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# Reading Comprehension Levels and Metacognitive Strategies of Grade 10 Students: Their Implications to the Teaching of Reading in the Senior High School

**[1]Whellalyn G Duldulao and [*2]Bert A Gamiao**

[1]Teacher III, Junior High School Department, Batac National High School, Batac, Ilocos Norte, Philippines..

[*2]Associate Professor, College of Teacher Education, Mariano Marcos State University, Laoag City, Ilocos Norte, Philippines.

**Abstract**

This study identified the reading comprehension levels and metacognitive strategies of Grade 10 students, and deduced the implications to the teaching of reading in the Senior High School.

Employing the descriptive research design, this study involved 246 Grade 10 students from the Schools Division of The City of Batac who answered through online the 30-item reading comprehension test and the survey questionnaire of metacognitive strategies to gather the data needed. The sample of the study was determined using proportional sampling technique.

Findings show that respondents' reading comprehension falls under frustration level in all the nine macro skills. Among the metacognitive strategies, the three most applied when students experienced reading comprehension difficulties are:

1. I read slowly but carefully to be sure I understand what I am reading;
2. I try to understand one paragraph before proceeding to the next one; and
3. When a reading text becomes difficult, I pay closer attention to what I am reading.

The findings on the Grade 10 students reading comprehension level and metacognitive strategies brought about implications to the teaching of reading in the senior high school.

**Keywords:** Reading comprehension, metacognitive strategies, PISA, teaching reading senior high school

## Introduction

A high level of reading comprehension has been considered an indicator of academic success. Reading becomes especially important to students in the later elementary grades since it plays a significant part in one's achievement and provides the foundation for further learning in secondary school (Sweet & Snow, 2003) [31]. A student's academic progress is profoundly shaped by the ability to understand what is being read.

Interestingly, proficient reading comprehension level is important for a wide variety of activities-from following instructions in a manual; to finding out answers to questions; to communicating with people for a specific purpose or matter. Even though many learners can read verbally, reading comprehension is a different thing. Reading involves translating and decoding text into sounds and spoken words. Reading comprehension involves taking what was just read and develop meaning from those words. In simpler terms, reading comprehension is the ability to read, understand, process, and recall what was just read.

Similarly, having outstanding reading comprehension skills is essential. Such increases the pleasure and efficiency of reading and helps students academically. When given a reading text by their teacher, students can read it, but they cannot understand the meaning of the words and sentences. Being able to understand the meaning behind the text helps students develop intellectually, socially, and professionally.

In addition, reading comprehension is very essential for any reading activity. Students may know how to read words, recognize printed text but they often are not able to comprehend or understand what the passage is all about. Sometimes, a student's reading comprehension is compromised because although a student may be able to understand literally, but deeper understanding may not be assured.

Alarmingly, among 79 participating countries and economies, the Philippines scored the lowest in reading comprehension in the 2018 Programme for International Student Assessment (PISA). Reading comprehension was the main subject assessed among 15-year old students in the 2018 PISA. The Philippines had an average reading score of 340, more than 200 points below China (555) and more than 100 points less than the OECD average (487).

In the Philippines, male and female learners' performances in reading both ranked lowest among PISA-participating countries (Philstar, 2019) [23]. Such result is expected based on National Achievement Test results, where students also showed low proficiency level in English according to the DepEd Secretary Leonor M. Briones. From the PISA results and Phil-IRI results, the reflected low reading level of learners shows how poor their reading comprehension and proficiency are.

***Corresponding Author:** Bert A Gamiao

Reading without comprehension is not reading at all. A learner has to understand, appreciate and react to what he reads to benefit from the reading process. Reading is not just for the sake of knowing but also has to make sense to what has been read. Comprehension instruction is rarely addressed as a significant issue in the high school curriculum. Traditional strategy is usually the primary focus in the classroom. Studies have shown that students walk in to the upper-level unprepared for the comprehension demands that lie before them. Students are struggling to comprehend texts from books which affect their scores leading to lower grades and academic performance. Reading comprehension is not only limited to the English subject since other subjects such as Mathematics, Science, MAPEH and TLE make use of the English language in textbooks and as a medium of instruction. Teachers, for the most part, neglect or fail to teach students' comprehension reading strategies, relying too often on the traditional approach. They seem unfamiliar with the wide range of effective approaches in teaching.

Sadly, the reading comprehension skills among learners have caused grave concerns. Many teachers claim that it continues to deteriorate. They feel that school year after school year, they are getting students who are poorer in reading comprehension skills than those who came before them. Since the implementation of the K to 12 program, Senior High School teachers are alarmed that the even the grade 11 students cannot comprehend well with reading text, causing failures in their academic performance.

This phenomenon is evident in public schools all throughout the country. In the Division Reading Profile (English Silent) of the Schools Division of the City of Batac in the school year 2019-2020, most of the test takers of the Philippine Informal Reading Inventory Group Screening Test (Phil-IRI GST) got a score below 14, with an average score ranging from 7.34-8.91. Of the Grade 4 takers, 607 of 805 or 75 percent fall under the score of 14 and are needing intervention while only 197 of 805 or 25 percent got scores of 14 and above. Similarly, 663 of 906 or 73 percent of the Grade 5 test takers and 700 of 897 or 78 percent of the Grade 6 takers need intervention. Results imply that schools and the division have to exert much effort in implementing more effective contingency measures to improve the learners' reading level.

This implies that the Division-initiated reading program is somehow effective as revealed by the significant improvement, but it has to be sustained. Moreover, more contingency measures are expected to be implemented to attain a higher achievement level of the division specifically in terms of the reading level improvement of the learners.

The difficulty of the pupils in the elementary will bring a huge pressure to the language teachers in the junior high school particularly on the English subject teachers. Aside from the problem on the speed level of the students in oral reading, the bigger issue lies on their difficulty to grasp the meaning of what the learners are reading. Since the medium of instruction of the subjects (Mathematics, English, Science, MAPEH, TLE) is English, there is a huge problem on how the students understand instructions, text and questions due to their difficulty in reading comprehension.

Unfortunately, a large percentage of students in the junior high school experience difficulties in answering comprehension questions from reading texts. There are grade 7 students who can sound out words but cannot understand and decode their meaning. Such reading difficulty is carried out until the learners will reach their last grade level in the junior high school.

Moreover, it is observed that students cannot even understand instructions from test questions, cannot summarize a literary piece, answer simple comprehension questions and use some of the words from text in sentences simply because they could not comprehend with what they are reading. Students in the English subject class cannot finish a reading task that involves comprehension within an hour. This makes the language teacher adjust with the hours and days of lessons that involve reading comprehension because the students take so much time for them to accomplish the activity.

Consequently, students who do not read well in high school are likely to drop out or to graduate without the skills to obtain anything more than menial work (Joftus & Maddox-Dolan, 2002) [7]. Poor readers who do graduate are likely to experience serious difficulties entering college.

Ideally, reading success would be assured for all in elementary school. Yet even if improved practices in elementary schools could reduce the numbers of below-level secondary readers, the numbers are so large that it would be a very long time, if ever, before improved reading programs in elementary schools would entirely solve the secondary reading problem. Secondary schools will always need strategies to continue to build the reading skills of their students.

Furthermore, metacognition (learning how to learn) should be part of basic education. By understanding the distinctive cognitive demands of each subject, teachers will become experts of the course contents and processes (Schleicher, 2019) [27]. The metacognitive strategies (MS) an individual employs are very significant in one's academic studies. Metacognition or "thinking about thinking" involves the awareness and regulation of the thinking process. These are essential in attaining reading comprehension.

When students learn to use metacognitive skills, they control their own learning and they are able to make connections between subjects and learning as opposed to learning in isolation. Metacognition directly relates to cognitive abilities and skills. Students become the boss of their own brain and of their own thinking. Since metacognition requires an awareness and control over knowledge, it is also over knowledge construction, or cognition (Michalsky, Mevarech, & Haibi, 2009) [15].

These observations, view and experiences relative to the difficulties in reading comprehension and metacognitive strategies of students prompted the researcher in conducting this study.

## Literature Review

Language teaching changes and develops along with developments in language and in education. Different theories to provide language pedagogy frameworks, varied literatures and studies have been created, forwarded and conducted, all for the purpose of advancing teachers' and learners' language competencies along reading. These literature and studies, specifically those that bear relevance to reading, reading comprehension and teaching reading, are presented in this section.

### Building Blocks of Reading: Laying the Foundation

While many classrooms engage in comprehension assessment, researchers have found that explicit strategy instruction is lacking in most classrooms (Basaraba *et al*., 2013) [3]. They observed that while many teachers easily find materials to assess comprehension, the materials to instruct students in the variety of strategies that can assist students in

gaining a greater depth of comprehension knowledge are not readily available. Readers who are offered explicit instruction in comprehension strategy and metacognitive thought processes tend to have a higher level of comprehension than those who do not engage in these skills (Askell-Williams, Lawson, & Skrzypiec, 2012; Dabarera, Renandya, & Zhang, 2014) [2, 32]. Askell-Williams, *et al*.,(2012) [2] emphasized that educators must be taught how to effectively engage learners in metacognitive thought processes that lead learners to gain a higher level of competency in reading comprehension.

The five skills, identified as foundational to reading by Basaraba, *et al*. (2013) [3], are phonemic awareness, fluency, phonics, vocabulary, and comprehension. While comprehension is the end goal of a successful reading encounter, comprehension of text must also include accurate decoding skills. Shaul and Schwartz (2014) [26] explained that phonemic awareness is the study of the sounds within words and that this awareness is strongly correlated to a reader's success in the accurate decoding of text. Phonemic awareness leads students in a natural progression to the study of letters and their sounds in direct phonetic instruction.

Comprehension is often defined as the reader's ability to understand and interpret the text and is considered the most cognitively taxing of the five essential reading skills. Based on these tenets, one can argue that comprehension instruction should be the focus of the majority of the reading instruction time. This does not always occur in the primary-grade reading classroom. Within the standard approach utilized in a basal reader, comprehension instruction beyond literal comprehension is not emphasized before the third grade (Afflerbach, 2011) [5].

**Reading Comprehension Difficulties as a Perennial Problem in Education**

Since it is already a fact that non-readers are a perennial problem in the educational system, the magnitude of reading education should not be underestimated. Teachers must be aware of this because they are the central figures in all teaching activities. The challenge for a brighter future of our school children depends on the teachers. Teachers must accept the challenge and perform their duties and responsibilities honestly and devotedly (Villacortes, 2018) [35].

It is noteworthy to note the result of the reading comprehension test conducted by Programme for International Student Assessment (PISA) in 2019 where the Philippines ranked the lowest among 79 countries (PhilStar, December 2019) [23]. One of the reasons given by Perez (2019) [34] on the Philippines being ranked last in the same assessment is the low ability of students to discern the credibility of a text which was one aspect that PISA tested. This means that students in the country do not know how to evaluate sources, check the facts and actually cross-check them.

This result of the study implies that students should be taught techniques to enhance such reading skill. Higher order comprehension goes beyond the literal understanding of material and connects with students' higher order thinking skills. Incorporating higher order comprehension into lessons at the secondary level is crucial for proper development of analytical and synthesis skills in students. As students advance in their studies, reading progresses from simple recall and recitation of facts to in-depth inferential analysis of material (Fitzell, 2020) [36].

Alcantara (2012) [1] of Faigal Elementary School in Nueva Ecija, Philippines conducted an assessment with regard to the quality of English reading instruction under the "NO READ, NO PASS" policy of DepEd. It is a stringent measure to upgrade the quality of instruction in the country. For this reason, greater responsibility has been placed on teachers to develop all pupils to become good readers in their respective grade level at the end of the school year. The action research premise was conceptualized in order to determine the quality of English reading instruction in the aforementioned place. Hsu (2010) [33] also examined the reading comprehension difficulties encountered by junior high school students in Taiwan and came up with three suggestions from her findings:

1. English teachers should put more emphasis on the teaching of reading comprehension such as instructing the use of reading strategies, and doing more English comprehension practices.
2. Teachers should help the students get ready to read through the use of reading strategies effectively, with practical guidance in how to learn reading comprehension effectively from English reading programs at school; and
3. English teachers should provide various types of reading comprehension practices and related reading materials to help students extend their interest in reading comprehension.

In addition, Martizano (2017) [13] investigated the reading difficulties of Grade 7 students of Prosperidad National High School. It was found out that inferring meaning and drawing conclusions, using phonetic analysis, vocabulary building, idioms and figurative language, finding the main idea and supporting details, using context clues, using parts of the book, using dictionaries, encyclopedia and other reference books, and following directions were the least mastered reading skills. Thus, the researcher opted to design a reading intervention program to address the problem. Romero (2018) [20] disclosed that the reading comprehension skills of the participants had improved from the frustration level to zero frustration, on the three identified least mastered competencies namely, identifying the main idea, vocabulary development, and making inferences after employing the EReCoS (Enhancing Reading Comprehension Skills). These are reading materials consist of diverse activities namely, simple identification, guided identification, word box, context clues, and reading between the lines that helped address the identified least mastered reading skills among the respondents. Meanwhile, Hernando (2012) [12] identified the reading comprehension difficulties of grade six at-risk readers. The study showed that a reading program must be given an emphasis in every school in order to equip the children with the necessary skills. In the study of Winograd (1984) [29], he found out that some eighth-grade students' difficulties with the task of summarization may be linked to deficits in strategic skills. This study suggests that when comprehension difficulties are encountered, teachers should assess the students' use of strategic skills and provide appropriate training if necessary. Further, summarization also employs decision making on what details are relevant and irrelevant. In this decision-making process, students might be best facilitated with the crucial skill of reading comprehension that can enable them to allocate relevant details and exclude irrelevant ones (Flores & Lopez, 2019) [11].

Comprehension is a process that cannot be fully mastered. The reader has to use his skills and comprehensive operations in various grades of comprehension and for all types of texts. (Neff, *et al*., 1995) [17]. So, the curriculum should be sufficient

and flexible at both variety and level of content including what the teacher is supposed to do to teach students using a system of strategies for teaching how to read. The following are the problems and difficulties which could reduce the comprehension efficiency process from what are stated in the educational literature (Shubailat, 2010; Manasrah, 2007; Nasr, 2003; Asr, 1999; Kamahi & Catts, 1991) [37, 38, 39, 40, 41]:

a) Limited previous knowledge of the reader with inability to integrate new knowledge to the previous one.
b) A limited vocabulary.
c) Lack of oral language skills before entering school.
d) Excessive concentration of teachers in the early grades on teaching the skill of decoding the symbol.
e) Focus on accurate reading performance at the expense of meaning.
f) Lack of listening comprehension skills.
g) Parents' carelessness to communicate with their children or follow up them at the school.
h) Lack of exposing children in the early grades for printed materials.
i) Create negative attitudes among students towards reading and materials.
j) Lack of dedicated time for independent reading; and
k) Weakness of the students' self-confidence in their abilities to read.

**Metacognitive Learning Strategies in Learning and Reading Comprehension**

Comprehending text is a complex mental process. Readers need to use their prior knowledge to interpret the information in the text and construct a meaningful representation of what the text is. It is important that the readers have to understand and remember what the text is, and also they need to monitor whether comprehended text makes sense or not and whether the information learned from the text can be used to achieve their goals as elaborated in the study of McNamara Ozuru Best and O'Reilly (2006) [14]. The process of being aware of using readers' own cognitive resources is called metacognition. The current studies of reading comprehension do emphasize the strategies used by good and poor readers, and also the metacognitive awareness readers have.

Cross and Paris (1988) [6] and Yuill and Joscelyne (1988) [30] identified comprehension strategies which they suggest good readers have in place and contribute to their success as readers. Cross and Paris studied the relationship between metacognition and reading ability using Informed Strategies for Learning (ISL). They found that these strategies provided help for poor readers and concluded that good readers were already using these metacognitive comprehension strategies. This suggests that successful readers may intuitively and independently integrate these reading comprehension strategies into their reading abilities.

Paris and Oka (1986) [18] conducted another study to investigate students' use of reading comprehension strategies by teaching them to be metacognitive about reading process. The results revealed that the students who used ISL improved their reading comprehension and those readers of all skill levels benefitted from ISL.

Metacognitive experiences or regulations refer to a set of activities that help learners to control their learning. According to Flavell (1979) [63], metacognitive experiences involve the use of metacognitive strategies and are likely to come up "in situations that stimulate a lot of careful, highly conscious thinking in novel experiences". It refers to the actions used to achieve an individual's goals in learning. In addition, classroom research shows that students who apply metacognitive strategies are more likely to excel in problem-based learning (Hmelo-Silver, 2004; Rozencwajg, 2003) [42, 21], self-regulation (Butler & Winne, 1995; Narciss, Proske, & Koerndle, 2007; Pintrich, 2004; Schunk & Zimmerman, 2003) [43, 44, 45, 46] self-efficacy and motivation (Dinsmore *et al*., 2008; Ormrod, 2011; Wolters & Pintrich, 1998; Zull, 2011) [47, 48, 49, 50] expert learning (Bransford, Brown, & Cocking, 2000; Sternberg, 1998, 2003) [51, 52, 53], and in academic achievement (Hartman, 2001; Justice & Dornan, 2001; McCormick, 2003; Peverly, Brobst, Graham, & Shaw, 2003; Vrugt & Oort, 2008; Winston, Van Der Vleuten, & Scherpbier, 2010) [54, 55, 56, 57, 58].

Interestingly, metacognitive learning strategies can also be defined as any thoughts or behaviors that promote encoding Within this definition, encoding refers to a process in the brain where perceived items of interest are converted into a construct that can later be recalled from short-term or long-term memory. (Schellenberg, Negishi, & Eggen, 2011) [24]. Contemporary research about students' metacognitive learning strategies suggests that these strategies are complex and that metacognition does not involve a single technique (Zimmerman, 2002) [60]. Applying metacognitive strategies involves several aspects of the learning process and may include planning an approach, evaluating the progress, and monitoring levels of comprehension (Hattie, 2009) [61].

According to Hattie (2009) [61], when instructors teach about metacognition as a separate course component, for example as a way to offer "study tips", it tends to only affect students' surface knowledge. In contrast, when instructors integrate metacognition into the course content and require the use of metacognitive strategies in the learning process, this tends to affect a deeper level of students' understanding (Hattie, 2009) [61]. Lavery (as cited in Hattie, 2009) [61] found that the metacognitive strategies that seemed to produce the highest effects on students' knowledge were goal-setting and planning, self-instruction, and self-evaluation.

Hence, pedagogy integrated with metacognition-explicitly teaching about metacognition, modeling metacognitive strategies, and teaching content by involving metacognitive strategies-seems to offer the best possibilities for the development of students' metacognitive skills and abilities.

**Materials and Method**

This study used the descriptive research design. The reading comprehension levels of the Grade 10 students and the metacognitive strategies they use were identified. Also, the implications of the results of the analysis of data to the teaching of reading in the senior high school were drawn. The research instruments used were researcher-made reading comprehension test, survey questionnaire on the Metacognitive Strategies of Grade 10 Students adopted from Mokhtari and Sheorey (2002) [62] that determined the metacognitive strategies used by the Grade 10 students when they experience reading comprehension difficulties.

After receiving the ethical clearance certificate from University Research Ethics Review Board (URERB) and after securing permission from the Schools Division Superintendent of the Division of the City of Batac for the conduct the study in the said division, data gathering was done online instead of the usual face to face procedure due to the COVID19 pandemic. Enough time was given to the respondents to accomplish both the questionnaire and comprehension test. Their answers were tabulated and analyzed. Likewise, students' reading comprehension levels

and metacognitive strategies were interpreted to come up with their implications to the teaching of reading in the senior high school.

## Results and Discussion

### Reading Comprehension Level of Grade 10 Students

Reading is the basic tool for learning in all subject areas. Because of this, reading has always been regarded as the primary key to learning in the educational process. Table 1 shows the reading comprehension level of the Grade 10 students.

**Table 1:** Reading comprehension level of Grade 10 students.

| Reading Comprehension Skill | Mean Percentage Score (MPS) | Reading Comprehension Level |
|---|---|---|
| 1. Vocabulary | 31.30% | Frustration |
| 2. Summarizing | 24.80% | Frustration |
| 3. Sequencing | 32.52% | Frustration |
| 4. Inferring | 41.06% | Frustration |
| 5. Comparing and Contrasting | 39.43% | Frustration |
| 6. Drawing conclusions | 45.39% | Frustration |
| 7. Finding the main idea | 42.28% | Frustration |
| 8. Relating background knowledge | 31.17% | Frustration |
| 9. Distinguishing between fact and opinion | 28.86% | Frustration |
| Overall | 35.20% | Frustration |

| Legend | |
|---|---|
| **Score (in %)** | **Reading Comprehension Level** |
| 80-100 | Independent |
| 59-79 | Instructional |
| 58 and below | Frustration |

Based on the table, the reading comprehension level of the Grade 10 students is within the frustration level (Phil-IRI manual, 2018) as indicated by the overall mean percentage score (MPS) of 35.20%. In all nine reading comprehension skills, the Grade 10 students are also within the frustration level. The result implies that the Grade 10 students are not performing according to the reading comprehension level expected of them. It is also important to note that the students experienced difficulties along the nine reading comprehension skills, namely: vocabulary, summarizing, sequencing, inferring, comparing and contrasting, drawing conclusions, finding the main idea, relating background knowledge, and distinguishing between fact and opinion. This means that in order for the students to improve their reading comprehension level, all the nine reading comprehension skills should be developed and be given equal attention. When students experience difficulties even in just one of the reading comprehension skills, their general comprehension skill will be affected.

It is noteworthy to mention that reading is a basic tool in learning in all subjects. However, not all subjects provide learning opportunities for students to improve their reading comprehension skills. Hence, the involvement of all teachers, regardless of the subject they teach, is needed so that it would be easier for students to go beyond the frustration level. Such finding corroborates with that of the 2019 Phil-IRI result in the said Division Profile of the Schools Division of Batac wherein 75% of the grade 4 test takers and 73% of the grade 5 test takers need interventions for scoring less that 14 out of 30 items from their reading test. Furthermore, the results also find support in the study of Pemito-Amor (2018) [19] where she found out that despite the efforts to aid the reading skills of the students such as Every Child A Reader Program (ECARP) of the Department of Education (DepEd) and declaring November as National Reading Month of every year which mainly aimed to promote reading and literacy among the learners to name a few, still, many learners are at the developing level of reading. In addition, the result of Philippine Informal Reading Inventory (PHIL-IRI) conducted in June 2017 at Calaitan National High School of Bayugan City Division showed a poor performance in reading of the Junior High School students. Of the 326 students, only 91 or 28% were classified independent readers. These learners were the ones who could access the text very quickly with 100% accuracy when reading. On the other hand, 125 students belong to developing level. These data reveal that these learners have reading difficulties. They read below their grade level and they exhibit low level of comprehension.

Moreover, the result is also supported by findings of the study conducted by Suwanto (2014) [64] in several schools. Suwanto found out that there are some students who cannot understand very well what they have read and cannot summarize the good points of a text. Such difficulty in summarizing shows how students poorly understand a text and could not find the connection between relevant information presented in a text to come up with a general picture. In another research conducted by Semarang (2017) [65], it showed that many students do not understand what they read because majority of them cannot retell about what they have read.

When it comes to distinguishing between fact and opinion, the Grade 10 students gave minimal answers and cannot even distinguish biases from a text. They can give opinions to questions; however, it is difficult for them to pinpoint facts and opinion in texts. Such result was evident in the data provided by the 2018 Programme for International Student Assessment (PISA) revealing that most 15-year old students in some countries have difficulty in distinguishing fact from opinion. Only 13.5% of the students could reliably distinguish fact from opinion in reading tasks. Surprisingly, majority of the students could not retell and even recall literary pieces that they have read during their early secondary years. This shows that the students have poor background knowledge, a skill that is necessary in understanding a text. Background knowledge is based on the learner's past experiences and students need this threshold of knowledge about a topic. The students' poor reading habits give them an almost empty threshold of knowledge making it difficult for them to answer reading comprehension test that requires such macro skill. If a learner is a wide reader, then it is easier for him to construct a meaningful mental model of what a reading text is about. Unfortunately, the students do not engage themselves much in reading materials like printed news, literary pieces, academic papers and other books unless the teachers told them to do so during class activities.

Similarly, when it comes to comprehension, reading strategies such as visualizing, predicting, summarizing, questioning, making connection and inferring are ineffective if students do not have sufficient background knowledge (Fisher, Ross & Grant, 2010) [66]. Such is one of the reasons for the Grade 10 students to have difficulties in all the reading comprehension skills.

**Metacognitive Strategies in Reading Used by the Grade 10 Students**

Metacognition is the foundation for other reading comprehension strategies. Proficient readers continually monitor their own thoughts, controlling their experience with the text and enhancing their understanding. This section presents the metacognitive strategies used by the Grade 10 students when they experience reading comprehension difficulties.

Table 2 shows the standard deviation, mean and frequency of the metacognitive strategies used by the Grade 10 students when experiencing reading comprehension difficulties.

Among the fifteen Metacognitive Strategies (MS), the five used *most often* by the Grade 10 students are the following: (MS 10) *I read slowly but carefully to be sure I understand what I am reading*; (MS 5) *I try to understand one paragraph before proceeding to the next one*; (MS 13) *When a reading text becomes difficult, I pay closer attention to what I am reading;* (MS 2) *I read other references and read about the topic*; and (MS 11) *I try to get back on track when I lose concentration.*

**Table 2:** Metacognitive strategies used by Grade 10 students when experiencing reading comprehension difficulties.

| Metacognitive Strategies (MS) | Standard Deviation | Mean | Frequency |
|---|---|---|---|
| 1. I take down/underline/highlight the key ideas when reading. | 1.03 | 3.83 | Often |
| 2. I read other references and read about the topic. | 0.90 | 4.17 | Often |
| 3. I picture or visualize information to help remember what I read. | 3.24 | 4.15 | Often |
| 4. I discuss and solve the doubts related to the reading text with my teachers and friends. | 0.97 | 3.46 | Some-times |
| 5. I try to understand one paragraph before proceeding to the next one. | 0.90 | 4.36 | Often |
| 6. I go over a reading text for several times until I can understand it. | 0.98 | 4.13 | Often |
| 7. I summarize what I read to check whether I understand the text or not. | 0.96 | 3.85 | Often |
| 8. I predict what will happen after reading a text/story. | 0.97 | 3.73 | Often |
| 9. When I read, I should simply get the information from the reading passage. | 0.90 | 3.87 | Often |
| 10. I read slowly but carefully to be sure I understand what I'm reading. | 0.83 | 4.46 | Often |
| 11. I try to get back on track when I lose concentration. | 0.97 | 4.17 | Often |
| 12. I adjust my reading speed according to what I'm reading. | 0.93 | 4.02 | Often |
| 13. When a reading text becomes difficult, I pay closer attention to what I am reading. | 0.94 | 4.23 | Often |
| 14. I stop from time to time and think about what I'm reading. | 1.00 | 3.78 | Often |
| 15. I take down/highlight difficult words and use the dictionary to unlock their meanings and use them in sentences. | 1.03 | 3.90 | Often |
| Overall | 1.27 | 4.01 | Often |

| Legend: | |
|---|---|
| **Range of Means** | **Descriptive Interpretation** |
| 4.51-5.00 | Always |
| 3.51-4.50 | Often |
| 2.51-3.50 | Sometimes |
| 1.51-2.50 | Rarely |
| 1.00-1.50 | Never |

The results imply that the Grade 10 students need to spend longer time to understand what they read. The use of MS 10 and MS 5 when experiencing reading comprehension difficulties only shows that the students tend to grasp words slowly to decode them. On the other hand, using MS 13 and MS 11 implies that students need full concentration in order to understand what they are reading. Hence, distractions or multitasking should be avoided so that they can pay attention to the text. Likewise, the use of MS 2 implies that the students should be given enough time and opportunities to expose themselves to other related reading materials or references. This could help them develop a rich background which they can use to understand a reading text.

In addition, the results also imply that students cannot accomplish all reading comprehension questions and activities on a given time limit because they need to have longer time to process what they are reading. The curriculum guide should be decongested in order to allow the students to employ these metacognitive strategies and cope with their reading comprehension difficulties.

Even during this time of pandemic when there are only 5-8 Most Essential Learning Competencies per quarter, the students still find it hard to comprehend the lessons in their modules especially if two or more reading texts are involved. English teachers are even complaining that the number of students who are able to accomplish reading activities is decreasing.

Furthermore, such results corroborate with that of the findings of Chen & Chen (2015) [67] who discovered that high school students really need to spend longer time to be able to process a given reading material. Hence, teachers should be patient enough to guide students during reading activities and that time pressure should not affect students' concentration.

Interestingly, among the metacognitive strategies, only MS 4, *I discuss and solve the doubts related to the reading text with my teachers and friends,* is *sometimes* employed by the students. This is evident in classroom situations because even though the teacher asks students if they have questions regarding the lesson, the class tends to become silent and learners feel awkward to ask for clarifications. Majority of the students do not ask questions to the teacher or to their friends because the latter also do not know how and what to tell them.

Finally, the result of this study revealing the five most frequently used metacognitive strategies of the Grade 10 students corroborates with the findings of Li (2010) [68] in a study on *Using the Metacognitive Awareness of Reading Strategies Inventory (MARSI) to Explore the Uses of Reading Strategies of Students.* He found out that students' full concentration, the use of other references or reading materials related to the topic, and spending longer time to process the text are what they use when experiencing reading comprehension difficulties.

**Implications of the Reading Comprehension Level and Metacognitive Strategies Used by the Grade 10 Students to the Teaching of Reading in the Senior High School**

From the results of the study on the reading comprehension levels and metacognitive strategies of the Grade 10 students, the following implications to the teaching of reading in the senior high school are drawn.

The Grade 10 learners are considered the senior students in the junior high school. While it is true that the usage of metacognitive strategies may help the learners in their reading comprehension, specific strategies may or may not be

applicable to address specific difficulty in reading (Muhid, *et al*., 2020) [16]. This study found out that most of the Metacognitive Strategies mentioned were often used by the Grade 10 students, thus there are still time that they do not employ these strategies in reading. Such result then implies that in order for them to cope with their low level of reading comprehension as they enter the senior high school, their teachers may start to give them trainings on metacognitive strategies and make the students aware of and foster their students to acquire metacognitive strategies. They can explore more on these metacognitive strategies to enhance their reading comprehension during their lessons and classroom activities. Teachers can also model these metacognitive strategies for their learners. On the other hand, students could acknowledge themselves to learn about metacognitive strategies and further to apply the strategies purposefully.

Aside from the Grade 10 students having the lowest reading comprehension level in this macro skill, this study also found out that summarizing has no significant relationship between any of the metacognitive strategies. This implies that the students find it challenging to apply such macro skill because they do not employ any metacognitive strategy that would help them employ summarizing effectively.

Summarizing is a cognitively demanding job as it requires the students to reconceptualize the text that they have read through the process of going back and forth in the text and viewing it from a more general macro level, rather than a local micro one. Also, it requires the students to have a good grasp of the main ideas of the text and to distinguish the important superordinate elements from the less important, subordinate ones (Nambiar, 2007) [69].

Two of the learning competencies required in the Teaching of Reading and Writing subject in the senior high school which require a great deal of summarizing skill are to write a book review or article critique and write a literature review. Hence, the teacher should teach the students to employ decision making on what details are relevant and irrelevant. This macro skill should be taught longer to them for them to grasp better strategies to employ it with efficacy.

On the other hand, Graney (1990) attributes the capability to determine fact and opinion to 'sophisticated' readers and maintains that "when a somewhat sophisticated reader directs attention towards this, he can do it; he can say whether a text is a fact or an opinion". In other words, Graney views the ability to determine fact and opinion as one of the sub-skills of reading ability in skilled readers.

One of the findings of this study revealed that the Grade 10 students find it difficult to employ such reading skill. Students need to develop this skill because such is needed when developing the following competencies in the Senior High School:

1. Identifies claims explicitly or implicitly made in a written text;
   a) Claim of fact.
   b) Claim of policy.
   c) Claim of values.

2. Formulates evaluative statements about a text read.
   a) Formulates assertions about the content and properties of a text read.
   b) Formulates meaningful counterclaims in response to claims made in a text read needs; and

3. Determines textual evidence to validate assertions and counterclaims made about a text read.

This result of the study implies teachers teaching the reading subject should encourage higher order comprehension that goes beyond the literal understanding of material and connects with students' higher order thinking skills. Incorporating higher order comprehension into lessons in the subject is crucial for proper development of analytical and synthesis skills in students. As students advance in their studies, reading should progress from simple recall and recitation of facts to in-depth inferential analysis of material (Fitzell, 2020) [36].

It was also revealed from this study that the students' skill in relating background knowledge is the third lowest level macro skill in reading. With such results, senior high school teachers can activate students' background knowledge in a number of ways. In the teaching of reading in the senior high school, the skill in relating background knowledge is needed in developing all the competencies that require reading comprehension. The teacher should make sure that students' background knowledge is activated during the pre-reading activities. Such teaching pedagogy should be a part of the teaching-learning process, which includes looking for instructional techniques, classroom management procedures, grade-level content, and background knowledge development, among others. Putting all of these to use requires attention to the ways in which background knowledge is activated during a lesson.

In addition, Rumelhart (1980) [22] pointed out the importance of pre-reading stage in building confidence and creating security within the learners before they approach a reading text. He further added that the pre-reading phase also can shed light on the different experiences and background knowledge that students bring to a text, influencing how they will read and learn from a particular text. By knowing what students bring to a text, the teacher can provide students with appropriate scaffolds to make links between what is already known and new information presented in a text.

Consequently, it was also found that the vocabulary is the fourth lowest level macro skill in reading comprehension of the Grade 10 learners. Past evidence has shown that vocabulary is significantly related to inference ability, listening comprehension, and reading comprehension (Cain & Oakhill, 2014; Daugaard, *et al*., 2017) [70, 71]. This implies that the low level of vocabulary among the Grade 10 students should be prioritized by the teachers. It is oftentimes the first activity during lessons which involves a great deal of reading comprehension. Some previous studies proposed games as media to teach vocabulary. A study held by Silsüpür (2017) [72] found that in reality, the students preferred learning through vocabulary games rather than traditional way. The findings of Silsüpür also revealed that games reduce negative feelings during the learning process. It suggested that teachers should reconsider the role of games and appreciate their educational value. In other words, negative feelings can also influence the process of learning in the classroom and fun activities such as game can reduce the feelings to make students feel more comfortable and master or understand the lesson better.

Additionally, it was found that sequencing is among the five lowest reading comprehension level among Grade 10 students. This skill is needed in summarizing, thus, if such skill will be enhanced, the learners' low level of reading comprehension in summarizing will also be addressed.

Teachers in the senior high school should inculcate in their lessons more sequencing lesson ideas and sequencing

activities to improve their comprehension in this macro skill in reading.

Meanwhile, the ability to compare and contrast is one of the first higher-order reading comprehension skills students are introduced to. It is no wonder, as the ability to categorize and compare things in terms of their differences and similarities corresponds to some the earliest stages of cognitive development. In the study conducted by Henk and Stahl (1989) [74] on The Usage of Comparison-Contrast of the College Developmental Reader, they found out that college developmental readers performed poorly overall. Most of these students could not read 11th grade comparison-contrast passages with satisfactory comprehension. By contrast, proficient readers tend to achieve around 70% comprehension (rather than 58%), placing them at the instructional level for the same passages and questions.

If there are competencies that require the implicit use of the skill, the teachers can use the noteworthy implication given by Henk and Stahl (1985) [73] for developmental educators and teachers in the secondary level. According to them, students may require explicit instruction with both divided and alternating patterns to facilitate their learning of unfamiliar comparison-contrast information. The use of graphic organizers is also helpful for the students to further understand a reading text with ideas that need to be compared and contrasted.

The low reading comprehension level of the Grade 10 students in making inferences can find support in the study carried out by Baydık (2018) [75]. In his study, the learner participants were not able to perform adequately in inference-making. Such reading comprehension macro skill is much needed in the competency on identifying the unique features of and requirements in composing texts that are useful across disciplines. This is because according to Harvey and Goudvis (2007) [76], through making inferences, students will be able to draw conclusions, make predictions, identify underlying themes, use information to create meaning from text, and use pictures to create meaning. This idea implies that students can be taught to use illustrations, graphs, and titles from the text to make inferences.

Another aspect of skilled reading that is difficult for many students to employ is finding the main ideas of a passage. Though in this study, it is the second highest level in their reading comprehension, it is still considered low with an MPS of 42.28%. The same is true to the study of Mauli, *et al.* (2014) [77] about Students' Difficulties in Finding Main Ideas. She found out that the 8th grade students felt difficulty in finding main ideas because they do not know the meaning of main idea and many difficult words are causing difficulties to find main ideas in the text. In paralleled studies with subjects from third grade through college, Brown and Smiley (1977a, 1977b) [4] found large developmental differences in the ability to determine the importance of structural units of prose passages. Eamon (1978-79) [78] also presented evidence that distinguishing main ideas from peripheral information can be difficult for poor readers. This implies that in presenting information, teachers explicitly point out main ideas, and they provide cues such as intonation patterns, amount of repetition, and phrasing. All of this may make the task of determining main ideas much easier when listening to teachers' presentations than when reading. These techniques can be adopted by the senior high school teachers when teaching the students in making a book review or article critique.

Also in this study, the skill in drawing conclusions has the highest reading comprehension level of the grade 10 students. To draw conclusions means the student uses written or visual clues to figure out something that is not directly stated in the reading. Such result is similar to the findings of the study of Kurniawati (2014) [79] titled 11th Grade Student's Capability in Drawing Conclusion where she found out that the students' capability in drawing conclusion from argumentative text is good capability (satisfactory). It is evident from a number of students where more than 50% students or 25 from 38 students are able to draw conclusions without seeing the use of grammar and structure.

In the context of this study, drawing conclusions being the least difficulty of the students imply that such is their strongest macro-skill in reading comprehension, and if contingency measures in improving their reading comprehension will be implemented focusing in all of the indicated macro skills in reading comprehension, their skill in drawing conclusion will be enhanced.

## Conclusion

In light of the findings, it can be concluded that the Grade 10 students are within the frustration level of reading comprehension and they use different metacognitive strategies when experiencing reading comprehension difficulties. The usage of metacognitive strategies may help the learners in their reading comprehension but specific strategies may or may not be applicable to address specific difficulty in reading. This is true to the low reading comprehension level of the Grade 10 students. Such conclusions conform to the Self-Regulated Learning Theory and Metacognitive Theory because the learners used specific metacognitive strategies to cope with their difficulties in their reading comprehension.

## Recommendations

Based on the findings and conclusions of the study, the following recommendations are offered:

Reading programs should further be strengthened from elementary to high school to improve the students' reading comprehension skills and will be well prepared when they reach senior high school. There are a number of reading programs and interventions which could deliver noteworthy results like BASA PILIPINAS and RRA Reading Clinic. These programs and interventions, if given much importance and attention by schools divisions and school administrations, could help students improve their reading comprehension skills and could make them better learners in all subject areas in the junior and senior high school.

Further, all teachers should encourage students more to read as often as possible to enhance their reading comprehension skills. In addition, teachers should provide explicit instruction on the use of study strategies on metacognition by modelling the processes themselves. Such metacognitive strategies in reading can be taught in all subject areas since all of them require reading comprehension to better understand the lessons.

Curriculum developers should also consider the students' difficulty and reading comprehension level when designing lessons and incorporating strategies and approaches in teaching reading. They may include implicit and explicit metacognitive strategies in the instructions of reading activities and lessons. Further research on the effective selection of metacognitive strategies which may be applied in reading lessons may also be done.

In the SHS curriculum implementation, there should be an identification, selection and implementation of a well-designed, research-based core reading program as the first

step in a model designed to address reading difficulties and low reading comprehension level in most students. Once a school selects such an instructional program, it is crucial that the program be fully implemented with high fidelity. Administrators must thoroughly understand the elements of a research-based reading program and should establish a school culture that values effective, research-based, proven practices. Once the school embraces a new curriculum for reading instruction, it must be nurtured by frequent review, regular meetings for collective discussion and troubleshooting, on-going professional development, implementation monitoring systems and coaching support for teachers for continuous improvement. Moreover, educating students to become critical thinkers with metacognitive skills and abilities is one of the primary initiatives of 21st century learning.

Finally, this study could encourage research enthusiasts to conduct studies similar to this research on a wider scope to further validate its findings. It is also suggested that more studies will be conducted not only on the students reading comprehension difficulties and their metacognitive strategies but also other research related to reading.

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