading texts used in the developed reading enhancement competency material have reading age (grade level) of 7 based on their polysyllabic word count. Polysyllabic word count refers to the number of words in a text containing 3 or more syllables (polysyllabic). In SMOG conversion table, texts that have 13-20 total polysyllabic syllables are suited for Grade 7. This supports the claims that the reading texts found are matched to the reading skill level of the target students and can be easily understood by most of the target learners.

Using the SMOG Reading Level Formula, all you need are 30 sentences to work with in order to achieve accurate results. You will know what grade level is necessary for someone to comprehend the text.

One sentence is a group of words ending in a period, exclamation point, or question mark. Long sentences with a semicolon are considered two sentences. Hyphenated words are considered one word. Polysyllabic proper nouns are counted. Polysyllabic numbers (regardless of how they are written). Abbreviations should be avoided unless absolutely necessary. If not, it should be numbered and read without an abbreviation.

Jenny Lou M. Calim 193/196



Table 16. Level of Readability of the Developed Reading Competency Enhancement Material for Grade 7 Students Using Metacognitive Approach Using SMOG Formula

Title of the Reading Text	Total Polysyllabic Word Count	GradeLevel
Here's why you should watchGMA's 'Maria Clara at Ibarra	13	7
Teves secretary seeks CHR's helpover police 'pressure' to rat on employer	19	7
The Panagbenga Festival in BaguioCity	13	7
Bodies of plane crash victims in Isabela brought down to Divilacantown proper	17	7
Philippine Economy to Post RobustGrowth in 2023, 2024 Despite Inflation Pressures — ADB	20	7
VP Sara Duterte presented the BasicEducation Report 2023	18	7
Online gaming – The basics	13	7
Plastic Pollution	13	7
Reading Processes	14	7
Branches of Philippine Government	16	7
Sports in the Philippines	14	7
From 7107 to 7641	14	7
The Butterfly Life Cycle	13	7
On the 4th of July	13	7
Life of a Student	13	7
Asian Family	14	7
Phobia	13	7
Asian Culture	15	7

Like MacLaughlin stated, the SMOG readability algorithm is straightforward. There are only a few easy steps you need to take: first, count the 30 sentences in your text, starting with the first 10 sentences at the beginning, the next 10 in the middle, and the final 10 sentences at the end; second, count all the words with three or more syllables; third, calculate the square root of the total number from Step 2 and round to the nearest 10; and fourth, add three to the total from Step 3. The number you get in the fourth step is your *SMOG Grade*. It's fairly easy to understand the SMOG Index

results as they compute for the grade level.

One technique to make sure a material is written at the appropriate level for a student is to assess its readability. It is important to make sure the reading level of the content matches theirs. While reading too difficult content can be stressful, reading too easy stuff does not hone or improve skills. The texts were chosen based on the readability score as well as the researcher's subjective assessment of the texts in light of the abilities, needs, and interests of the students.

### **Discussion**

This study aimed to develop and evaluate a reading competency material for grade 7 students of Kasiglahan Village San Jose Rodriguez Rizal for School Year 2022- 2023. The data gathering instruments used were a researcher-made diagnostic test in determining the ten (10) least mastered competencies which served as topics to be included for the development of the reading competency enhancement material and an evaluation questionnaire which has six criteria namely; authenticity, clarity, clarity, comprehensibility, meaningfulness and usefulness. For the readability of the texts adopted in the reading material, SMOG Readability Formula was used.

The salient findings of the study are as follows:

The top 10 least mastered competencies in English 7 based on the Diagnostic test results that were developed into a Reading Competency Enhancement Material were 1) Using appropriate reading strategies for various text types; 2) Classifying text types (narrative, expository, explanation, recount, persuasive); 3) Distinguishing between general and specific statements; 4) Making generalizations from different text types; 5) Sequencing/reorganizing ideas or information; 6) Organizing information read into an outline 7) Making a Stand; 8) Reading intensively to find answers to specific questions; 9) Narrating events; 10) Using the card catalog, the online public access catalog, or electronic search engine to locate specific resources. The developed reading competency enhancement material for grade 7 students was Very Acceptable for the junior high school English teachers and expert-respondents in terms of authenticity, appropriateness, clarity, comprehensibility, meaningfulness, and usefulness as revealed by the grand weighted means of 4.82 and 4.65 respectively.

There is no significant difference between the

Jenny Lou M. Calim 194/196



evaluations of the two groups of respondents regarding the authenticity, appropriateness, clarity, comprehensibility, meaningfulness, and usefulness of the developed reading enhancement material as revealed by the computed t values of 1.25,1.48, 0.66, 1.75,1.02 and 0.64 respectively which are below the critical t value 0f 2.05. The reading texts treated to estimate readability using the SMOG Readability Formula have the reading age (grade level) of 7.

# Conclusion

Based on the findings, the following conclusions are drawn: (1) Grade 7 students are still experiencing difficulties in different reading skills. (2) The developed reading competency enhancement material using metacognitive approach is valid for the respondents and is suited to the readability level of the grade 7 students

#### References

Albino E. (2019) Non Readers a Growing Population; Philippine Star . Retrieved November 21, 2022, from https://www.philstar.com/other-sections/letters-tothe-%20editor/2019/04/10/1908732/non-readersgrowing-population/amp/

Bicomong C. (2022) The Development Of Reaching Hand-Printed Reading Materials(Pream) For Grade 2 Learner. Retrieved November 21, 2022 from https://ijrp.org/paper-detail/3324

Bekhta, N. (2018). Reading experimental literature: unreadability, discomfort and reading strategies. In H. Pyrhönen, & J. Kantola (Eds.), Reading Today (pp. 15-30). University College London Press. Retrieved November 21, 2022 from https://doi.org/10.14324/111.978178735195

Center for Teaching Innovation. Metacognitive Strategies (How People Learn) Retrieved November 21, 2022 from https://teaching.cornell.edu/teaching-resources/teaching-cornell-guid e/teaching-%20strategies/metacognitive-strategies-how-people

Chou (2022). Benefits of Teaching ESL with Authentic English Materials. Retrieved May 18, 2023 from https://www.fluentu.com/blog/educator-english/authentic-materials-f or-teaching-english/

D'SOUZA. (2021). What Impact will the Pandemic have on Early Literacy? Retrieved November 21, 2022 from https://edsource.org/2021/what-impact-will-the-pandemic-have-on-early-% 20literacy/659758

Department of Education. (2019). DM No. 173, s2019 Hamon: Bawat Bata Bumabasa. Retrieved November 21, 2022 fromhttps://www.deped.gov.ph/wpcontent/uploads/2019/11/DM\_s2 019\_173-1.pdf

Department of Education. (2018). Statement on the Philippines ranking in the 2018 PISA results. Retrieved November 21, 2022 from

https://www.deped.gov.ph/2019/12/04/statement-on-the-%20philipp

ines-ranking-in-the-2018-pisa-results/

De Vera B. (2022). Lockdown's Impact: Unicef Cites Poor Reading Skills among PH KIDS. Retrieved January 5, 2023 fromhttps://newsinfo.inquirer.net/1576573/lockdowns-impact-unicef-cites-%20poor-reading-skills-among-ph-kids

Friedrich, M. C. G., & Heise, E. (2022). The Influence of Comprehensibility on Interest and Comprehensio. Retrieved May 18, 2023 from https://econtent.hogrefe.com/doi/10.1024/1010-0652/a000349

Garcia C.A. (2022). Development and Evaluation of Self-Learning Module in Mathematics 10 (Master's Thesis), Marikina Polytechnic College, Marikina City

Garner (2018). Selecting Grade Appropriate Texts. Retrieved May 1 8, 2 0 2 3 from https://study.com/academy/lesson/selecting-grade-appropriate-texts. html

Gilbas, S. (2022). Reading Enhancement Advocacy in Dep Ed (R.E.A.D): Teachers' Life-Changing Task. Retrieved January 5, 2023 from https://www.researchgate.net/publication/360334490\_Reading\_Enhancement\_Advocacy

Goodman, J. (2020). On reading. Acta Analytica, 35(1), 51-59. Retrieved January 5, 2023 from https://www.researchgate.net/publication/36033440Reading\_Enhancement\_Advocacy\_in\_%20Dep\_Ed\_READ\_Teachers'\_Life-Changing\_Task

Jordan (2020). Clarity in writing: 7 Musts for Lucid Prose. Retrieved M a y  $$5\ ,$$  2023 from https://www.nownovel.com/blog/clarity-in-writing/

McCombes, S. (2022) Descriptive Research | Definition, Types, Methods & Examples Retrieved January 5, 2023 from https://https://www.scribbr.com/methodology/descriptive-research/

Malipot, M. H. (2018) DepEd Strives to Enhance Reading Skills of Students; Manila Bulletin online. Retrieved January 5, 2023 from https://news.mb.com.ph/2018/01/01/deped-strivesto-enhance-reading-skills-of-students/ accessed on September 12, 2018

Manlapig, M. (2020). What's to Blame for the Low Reading Comprehension of the Filipino Youth Retrieved January 5, 2023 from https://www.cnnphilippines.com/life/culture/2020/4/21/reading-%20comprehension-problem.html

Paez, D.. (2022). 9 out of 10 Can't Read. Retrieved January 5, 2023 f r o m \$\$h t t p s : //\$ https://www.manilatimes.net/2022/08/10/opinion/columns/why-9-ou t-of-10-filipino-children-cant-%20read/1854046

Rico J.R. (2018). Development and Evaluation of Contextualized Teaching and Learning Materials in Physics (Master's Thesis), Marikina Polytechnic College, Marikina City.

Rutzler, S. (2022). Importance of Reading Comprehension. Retrieved January 5, 2023 from https://www.mathgenie.com/blog/importance-of-reading-comprehension

Sarmiento E.A. (2018). Development and Evaluation of Worktext in Mathematics for Grade 7 (Master's Thesis), Marikina Polytechnic College, Marikina City

Saub(2022). How does meaningfulness of materials influence our learning process ? Retrieved May 18, 2023 from

Jenny Lou M. Calim 195/196



https://www.preservearticles.com/psychology/how-does-meaningfulness-of-materials-influence-our-learning process/2314

Sirisilla, S (2023). Bridging the Gap: Overcome these 7 flaws in descriptive research design. Retrieved March 3, 2023 from https://www.enago.com/academy/descriptive-researchdesign/#What \_Is\_Descriptive\_Research\_Design

The Learning Center. Metavognitive Study Strategies. Retrieved May 18, 2023. Retrieved from https://learningcenter.unc.edu/tips-and-tools/metacognitive-study-strategies/?fbclid=IwAR3W1boQPCf7D2BK2Ffv1Uagskc5ap0pUQy-Ib56a6vimKLmH7bJ3rYK7lw

Torres (2019). Development and Evaluation of Mathchessmatics Enhancement material for Grade 9 Students (Master's Thesis), Marikina Polytechnic College, Marikina City Villano J.B. (2021). Development and Evaluation of Practical Research Learning Module for Grade 11 Senior High School Students (Master's Thesis), Marikina Polytechnic College, Marikina City

 $Wang \ E. \ (2021) \ Teachers' \ Perceptions \ of \ What \ Makes \ Instructional \\ Materials \ Engaging, \ Appropriately \ Challenging, \ and \ Usable. \\ Retrieved \ May 18, 2023 \ from \\ https://www.rand.org/pubs/research_reports/RRA134-2.html$ 

Weigel, A. (2018). New reading strategies in the twenty-first century: Transmedia storytelling via app in Marisha Pessl's Night Film. In Hax A. & Olavarría L (Authors), Reading Today (pp. 73-8 6). R e t r i e v e d March 3, 2 0 2 3 from https://thinkspace.csu.edu.au/emilyparkinson/2018/08/10/assessment -2-1-literature-review-on-%20arcadia/

# Affiliations and Corresponding Information Jenny Lou M. Calim

- Marikina Polytechnic College Philippines
- Kasiglahan Village National High School Department of Education - Philippines

Jenny Lou M. Calim 196/196