



DIGITIZED AND CONTEXTUALIZED READING PATHWAYS AS INTERVENTION TOOL FOR LITERACY SKILLS DEVELOPMENT

LIWANAG S. SORILLO

Ibajay Integrated School
liwanagsorillo.1@gmail.com

ABSTRACT

This study investigated the effectiveness of Digitized and Contextualized Reading Pathways as an Intervention tool for developing the literacy skills of Grade 10 learners at Ibajay Integrated School during SY 2026-2027. Utilizing a true experimental research design, the study involved 50 Grade 10 students. The intervention integrated scaffolded reading activities, contextualized texts, explicit strategy training, guided questioning, predicting, inferencing, summarizing, reflection and self-monitoring across diverse thematic pathways. Data were gathered using a researcher-made, expert-validated and pilot-tested. Literacy skills test measuring reading comprehension, inference-making and metacognitive strategy usage. Descriptive statistics like mean, standard deviation, frequency and percentage were used, for the inferential statistics, paired samples t-test and independent samples t-test were utilized for data analysis.

The findings revealed that both groups had comparable low baseline literacy skills prior to the intervention, falling under the Low/Weak Proficiency category with no significant pretest difference. Following the intervention, both instructional methods demonstrated significant improvements. However, the experimental group exposed to the Digitized and Contextualized

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Reading Pathways achieved a mean that classified as Mastered/Excellent Proficiency level. In contrast, the control group under conventional instruction attained a mean under Closely Approximating Mastery/Very Good Proficiency level.

The results conclude that while conventional instruction improves reading performance, the Digitized and Contextualized Reading Pathways intervention is substantially more effective in elevating students' reading comprehension, inference-making capabilities, and metacognitive regulation to mastery levels. The study recommends institutionalizing structured, digitized and contextualized reading frameworks in secondary school curriculum and reading intervention programs to support literacy development.

Keywords: *Conventional Reading Instruction, Contextualized Reading Pathways, Digitized Reading Pathways, Inference Making, Literacy Skills, Reading Pathways*

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



INTRODUCTION

Reading goes beyond just the decoding of words since it is an interactive process whereby there is comprehension, reflection, strategic thinking, and motivation. Reading literacy is defined by one's capacity to comprehend, interpret, analyze, and use written texts for their own personal needs, learning purposes, and effective participation within society. The cognitive engagement in reading entails the mental processes adopted by readers when interacting with texts through questioning, inference, comprehension checks, and relating the new information to previous knowledge (Guthrie & Wigfield, 2020). On the other hand, reading pathways are systematic arrangements of reading tasks aimed at taking learners through increasingly challenging texts while incorporating explicit reading strategies (Afflerbach et al., 2021). Similarly, the framework of PISA underscores the importance of cognitive engagement and strategic behaviors associated with reading literacy for comprehension, evaluation, and application of information in both printed and online texts (OECD, 2019).

Nationally, literacy for adolescents remains a serious issue in education. Whereas many students enrolled in secondary schools may be proficient in decoding, there are many students who find it difficult to comprehend, infer and think critically and analytically, skills necessary to excel in their studies. Many studies now point out that factors like engagement and motivation of learners and the explicit instruction of metacognitive reading strategies are some of the most important things that influence learners into becoming strategic readers (Jang, 2023; International Literacy Association, 2023). In this regard, educational systems have

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



adopted a more structured way of improving literacy through scaffolding and engagement of learners in their reading interventions.

In Asia, international large-scale assessments show poor reading proficiency levels among adolescents. Such findings have led to adoption of different instructional practices that include scaffolded reading, differentiated instruction, contextualized learning materials, and strategic reading programs, among others. In the Philippines, the Department of Education has strengthened literacy development through programs such as the Philippine Informal Reading Inventory (Phil-IRI), Project BEAR, and *Arangkada Pagbasa*, which primarily focus on improving foundational reading skills among beginning and struggling readers (Aquino et al., 2024). Despite these initiatives, relatively few intervention studies have focused on Grade 10 learners, whose curriculum requires them to process increasingly sophisticated informational and literary texts while demonstrating higher-order comprehension, inferential reasoning, and metacognitive thinking.

At the local level, Ibajay Integrated School continues to face challenges in developing the literacy skills of Grade 10 learners. Based on classroom observations, teacher assessments, and school reading performance records, many learners demonstrate satisfactory oral reading fluency but experience difficulty in understanding complex texts, drawing logical inferences, synthesizing ideas, evaluating information critically, and applying appropriate metacognitive reading strategies during independent reading activities. These challenges are reflected in learners' classroom performance, written outputs, and assessment results, where comprehension and higher-order thinking skills remain areas of concern. Furthermore, existing

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



reading interventions in the school primarily emphasize remediation of basic reading skills and provide limited opportunities for structured cognitive engagement appropriate for secondary learners who are expected to analyze, interpret, and evaluate increasingly complex texts.

Based on these considerations, this study recommends Digitized and Contextualized Reading Pathways as an intervention which involves scaffolded and context-related reading activities, as well as cognitive and metacognitive strategies like predicting, questioning, inferencing, summarizing, monitoring, and reflection. The purpose of these activities is to make reading more meaningful, thus enhancing comprehension and inferencing abilities, as well as metacognition. This study seeks to find out whether the proposed intervention will be effective for Grade 10 learners of Ibajay Integrated School and to provide information which can be used in developing effective literacy interventions for secondary learners.

This research study endeavors to find out how effective structured and contextualized reading pathways in improving the literacy skills of Grade 10 students of Ibajay Integrated School considering their reading comprehension, inference making, and use of metacognitive strategies. The study will seek to answer the following questions: What is the level of literacy skills of the Grade 10 students considering the Pretest Scores when they are subjected to Conventional Instruction and Innovative Instruction through the Use of Digitized and Contextualized Reading Pathways?, What is the level of literacy skills of the Grade 10 students considering the Posttest Scores when they are subjected to Conventional Instruction and Innovative Instruction through the Use of Digitized and Contextualized Reading Pathways?, Are there significant differences in the level of literacy skills among Grade 10 pupils based on

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



pre-test scores when taught with Conventional Instruction and Innovative Instruction through the Use of Digitized and Contextualized Reading Pathways?, Are there significant differences in the level of literacy skills between Grade 10 learners using post-test scores when instructed using the following techniques: Conventional Teaching and Innovative Teaching through the Use of Digitized and Contextualized Reading Paths?, Are there significant differences in the level of literacy skills using pre- test and post-test scores of Grade 10 learners using Conventional Teaching? Lastly, are there significant differences in the level of literacy skills using pre- test and post-test scores of Grade 10 learners using Innovative Teaching through Digitized and Contextualized Reading Pathways?

Hypothesis

This hypothesis is formulated based on the statement of the problem:

1. There is no significant difference on the level of literacy skills of the Grade 10 students based on the Pretest Scores when they are exposed to:
 - 1.1 Conventional Instruction
 - 1.2 Innovative Instruction thru the Use of Digitized and Contextualized Reading Pathways.
2. There is no significant difference on the level of literacy skills of the Grade 10 students based on the Posttest Scores when they are exposed to:
 - 2.1 Conventional Instruction

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



2.2 Innovative Instruction thru the Use of Digitized and Contextualized Reading

Pathways.

3. There is no significant difference on the level of literacy skills based on the Pretest Scores and Posttest Scores of the Grade 10 students exposed to Conventional Instruction.
4. There is no significant difference on the level of literacy skills based on the Pretest Scores and Posttest Scores of the Grade 10 students exposed to Innovative Instruction through the use of Digitized and Contextualized Reading Pathways.

Theoretical Framework

Firstly, this study will be based on three major theoretical foundations, which are the sociocultural theory of Vygotsky (1978), cognitive apprenticeship theory by Collins, Brown and Newman (1989), and metacognitive theory by Flavell (1979). Together, all of these theoretical approaches explain how the structured and context-based reading paths enhance development of reading skills through provision of instructional support, strategy demonstration, and regulation of one's thinking during reading processes. Additional theoretical basis for the study will be provided by the Engagement Theory of Fredricks, Blumenfeld and Paris (2004).

The first basic theoretical basis of the study will be the sociocultural theory by Vygotsky. According to this theory, learning process takes place through social interaction with others and is guided by more knowledgeable persons. The key element of this theory is

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



the zone of proximal development (ZPD), which represents the gap between what can be done by learners independently and what can be done under the proper assistance of teachers or peers. Through ZPD, instructional scaffolding helps learners to develop higher level of comprehension.

In the development of the Structured and Contextualized Reading Pathways in the current study, scaffolding as described by Vygotsky has been implemented. This is because of the sequential way the activities related to reading have been structured, starting with less difficult readings to more difficult ones in a stepwise manner. At each level, there will be teacher guidance, guided practice, collaboration, and independent reading activities. Scaffolding is supposed to help learners become competent in their reading comprehension and inferential abilities.

Vygotsky's theory has been complemented by the Cognitive Apprenticeship Theory as proposed by Collins, Brown, and Newman (1989). The theory extends traditional apprenticeship into cognitive realms, whereby learners develop complex cognitive skills through observation, guided practice, coaching, reflection, articulation, and eventual independence. In addition to teaching the content, the teacher helps learners see what expert thinkers do in solving problems.

In this case, Digitized and Contextualized Reading Pathways can be viewed as a cognitive apprenticeship approach because of the explicit nature in which learners are taught about the thought processes involved in proficient reading. In the process of instruction, the

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



teacher models the various reading strategies such as the activation of prior knowledge, prediction, questioning, inference making, summarizing, comprehension monitoring, and evaluation of information. The learners are allowed to practice these strategies under the direction of the teacher before eventually using them on increasingly complex texts on their own.

Metacognitive Theory proposed by Flavell (1979) provides the theoretical base for this study as well. According to the theory, learning becomes highly effective when the learner possesses sufficient awareness and regulation of their own cognitive processes. The theory identifies three main processes in metacognition namely planning about what needs to be done in order to learn, monitoring of learning, and evaluation of how well the process was conducted.

Further research on metacognition has shown that those learners who regulate their cognition consciously exhibit greater comprehension skills, critical thinking, and problem-solving capabilities (Ozturk, 2024). In the present case, the Digitized and Contextualized Reading Pathways involve specific metacognitive techniques such as prediction, questions, summarization, clarification, reflection, self-monitoring, and self-assessment. These techniques help learners to be aware of their thinking during reading process, monitor constantly their comprehension skills and assess the efficacy of the techniques they use. It means that learners will enhance self-regulation and will become independent and reflective readers.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



These theoretical foundations are supported by the Engagement Theory by Fredricks, Blumenfeld, and Paris (2004) which claims that effective learning happens in the situation when learners engage themselves mentally, behaviorally, and emotionally in class activities. Cognitive engagement implies mental efforts made by learners for the comprehension of complex ideas, behavioral engagement deals with active participation in learning process, whereas emotional engagement relates to learners' interest in learning.

All four theoretical perspectives, taken collectively, provide a solid rationale for the improvement in the literacy skills of Grade 10 learners through the proposed intervention program. Sociocultural Theory emphasizes the importance of scaffolded instruction and guided learning. Cognitive Apprenticeship Theory demonstrates how learners gain the necessary knowledge through explicit modeling and guided practice in strategic reading behavior. Metacognitive Theory provides an insight into learners' regulation of their thinking process, leading to better comprehension. Finally, Engagement Theory reiterates the need for maintenance of cognitive, behavioral, and emotional engagement of learners.

Conceptual Framework

The current research is built on the Input Process Output (IPO) theory and shows the link between the Digitized and Contextualized Reading Pathways application and literacy skills acquisition by Grade 10 learners. In particular, the present investigation looks into the possibility that the intervention helps students develop their reading comprehension,

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



inference-making abilities, and metacognitive strategies usage more effectively than the conventional method of teaching does.

The theoretical framework employs a quasi-experimental pretest-posttest control group design. There are two equivalent groups of Grade 10 learners used for the study. While one group receives traditional reading classes in the classroom, another group receives an intervention called Digitized and Contextualized Reading Pathways intervention.

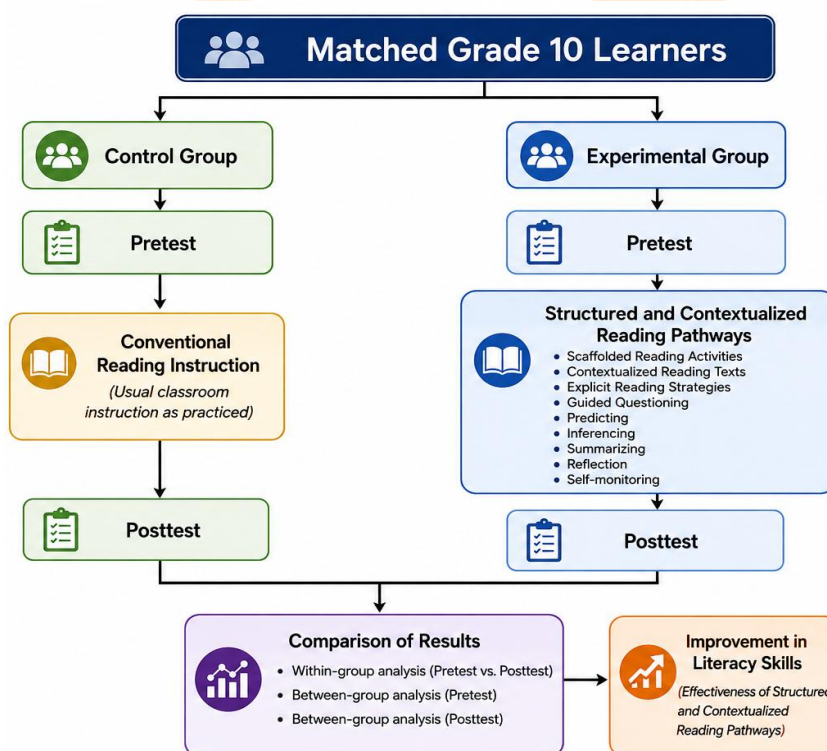


Figure 1: The Research Paradigm Illustrating the Researcher's Conceptual Framework

Before the intervention is implemented, both groups are evaluated with the pretest to find out their initial levels of literacy skills. After that, the control group continues using

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



traditional methods, while the experimental group receives a series of structured and contextualized reading pathways activities including scaffolded instruction, explicit reading strategies, contextualized reading materials, reflective tasks, and guided metacognitive activities.

After the intervention is completed, both groups are tested again with the posttest. Results of pretests and posttests are analyzed in order to find out how much both groups have improved and how effective Digitized and Contextualized Reading Pathways are compared to traditional classes.

METHODOLOGY

Research Design

The study made use of a true experimental research design, more precisely, pretest-posttest control group design, in order to find out the efficiency of Structured and Contextualized Reading Pathways as an intervention technique for the development of literacy skills in Grade 10 learners. The research design was chosen to enable the researcher to compare the literacy skills of the learners prior to and following the intervention while using two groups of learners – the experimental group which received the intervention and the control group receiving conventional reading instructions.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



A true experiment is more applicable in instances where individuals can be randomly allocated into various groups, which provides the researcher with the ability to manipulate the conditions in the study to determine cause and effect. This is according to Creswell and Creswell (2018), who argue that through a true experimental design, the researcher is able to determine the cause-and-effect relationship through the allocation of individuals to various groups in a random manner. A true experiment design will thus apply when learners can be randomly assigned to an experimental and control group.

In this study, both the experimental and the control groups were tested using the pre-test to obtain their baseline levels of literacy in the areas of reading comprehension, inference making, and metacognitive strategies use. The experimental group then underwent the intervention referred to as Structured and Contextualized Reading Pathways, while the control group was subjected to conventional reading instructions offered at the school. After the intervention, both groups were tested using the post-test to measure any changes in their performance in literacy. According to Dimitrov & Rumrill (2003), pre-test/post-test designs are commonly used in educational and behavioral studies because they give baseline information, help assess the gains in learning, and improve evaluation of interventions over time.

This research design was appropriate for the current study since it helped the researcher assess whether the Structured and Contextualized Reading Pathways intervention had positively influenced the performance of Grade 10 learners in the area of reading comprehension, inference making, and metacognitive strategies use.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Locale of the Study

The study was conducted at Ibajay Integrated School, a public secondary school situated in the Municipality of Ibajay, Province of Aklan, Philippines. The school is run under the Schools Division of Aklan and enrolls both Junior High School and Senior High School level learners in its different grade levels. It caters to learners from the various barangays of the municipality, offering quality basic education to learners from various socio-economic classes.

Ibajay Integrated School was chosen as the research site owing to the appropriateness of the context in conducting a study about literacy development among Grade 10 learners.

Respondents of the Study

The respondents of the study included Grade 10 students of Ibajay Integrated School in School Year 2026-2027. The entire population of the study was made up of 57 students who are enrolled in the Special Program in the Arts (SPA), out of which 30 are from Grade 10-Brocka and 27 are from Grade 10-Bernal.

The sample size was computed through the use of Slovin's Formula with a 5% margin of error, which is typically used to compute an appropriate sample size from a finite population. Therefore, there were 50 Grade 10 students that participated in the study.

In order for the selected respondents to be comparable, they were matched according to their pretest score in reading comprehension, inference making, and use of metacognitive strategies. The learners were then ranked according to their pretest performance and were

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



matched with another learner with a similar pretest score. In this way, one learner from each pair was put into the experimental group while the other was put in the control group. This way of matching made the two groups become more similar and helped to increase the validity of the research.

The experimental group, which has 25 learners, was taught using the Structured and Contextualized Reading Pathways, while the control group, which also has 25 learners, was taught using the regular reading instruction done at the school. The two groups were given the pretest and posttest to determine the effect of the intervention on their literacy skills.

Research Instrument

The main instrument used in this study was the Literacy Skills Test that the researchers developed, which is also both the pretest and posttest in assessing the literacy skills of the Grade 10 learners before and after the Structured and Contextualized Reading Pathways intervention.

The test is composed of contextualized reading passages and corresponding multiple-choice and short-response items that aimed at measuring three dimensions of literacy skills: reading comprehension, inference making, and use of metacognitive strategies. The reading comprehension questions measured the ability of the learners to determine main ideas, details, sequence of events, and author's purpose. The inference-making questions assessed the learners' ability to derive implied meanings, make logical inferences, make predictions and justify their answers through textual support. The metacognitive strategy questions assessed

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



the learners' ability to plan, monitor and evaluate their comprehension before, during, and after reading.

The same test was used for both pre-test and post-test so that the results could be comparable. Steps were taken to control the testing effect, which included allowing enough time between the administration of the pre-test and post-test and conducting the intervention in the interim period. The standardized procedure of testing was followed while conducting both the tests, including giving instructions, providing proper environment, and allotting time.

Validity of the Instrument. For the determination of content validity, the researcher-made instrument along with Table of Specifications (TOS) was forwarded to the panel of three experts who had proficiency in the field of English language teaching, reading literacy, and educational research. These validators reviewed the instrument on the basis of its relevance of content, alignment with the research aims and objectives, instructions given, language used, suitability of test questions and other aspects of the format. Comments, suggestions, and recommendations provided by the validators have been taken into consideration in the revision of the instrument before using it in data collection. Content validation helped in ensuring that the test is valid in measuring the constructs of reading comprehension, inference making, and use of metacognitive strategies. As pointed out by Taherdoost (2019), expert validation is an important step during instrument development since it helps in determining the relevance of test items.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Pilot Testing and Reliability of the Instrument. After validating the content of the instrument, the improved version of the instrument was pilot tested using Grade 10 learners from other classes that did not participate in the study proper. The purpose of the pilot testing is to establish the understandability of the instructions, relevance of the reading passages, degree of difficulty of the test questions, and the reliability of the test.

The data gathered from the pilot testing were analyzed for reliability by calculating the Cronbach's alpha coefficient to determine its internal consistency. A Cronbach's alpha coefficient of 0.70 or above was deemed acceptable, meaning that the test had sufficient reliability in education research. Ambiguous, overly difficult, or poorly discriminating items were revised or eliminated in light of the pilot testing and the recommendations of the validators.

Data Gathering Procedure

The procedures of conducting the study were done through a systematic approach for its validity, reliability, and ethical considerations. Before the implementation of the study, the researcher obtained permission from the Graduate School, the Schools Division Office of Aklan, and the Office of the School Principal of Ibajay Integrated School in conducting the research. Informal consent forms were also given to the participants and their parents or legal guardians, wherein the objectives of the study, voluntariness of participation, confidentiality of the data to be gathered, and right to withdraw from the study were explained.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Prior to the implementation of the intervention, the researcher formulated the Structured and Contextualized Reading Pathways, the researcher-made Literacy Skills Test, and the Table of Specifications (TOS). These materials were subjected to content validation by experts in English education, reading, and research. The revised research tool was then pilot-tested using Grade 10 learners from an equivalent public secondary school but not involved in the actual study. The analysis of the pilot test was conducted to check the reliability of the tool.

The selected learners were given the pretest in order to determine their proficiency levels in reading comprehension, inference-making, and utilization of metacognitive strategies. The pretest scores also formed the basis for the matching-pairing process whereby learners who exhibited similar literacy performance skills were paired and then assigned to either the experimental or control groups. This process ensured that the two groups were matched in terms of competence before the intervention took place.

The experimental group then undertook the implementation of the Structured and Contextualized Reading Pathways while the control group was taught through the normal reading instructions regularly used in the institution. The implementation process was done during the regular English lessons between June to July 2026. During the implementation process, the experimental group undertook various activities which involved scaffolding, questioning, prediction, inference-making, summarizing, reflection, and self-monitoring among others in an attempt to improve reading comprehension, inference-making, and utilization of metacognitive strategies.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



After the implementation of the intervention, both the experimental and control groups took the posttest using the same Literacy Skills Test developed by the researcher for the pretest. Careful attention was given to the standardized process of testing and scoring.

Lastly, the test papers of the respondents were examined, scored, encoded, and analyzed statistically. Comparison of pretest and posttest scores of both groups would reveal the effectivity of the Structured and Contextualized Reading Pathways in enhancing the reading skills of the learners. All information collected during the conduct of the study was kept confidential and used only for academic purposes.

Data Analysis Procedure

The information that was collected for this study was then subjected to proper statistical analysis to assess the efficacy of the Structured and Contextualized Reading Pathways in enhancing the literacy skills of Grade 10 students. These analyses were conducted through statistical software, and the level of significance was kept at 0.05.

For the purpose of the analysis, descriptive statistics like frequency, percentage, mean, and standard deviation were used for describing the demographic profile of the respondents along with the performance of the respondents in terms of their reading comprehension skills, inferencing skills, metacognitive strategies, and overall literacy skills before and after the intervention. The mean scores were then interpreted on the basis of mastery level descriptors of the National Education Testing and Research Center (NETRC).

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



In order to find out if there was a significant change in the literacy competencies of the learners before and after the intervention, the paired samples t-test was utilized for both the experimental and control groups. This test was selected since it allows comparing the mean scores of the same respondents based on two points of measurement which are the pretest and the posttest.

The independent samples t-test was employed to identify if there was a significant difference between the posttest scores of the experimental and control groups following the implementation of the intervention. The purpose of this test was to establish if the respondents from the experimental group were performing better than those in the control group.

One (1) point was given for each correct response on the researcher-developed Literacy Skills Test while zero (0) point was given to each wrong or not answered item. There were 15 items per literacy component which translated into a maximum score of 15 points. The entire test had 75 items giving a maximum score of 75 points.

In determining the performance of the respondents on each literacy component, the following mastery level descriptors were used:

Raw Score	Descriptive Equivalent	Verbal Description
66-75	Mastered	Excellent/Exceptional Proficiency
55-65	Closely Approximating Mastery	Very Good Proficiency
44-54	Moving Towards Mastery	Good Proficiency

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Raw Score	Descriptive Equivalent	Verbal Description
33-43	Average	Satisfactory Proficiency
22-32	Low	Weak Proficiency
11-21	Very Low	Poor Proficiency
0-10	Absolutely No Mastery	No Proficiency at All

Research Ethics

The study was done in accordance with existing ethical guidelines on conducting research with human subjects. Approval for the study was sought from the Graduate School, Schools Division Office of Aklan, and the Office of the School Principal of Ibajay Integrated School before the actual conduct of the study. Permission was also acquired from the Grade 10 English teachers concerned before implementing the intervention.

Informed consent was secured from all participants and their parents or legal guardians before the actual data gathering process started. The informed consent form gave a clear explanation of the purpose of the study, research methods, length of participation, possible risks and benefits, confidentiality of the data collected, and the voluntary nature of participation. Sufficient time was also given to the participants and their parents or legal guardians to understand the informed consent form and ask questions prior to signing. It was also made known to them that they have the right to withdraw from the study at any point without penalty.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



FINDINGS AND DISCUSSION

Level of Literacy Skills of the Grade 10 Students Based on the Pretest Scores when they are Exposed to Conventional Instruction

Table 1 shows the literacy skills level of the Grade 10 learners in relation to their pretest scores prior to the application of the traditional approach to reading instruction. From the results, it can be seen that 13 out of 25 learners (52.00%) scored Average proficiency level, which is regarded as satisfactory proficiency while 12 learners (48.00%) scored in the Low proficiency level, which means weak proficiency. The respondents had an average score of 32.44, which places the learners in the Low proficiency level.

From the above results, it can be seen that even though more than half of the respondents have satisfactory proficiency level, their performance was below the desired level of mastery. This is shown by the low average score, which depicts that most of the learners found it hard to comprehend the texts, make logical inference and use metacognitive reading strategies. Literacy skills are important for the analysis of the increasingly complex texts in the secondary education level.

The study findings provide evidence that supports the assertion that most Filipino secondary learners still find it difficult to comprehend what they read despite mastering basic decoding skills. According to OECD (2023), many Filipino students demonstrate proficiency levels in reading literacy below the minimum level in that they struggle to locate, integrate, and evaluate information in written materials. Likewise, Snow and Matthews (2022) pointed out that adolescents need to be explicitly taught comprehension strategies and engaged

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



meaningfully with the texts so that they can learn higher-order literacy skills that will help them succeed in their studies.

Moreover, the findings of the study are in line with the Metacognitive theory by Flavell which explains that students lacking metacognitive skills fail to monitor comprehension, use suitable reading strategies, and regulate their learning process. Fredricks, Blumenfeld, and Paris (2004) explained that students lacking cognitive engagement tend to have poor academic performance due to their inability to exert enough mental energy when processing and interpreting the information. Therefore, the low performance of the respondents in pretesting could be attributed to inadequate cognitive engagement and strategic reading behavior.

Moreover, the results further highlight the importance of conducting structured and context-driven literacy programs that actively involve the learners in constructing meaning through reading. As pointed out by Guthrie and Wigfield (2020), when reading instructions are supplemented with cognitive engagements, strategy instructions and meaningful reading processes, there is an observable improvement in the learning outcomes of the learners. In this regard, the limited level of literacy skills of the respondents before the implementation of the intervention serves as an effective justification for conducting the Structured and Contextualized Reading Pathways that would help the learners to develop reading comprehension, inferences and metacognitive strategies through context-driven reading process.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Table 1. Level of Literacy Skills of the Grade 10 Students Based on the Pretest

Scores when they are Exposed to Conventional Instruction

Raw Score Range	Descriptive Equivalent	Verbal Description	Frequency (n=25)	Percentage (%)
33–43	Average	Satisfactory Proficiency	13	52.00
22–32	Low	Weak Proficiency	12	48.00
Mean: 32.44 (Low/Weak Proficiency)				

Level of Literacy Skills of the Grade 10 Students Based on the Pretest Scores when they are Exposed to Innovative Instruction thru the Use of Digitized and Contextualized Reading Pathways

Table 2 shows the level of literacy skills of the Grade 10 students from their pretest score before being exposed to the Digitized and Contextualized Reading Pathways intervention. Based on the data, it can be observed that there were 13 out of 25 respondents (52.00%) who belonged to the Average level of classification, which was considered to be Satisfactory Proficiency; 12 respondents (48.00%), meanwhile, were in the Low level of classification, considered as Weak Proficiency. The total mean score for all the respondents was at 32.40, which belongs to the Low level of classification and interpreted as Weak Proficiency.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



The poor pre-test results are consistent with past research which suggests that adolescent learners have problems understanding increasingly complex texts because of their limited use of strategies while reading as well as insufficient cognitive involvement. As reported by the Organisation for Economic Co-operation and Development (OECD, 2023), Filipino learners still score lower than the minimum requirement in reading literacy especially when it comes to activities involving the synthesis, interpretation, and evaluation of the text content. In addition, Snow and Matthews (2022) argued that reading comprehension among secondary learners should be supported through higher-order thinking and strategy application during reading.

The results also provide evidence in support of Flavell's (1979) Metacognitive Theory, stating that learners who are still unable to develop self-monitoring, planning, and evaluating processes necessary for successful comprehension exhibit poor reading performance. Additionally, Fredricks, Blumenfeld, and Paris (2004) asserted that cognitive engagement was a key factor in educational success, since active information processing, question asking, and monitoring helped learners to produce successful learning results. This way, the relatively low pretest performance of the respondents might be caused by a lack of cognitive engagement and proper application of metacognitive strategies.

Furthermore, the results underline the necessity of implementing well-planned literacy interventions, engaging learners in the process of reading. Guthrie and Wigfield (2020) noted that reading instruction strategies combining guided reading activities, strategy instruction, and engagement had a positive effect on reading comprehension and overall reading

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



performance. This way, the low literacy skills of the respondents prior to the intervention became a justification for implementing the Digitized and Contextualized Reading Pathways.

Table 2. Level of Literacy Skills of the Grade 10 Students Based on the Pretest Scores when they are Exposed to Innovative Instruction thru the Use of Digitized and Contextualized Reading Pathways

Raw Score Range	Descriptive Equivalent	Verbal Description	Frequency (n=25)	Percentage (%)
33–43	Average	Satisfactory Proficiency	13	52.00
22–32	Low	Weak Proficiency	12	48.00
Mean: 32.40 (Low/Weak Proficiency)				

Level of Literacy Skills of the Grade 10 Students Based on the Posttest Scores when they are Exposed to Conventional Instruction

Table 3 shows the level of literacy skills of the Grade 10 respondents after being taught reading using the conventional method as shown in their posttest scores. According to the results, 16 out of 25 respondents (64.00%) got into the Closely Approximating Mastery level, meaning Very Good Proficiency, 8 respondents (32.00%) in the Moving Towards Mastery Level, implying Good Proficiency, and only 1 respondent (4.00%) in the Mastered Level, signifying Excellent/Exceptional Proficiency. The respondents were able to get an average

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



posttest score of 56.26 which is under the category of Closely Approximating Mastery or Very Good Proficiency.

The respondents, as compared to the pretest results, have significantly improved their literacy skills after being exposed to the conventional reading instruction. The increase of their mean score from 32.44 (Low/Weak Proficiency) during pretest to 56.26 (Closely Approximating Mastery/Very Good Proficiency) during posttest means that the conventional teaching approach in class helped improve the literacy skills of the learners.

The results support the notion that there is a positive impact of classroom teaching on the reading performance of students if they are provided with enough opportunities to interact with texts and get teachers' instructions. According to Snow and Matthews (2022), continuous reading instruction and comprehension activities help develop the literacy abilities of secondary school students. In turn, Duke and Cartwright (2021) stated that literacy abilities arise as a result of systematic instruction involving vocabulary, comprehension, background knowledge, and critical thinking skills development.

Even though the respondents showed considerable improvement as a result of conventional instruction, the results show that only one respondent (4.00%) reached mastery. Most of the respondents were at the Closely Approaching Mastery level, which implies that while conventional instruction helped the respondents perform better in literacy tasks, the respondents had not yet reached mastery level. It shows that there is room for improvement in instructional interventions where structured strategies instruction, cognitive engagement,

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



and contextualized reading will be emphasized to ensure that the learners reach mastery level.

In summary, the results from the post-test indicate that conventional instruction played a big role in improving the literacy performance of the respondents.

Table 3. Level of Literacy Skills of the Grade 10 Students Based on the Posttest Scores when they are Exposed to Conventional Instruction

Raw Score Range	Descriptive Equivalent	Verbal Description	Frequency (n=25)	Percentage (%)
66–75	Mastered	Excellent/ Proficiency	Exceptional 1	4.00
55–65	Closely Approximating Mastery	Very Good Proficiency	16	64.00
44–54	Moving Towards Mastery	Good Proficiency	8	32.00
Mean: 56.26 (Closely Approximating Mastery/Very Good Proficiency)				

Level of Literacy Skills of the Grade 10 Students Based on the Posttest Scores when they are Exposed to Innovative Instruction thru the Use of Digitized and Contextualized Reading Pathways

Table 4 shows the literacy skills of the Grade 10 students based on the posttest scores of the students after their exposure to the Digitized and Contextualized Reading Pathways. It shows that 24 out of 25 respondents (96.00%) reached the Mastered level, considered Excellent/Exceptional Proficiency, and only 1 respondent (4.00%) was categorized as Closely

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Approximating Mastery, which means Very Good Proficiency. The respondents got an overall mean score of 71.52, falling into the Mastered category and therefore considered Excellent/Exceptional Proficiency.

Based on the pretest results, the mean score of the respondents was 32.40 (Low/Weak Proficiency). Compared to this result, the posttest results show a significant improvement in the performance of the learners regarding literacy. There is a noticeable increase in the mean score, proving that the Digitized and Contextualized Reading Pathways have significantly improved the learners' performance in terms of comprehension, inference, and metacognition. The almost hundred percent achievement of the mastery level by the respondents shows that the intervention has helped them develop higher-level skills compared to what they previously knew before the intervention.

The results are consistent with Vygotsky's theory of Sociocultural learning theory. This theory states that learning is most effective when the learner has appropriate scaffolding in his/her ZPD. By using guided reading, contextualized texts, teacher mediation and collaborative learning experiences, the Structured and Contextualized Reading Pathways gave the learners sufficient instructional support to do tasks that they would have been unable to do without such support. As the learners internalized these skills, they became better able to understand increasingly difficult texts.

The findings are also consistent with the Engagement Theory introduced by Fredricks, Blumenfeld, and Paris (2004). According to this theory, students with cognitive engagement

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



show better academic performance. This intervention encouraged the learners to engage in activities such as prediction, questioning, inference, summarization, reflection and self-monitoring when reading. This increased their cognitive processes and made them more effective in making sense of and regulating their own reading.

In addition, the results are in line with Flavell's Metacognitive Theory, which states that when learners reflect on their planning, monitoring, and evaluation processes, they tend to become more efficient and independent readers. The use of metacognitive reading strategies in the Digitized and Contextualized Reading Pathways probably contributed to learners' metacognition, making them capable of choosing appropriate reading strategies, finding out problems in comprehension, and adjusting their actions while reading.

Overall, the outcomes from the post-test show that the Digitized and Contextualized Reading Pathways were an extremely successful intervention in improving the literacy levels of Grade 10 learners. The vast majority of the participants reached the level of Mastery, suggesting that the intervention led to better comprehension, greater inferencing, and more effective use of metacognitive strategies. This study provides substantial proof of how successful structured and contextualized reading programs can be for secondary school learners.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Table 4. Level of Literacy Skills of the Grade 10 Students Based on the Posttest Scores when they are Exposed to Innovative Instruction thru the Use of Structured Reading Pathways

Raw Score Range	Descriptive Equivalent	Verbal Description	Frequency (n=25)	Percentage (%)
66–75	Mastered	Excellent/ Exceptional Proficiency	24	96.00
55–65	Closely Approximating Mastery	Very Good Proficiency	1	4.00
Mean: 71.52 (Mastered/ Excellent/ Exceptional Proficiency)				

Difference on the Level of Literacy Skills based on the Pretest Scores of the Grade 10 Students Exposed to Conventional Instruction and Innovative Instruction thru the Use of Digitized and Contextualized Reading Pathways

The comparison of the pretest literacy skills of the Grade 10 students who were given the conventional teaching approach and the ones who were under the Digitized and Contextualized Reading Pathways is illustrated in Table 6 below. The mean score of the conventional teaching approach is 32.44 with a standard deviation of 4.63, while the mean score of the Digitized and Contextualized Reading Pathways is 32.40 with a standard deviation of 4.24. The t-value computed is 0.03, resulting in a p-value of 0.972, which is higher than the 0.05 level of significance. Thus, the null hypothesis was not accepted, meaning that there was no significant difference in the literacy skills of the two groups prior to the intervention.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez, Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas, Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



The equivalence of performance before the experiment can be explained by the matched-pairs technique used in grouping the participants. In grouping the participants in the control and experimental groups, the researcher took care of making sure that the learners had similar pre-test scores. As a result, the researcher ensured that the two groups would begin the experiment from the same point, thus creating an ideal setting for measuring the effectiveness of the intervention. According to Creswell & Creswell (2018), establishing the equivalence of the comparison groups before treatment is an essential characteristic of quasi-experimental research.

The results also agree with the tenets of Sociocultural Theory by Vygotsky, whereby the learners have different experiences and previous knowledge which affects their performance at the outset. With the guarantee of equal literacy skills of the two groups at the beginning, the study provides a fair and leveled learning ground where there are similar chances for improvement for the two groups. As such, any significant increase in performance after the intervention is appropriately credited to the teaching methods used and not to the differential capabilities of the learners.

The findings also support the Metacognitive Theory of Flavell. According to this theory, individuals initially have different levels of knowledge and control over their cognitive activities. Since the results of the pretests for two groups are remarkably similar, both groups had about the same level of metacognitive skills prior to training, and therefore, the intervention became the only variable affecting reading comprehension, inference making, and metacognitive strategies of students.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



At the same time, the results of the study coincide with existing educational studies devoted to the importance of establishing baseline equivalence in an intervention study. Dimitrov & Rumrill (2003) indicated that pretest comparisons are a way to prove that treatment and comparison groups were equivalent prior to the experiment, which increases the likelihood of causal relationships in educational programs' evaluation. Shadish, Cook & Campbell (2002) stated that establishment of equivalence between groups before treatment decreases threats to internal validity.

Table 5. Difference on the Level of Literacy Skills Based on the Pretest Scores of the Grade 10 Students Exposed to Conventional Instruction and Innovative Instruction through the Use of Structured Reading Pathways

Group	Mean	SD	t-value	p-value	Decision	Interpretation
Conventional Instruction	32.44 (Weak Proficiency)	4.63	3	0.972 ^{ns}	Accept H ₀	Not Significant
Digitized and Contextualized Reading Pathways	32.40 (Weak Proficiency)	4.24				

^{ns} – not significant at 5% alpha level

Difference on the Level of Literacy Skills based on the Posttest Scores of the Grade 10 Students Exposed to Conventional Instruction and Innovative Instruction through the Use of Digitized and Contextualized Reading Pathways

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez, Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas, Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Table 6 below summarizes the comparative analysis of the posttest literacy skills of the Grade 10 learners that were subjected to conventional instruction and the Digitized and Contextualized Reading Pathways. The group subjected to conventional instruction got an average of 56.28 with a standard deviation of 6.68, whereas the group subjected to the Digitized and Contextualized Reading Pathways got an average of 71.52 with a standard deviation of 5.38. The value of t computed is -8.88 while its p -value is 0.000, which were found to be significant at 1% level of significance, hence the rejection of the null hypothesis.

The results demonstrate clearly that the group that underwent the Digitized and Contextualized Reading Pathways outperformed the group receiving traditional instruction. Although both groups improved their literacy skills after the intervention, the experimental group performed at the Mastered level of proficiency compared to the Closely Approximating Mastery level that was achieved by the control group. The difference between the mean scores (71.52 versus 56.28) shows that the new instructional approach yielded much better learning outcomes than the traditional instruction in terms of learners' literacy development.

Another potential reason for the better performance of the experimental group can be the intervention itself. The Digitized and Contextualized Reading Pathways included scaffolded reading activities, contextualized reading materials, guided questioning, prediction, inferencing, summarizing, reflection, and self-monitoring. These kinds of activities help the learners construct meaning from the reading material through critical thinking and develop strategies of independent reading.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



The results have strongly proven the Sociocultural Theory suggested by Vygotsky which states that the maximum efficiency in learning will be achieved if learners will get proper scaffolding in their ZPD (Zone of Proximal Development). Using proper guided instruction and well-structured reading activities, learners were able to move from supported tasks to independent comprehension and analysis. Structured reading paths acted as instructional scaffolds helping learners to do increasingly difficult tasks related to literacy until they reached the level of being able to do these tasks independently.

Similarly, the results have also proven the Engagement Theory introduced by Fredricks, Blumenfeld, and Paris in 2004, which states that cognitive engagement is an important factor of academic success. The intervention was designed in such a way that learners had to predict the outcomes, ask questions, infer meanings, summarize the main ideas and think about what they understand. As a result of these cognitively challenging tasks, the learners were able to invest mentally in the reading activities, which improved the results of literacy.

Additionally, the findings support the Metacognitive Theory of Flavell, which states that effective readers regulate their thinking processes consciously in order to plan, monitor, and evaluate comprehension. With the implementation of metacognitive reading strategies during each step of the reading pathway, the intervention made it possible for the learners to be able to monitor and reflect upon their comprehension process, detect misunderstandings, and use appropriate strategies to solve reading problems. Metacognitive regulation played an important role in the success of the learners.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Finally, the outcomes align with modern research on adolescent literacy. In their recent study, Guthrie and Wigfield (2020) found that reading interventions focused on cognitive engagement and explicit comprehension strategies were effective in improving reading achievement and motivation of the learners. Similarly, Duke and Cartwright (2021) stated that a good literacy program should involve background knowledge, vocabulary, comprehension strategies, and critical thinking and not just decoding skills. In addition, Snow and Matthews (2022) stressed the importance of scaffolded reading instruction for enhancing comprehension, interpretation, and evaluation of complex texts by adolescents. Thus, all of these studies confirm the effectiveness of Digitized and Contextualized Reading Pathways demonstrated in the experiment.

Similarly, the results are in line with international literature regarding reading literacy. According to OECD (2023), successful readers are those who are able to analyze, integrate, evaluate, and reflect on the information contained in the texts through strategic behavior in reading. The Digitized and Contextualized Reading Pathways explicitly fostered all these competencies as they encouraged the participants to actively think, collaborate, and regulate themselves. As a result, the intervention met the needs of literacy in terms of higher-order reading literacies highlighted in modern literacy frameworks.

The findings have important implications in education as they concern classroom instruction and intervention literacy programs. In particular, the highly significant difference between the two groups proves that traditional approaches in reading instruction, even though effective in promoting literacy skills, might not be enough to tap into learners' full reading

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



potential. Introducing scaffolded and contextualized reading pathways into classroom instruction will help learners develop their reading comprehension and metacognitive strategy use. The results thus confirm the need to incorporate the intervention in English language classes and other courses where reading comprehension is important. Moreover, the findings provide empirical justification for the efforts of the Department of Education in literacy.

Generally, the results of this study provide clear and convincing proof of the effectiveness of the intervention of the Digitized and Contextualized Reading Pathways program compared to traditional teaching methods in enhancing the literacy skills of Grade 10 learners. The significant difference in the performance of the two groups in the posttests proves the effectiveness of the intervention in developing learners' comprehension and inferencing skills as well as metacognitive strategies.

Table 6. Difference on the Level of Literacy Skills Based on the Posttest Scores of the Grade 10 Students Exposed to Conventional Instruction and Innovative Instruction through the Use of Digitized and Contextualized Reading Pathways

Group	Mean	SD	t-value	p-value	Decision	Interpretation
Conventional Instruction	56.28 (Closely Approximating Mastery)	6.68	-8.88	0.000*	Reject H_0	Highly Significant

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez, Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas, Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Group	Mean	SD	t-value	p-value	Decision	Interpretation
Digitized and Contextualized Reading Pathways (Mastered)	71.52	5.38				

** - highly significant at 1% alpha level

Difference on the Pretest and Posttest Scores that Measure the Level of Literacy Skills of the Grade 10 Students Exposed to Conventional Instruction

Table 7 shows the comparison between the pretest and posttest scores of the Grade 10 learners who received conventional instruction. Before the introduction of the instructional period, the learners scored an average pretest score of 32.44 with a standard deviation of 4.63, which is interpreted as Weak Proficiency. Post exposure to conventional instruction, the learners recorded an average posttest score of 56.28 with a standard deviation of 6.68, meaning Closely Approximating Mastery and interpreted as Very Good Proficiency. The t-value of 23.31 resulted into a p-value of 0.000, which is less than the 0.01 level of significance. Therefore, the null hypothesis was rejected, meaning that there exists a very significant difference between the pretest and posttest scores of the learners who have been exposed to conventional instruction.

From the results, it can be seen that the conventional instruction was extremely helpful in improving the learners' literacy skills. The mean score improved from 32.44 to 56.28, implying that the learners improved their ability to read, make inferences, and apply

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



metacognitive strategies after classroom lessons. The learners did not reach the mastered level but were able to progress from Weak Proficiency to Very Good Proficiency.

This improvement can be credited to the consistent conduct of teacher-directed instructional activities that included guided reading, classroom discussions, comprehension activities, vocabulary development, and formative assessment. These instructional activities familiarized learners with different reading experiences, which eventually helped them become better at comprehending, interpreting, and analyzing texts. Consistent teacher feedback and practice likewise allowed learners to enhance their performance in reading across the course of the experiment.

These results coincide with Vygotsky's (1978) Sociocultural Theory, wherein learning is considered a product of social interaction and teacher direction. Through conventional instruction, teachers act as facilitators who give explanations, ask thought-provoking questions, and direct learners to comprehend increasingly difficult texts. These interactions between teacher and learner act as scaffolding that enables the latter to exceed his/her current level of performance. Despite the fact that the scaffolding offered by conventional instruction was less structured compared to the experimental instruction, it still led to improvements in learners' literacy performance.

In the same vein, the results support the Engagement Theory proposed by Fredricks, Blumenfeld, and Paris (2004), suggesting that active student involvement in classroom activities results in enhanced academic achievement. By actively participating in class

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



activities, the learners got involved in reading activities, class discussion, and exercises led by the teacher that helped promote cognitive processing and understanding.

In addition, the outcomes resonate well with Flavell's Metacognitive Theory, which suggests that effective readers are those who are aware of their cognitive processes. In traditional teaching approach, the learners gradually gained strategies such as monitoring comprehension, recognizing unknown vocabulary words, finding the main idea, and evaluating the text. Though these strategies were not explicitly taught like in the experimental treatment group, they helped in improving the reading performance of the learners/

The results of the current study support previous empirical research which shows how classroom instruction can help improve literacy. Specifically, Duke and Cartwright (2021) highlighted the importance of making sure that efficient reading instruction involves vocabulary acquisition, comprehension strategy development, background knowledge, and critical thinking. Similarly, Snow and Matthews (2022) found that guided teacher reading instruction is crucial for the success of adolescents in reading comprehension and achievement. In addition, Guthrie and Wigfield (2020) found that consistent reading instruction along with active classroom engagement helps increase learners' motivation and comprehension thus improving literacy outcomes.

Notwithstanding the improvement that has been achieved, the participants reached only the Closely Approximating Mastery level following conventional instruction. This means that although conventional instructional techniques have helped enhance the literacy skills of

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



learners successfully, there was still a possibility for improvement toward mastery. The conclusion to be drawn from this finding is that conventional instruction cannot provide enough attention to high-level literacy skills of learners including their ability to engage in inference-making, analysis, and metacognition.

Table 7. Difference on the Pretest and Posttest Scores that Measure the Level of Literacy Skills of the Grade 10 Students Exposed to Conventional Instruction

Test	Mean	SD	t-value	p-value	Decision	Interpretation
Pretest	32.44 (Weak Proficiency)	4.63				
Posttest	56.28 (Closely Approximating Mastery)	6.68		**	H_0	Highly Significant

**** Significant at the 1% alpha level**

Based on the educational approach, it is evident that the findings show that conventional teaching has been proven to be one of the key foundations in the process of acquiring literacy skills. The teacher's role in guiding the students' reading, providing direct instructions, classroom interaction, and assessments has made a positive impact on their performance in the area. However, it is also necessary to note that it is critical to make use of innovations in the field of instruction in order to improve the process even more and allow learners to go further and reach the mastered level.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Thus, the difference found between the pretest and posttest scores is highly statistically significant and proves the effectiveness of conventional instruction in terms of improving learners' literacy skills. On the other hand, it is possible to conclude that despite the effectiveness of conventional teaching methods, the introduction of structured and contextualized reading instruction should be considered as well.

Difference on the Pretest and Posttest Scores that Measure the Level of Literacy Skills of the Grade 10 Students Exposed to Innovative Instruction thru the Use of Digitized and Contextualized Reading Pathways

The comparison of the pretest and posttest scores of the Grade 10 respondents who underwent the intervention through the Digitized and Contextualized Reading Pathways is shown in Table 9. Prior to the application of the intervention, the respondents' pretest scores were 32.40 with a standard deviation of 4.24, categorized as Weak Proficiency. After the implementation of the intervention, the learners' posttest scores significantly improved at 71.52 with a standard deviation of 5.38, classified as Mastered level or Excellent/Exceptional Proficiency. A computed t-value of 38.16 resulted to a p-value of 0.000, lower than the 0.01 level of significance. Therefore, the null hypothesis was rejected due to highly significant difference between the pretest and posttest scores of the learners under the Digitized and Contextualized Reading Pathways.

The results show that the innovative method of instruction has proved very successful in improving the literacy of the Grade 10 learners. The dramatic rise in the mean score from

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



32.40 to 71.52 represents a rise of more than 39 points, which means that the learners have moved from the Weak Proficiency level to the Mastered level. Thus, this significant result indicates that the intervention helped the students to improve their reading comprehension, inference making, and use of metacognitive strategies.

The impressive rise in achievement could be attributed to the structure of the intervention itself, since the reading intervention consisted of the instructional strategies including contextualized reading texts, scaffolding, questioning, predicting, inferring, summarizing, reflection about the reading material, and self-monitoring. In other words, learners had an opportunity to actively engage with the text material and utilize the reading material. Therefore, the learners have been encouraged to be active participants during the entire process of reading.

The results have strongly supported the Sociocultural Theory of Vygotsky, according to which learners' achievement will be optimal if learners have got proper instructional help within their ZPD. By means of the sequence of the reading tasks and constant guidance from the teachers, learners were gradually helped to perform increasingly difficult literacy tasks until they were able to do them autonomously.

Similarly, the results confirm the Engagement Theory by Fredricks, Blumenfeld, and Paris (2004), which states that learners who are engaged cognitively achieve better academic performance than those who are engaged behaviorally. During the intervention, learners made predictions, asked questions, made inferences, summarized information, reflected on

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



concepts, and monitored their comprehension. Through such mentally challenging tasks, the process of learning became deep, leading to the considerable improvement seen in the posttest scores.

In addition, the results support the Metacognitive Theory by Flavell, according to which learners become efficient readers through regulating their thinking process in terms of planning, monitoring, and evaluating their comprehension. Since the Structured and Contextualized Reading Pathways included metacognitive processes in each reading activity, learners were able to recognize comprehension problems, choose proper reading strategies, and evaluate their comprehension. Thus, the considerable improvement seen in the posttest scores proves that the intervention was successful in the development of metacognition and self-regulation.

The current findings are in line with the results of previous empirical research that show the effectiveness of structured reading intervention. Thus, Guthrie and Wigfield (2020) noted that the programs for teaching reading, which included both cognitive engagement and explicit comprehension strategies, significantly enhanced the students' reading achievement and motivation. Similarly, according to Duke and Cartwright (2021), effective literacy instruction involves the combination of comprehension strategies, vocabulary instruction, background knowledge, and thinking to result in a significant improvement in the reading achievement of the learners. Snow and Matthews (2022) also found that scaffolded reading instruction increased adolescents' ability to understand, analyze and evaluate the increasingly complex texts.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



These findings are also in line with the recommendations of the Organisation for Economic Co-operation and Development (OECD, 2023) in terms of effective reading instruction. In particular, it is suggested that effective reading instruction should enhance the ability of the learners to interpret, integrate, evaluate, and reflect on the information provided in texts. As for the program under consideration, it helped the learners develop all of the competences in question because of authentic and contextually relevant reading experience.

In addition, the findings provide empirical backing to the continued efforts of the Department of Education to improve literacy through instructional innovation in line with the objectives of the MATATAG Agenda and other national literacy programs. Through active cognitive engagement and strategic reading, independent and reflective readers are developed.

Table 8. Difference on the Pretest and Posttest Scores that Measure the Level of Literacy Skills of the Grade 10 Students Exposed to Digitized and Contextualized Reading Pathways

Test	Mean	t-value	p-value	Decision	Interpretation	
Pretest	32.40 (Weak Proficiency)	4.24	38.16	0.000 **	Reject H ₀	Highly Significant
Posttest	71.52 (Mastered)	5.38				

**** Significant at the 1% alpha level**

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Overall, it is clear that the very statistically significant difference between the pre-test and post-test scores proves that the Digitized and Contextualized Reading Pathways was very effective for the improvement of the literacy skills of Grade 10 learners. This innovation allowed the respondents to move from the Weak Proficiency level to the Mastered level, which means that this innovative method can be considered very effective as an instructional innovation that fosters meaningful literacy development.

CONCLUSION

From the results of the study, the following conclusions have been made:

1. The Grade 10 learners in both the conventional instruction group and the Digitized and Contextualized Reading Pathways group had similar levels of literacy skills before the implementation of the intervention since they both had low levels of proficiency and there was no statistically significant difference between the scores of the two groups in the pretest. This shows that the two groups had similar skills in reading comprehension, making inferences, and metacognitive strategies.
2. Both the conventional instruction and the Digitized and Contextualized Reading Pathways improved the literacy skills of the learners. The improvement shown in the pretest and posttest scores of the two groups is an indication that continuous reading instruction improves literacy skills.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



3. However, the Digitized and Contextualized Reading Pathways turned out to be much more effective compared to traditional teaching. Those participants that were exposed to the intervention achieved the level of mastery while those participants that underwent traditional teaching were able to achieve only the level of closely approximating mastery. The very highly significant difference between the post-test performance of the two groups of participants shows that the intervention was much more effective in terms of improving reading comprehension, inference-making and metacognition.
4. The effectiveness of the Digitized and Contextualized Reading Pathways can be explained by the fact that it includes scaffolded learning experiences, contextualized reading texts, reading strategies instruction, guided questioning, predicting, inferencing, summarizing, reflecting and monitoring. Due to the inclusion of all these instructional components learners were involved in active cognitive processing, strategic reading and metacognition. The study concludes that the Structured and Contextualized Reading Pathways is an effective instructional intervention.

RECOMMENDATIONS

Based on the findings and conclusions drawn from the research, the following recommendations are made:

1. Students are encouraged to engage in the use of the reading strategies taught using the Digitized and Contextualized Reading Pathways, which include making predictions,

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



asking questions, inferring, summarizing, reflecting, and monitoring, not only in English classes but in other subjects as well. Engaging in these strategies regularly will greatly contribute to enhancing their reading comprehension and critical thinking skills.

2. English teachers are advised to incorporate Digitized and Contextualized Reading Pathways into their classroom teaching routines. They are expected to facilitate scaffolding reading exercises, guiding questions, predictions, inference, summarization, reflection, and self-monitoring techniques to effectively engage students in the reading process.
3. For teachers in other subject areas, they may incorporate contextualized reading pathways in the context of their own subjects so that students will have improved comprehension of the materials found in texts of their specific discipline.
4. The school head should institutionalize the implementation of Digitized and Contextualized Reading Pathways in the reading intervention program of the school. The school head may supply the teachers with instructional materials, contextualized reading materials, and professional development so that they can implement the intervention effectively. Moreover, the school administrator may also incorporate the intervention in the School Improvement Plan (SIP) and Annual Implementation Plan (AIP).
5. There is a possibility that the Department of Education can adopt the Digitized and Contextualized Reading Pathways within the literacy enhancement programs especially

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



in secondary level, which is still experiencing difficulties in reading comprehension, inferencing, and strategy utilization. Such intervention can also be adopted in reading remediation programs and professional development of teachers for improving reading instruction.

6. Curriculum developers may include the Structured and Contextualized Reading Pathways in curriculum guides, modules, and other instructional materials. Focusing on scaffolded and strategy-based reading instruction will enhance the literacy skills of the learners in preparation for the MATATAG Curriculum as well as twenty-first-century learning.
7. Additional research can be done to validate the findings of the study through larger sample sizes, different grade levels, and various contexts. They can even look into the longer-term effects of Structured and Contextualized Reading Pathways on academic performance, reading motivation, vocabulary growth, critical thinking skills, digital literacy, and self-regulation. Additionally, there may be qualitative or mixed-methods studies to determine learners' experiences, perceptions, and participation in the intervention.

On the whole, the results of the above study justify the implementation of Structured and Contextualized Reading Pathways as an appropriate instructional innovation to improve literacy competence among secondary school students.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



REFERENCES

Afflerbach, P., Cho, B. Y., & Kim, J. Y. (2022). *Reading instruction, reading engagement, and strategic reading in secondary education*. Guilford Press.

Aquino, R. M., Santos, J. L., & Dela Cruz, M. P. (2024). Reading intervention initiatives in Philippine public schools: Implications for literacy development. *Philippine Journal of Education*, 103(2), 45–63.

Attaprechakul, D. (2022). *Inference strategy instruction and reading comprehension among graduate students. (Complete publication details should be verified.)*

Batac, M. (2024). *Metacognitive awareness and reading comprehension among Grade 11 Technical-Vocational-Livelihood students. (Complete publication details should be verified.)*

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2020). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26(13), 1802–1811.

Collins, A., Brown, J. S., & Newman, S. E. (1989). Cognitive apprenticeship: Teaching the craft of reading, writing, and mathematics. In L. B. Resnick (Ed.), *Knowing, learning, and instruction: Essays in honor of Robert Glaser* (pp. 453–494). Lawrence Erlbaum Associates.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.

Department of Education. (2023). *MATATAG Curriculum Guide*. Department of Education.

Department of Education. (2024). *Philippine Informal Reading Inventory (Phil-IRI) Manual*.
Department of Education.

Dimitrov, D. M., & Rumrill, P. D. (2003). Pretest-posttest designs and measurement of change.
Work, 20(2), 159–165.

Duke, N. K., & Cartwright, K. B. (2021). The science of reading progresses: Communicating
advances beyond the simple view of reading. *Reading Research Quarterly, 56*(S1),
S25–S44.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-
developmental inquiry. *American Psychologist, 34*(10), 906–911.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the
concept, state of the evidence. *Review of Educational Research, 74*(1), 59–109.

Ghimire, S. (2025). *Metacognitive reading strategies and reading achievement among 15-
year-old learners. (Complete publication details should be verified.)*

Guthrie, J. T., & Wigfield, A. (2020). Engagement and motivation in reading. In M. L. Kamil et
al. (Eds.), *Handbook of Reading Research* (Vol. V). Routledge.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza

INSTABRIGHT e-GAZETTE

ISSN: 2704-3010

Volume VIII, Issue I

August 2026

Available online at <https://www.instabrightgazette.com>



International Literacy Association. (2023). *Children's rights to excellent literacy instruction*.

International Literacy Association.

Jang, B. G. (2023). *Adolescent literacy, engagement, and motivation in secondary classrooms*.

(Complete publication details should be verified.)

Johnson, E. B. (2002). *Contextual teaching and learning: What it is and why it's here to stay*.

Corwin Press.

Lin, Y., Chen, H., & Huang, P. (2023). Predictors of adolescents' reading literacy: The role of metacognitive strategies and reading engagement. *Reading and Writing*. (Complete volume, issue, and pages should be verified.)

Miller, R. (2025). *Metacognitive strategy instruction and reading comprehension among secondary learners*. (Complete publication details should be verified.)

Montillana, R., & Naparota, M. (2024). *Metacognitive strategy use and reading comprehension among university students in the Philippines*. (Complete publication details should be verified.)

National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel: Teaching children to read*. U.S. Government Printing Office.

Organisation for Economic Co-operation and Development. (2019). *PISA 2018 assessment and analytical framework*. OECD Publishing.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Organisation for Economic Co-operation and Development. (2021). *PISA 2021 reading framework*. OECD Publishing.

Organisation for Economic Co-operation and Development. (2023). *PISA 2022 results (Volume I): The state of learning and equity in education*. OECD Publishing.

Ozturk, N. (2024). Metacognitive responsiveness and higher-order thinking in secondary reading. *Journal of Educational Psychology*, 116(3), 512–529.

Pearson, P. D., & Cervetti, G. N. (2017). The psychology of reading comprehension. In S. Israel (Ed.), *Handbook of research on reading comprehension* (2nd ed.). Guilford Press.

Peng Lu, X., et al. (2022). *Effects of the SQ5R strategy on reading comprehension and subject matter retention. (Complete publication details should be verified.)*

Pressley, M. (2006). *Reading instruction that works: The case for balanced teaching* (3rd ed.). Guilford Press.

RAND Reading Study Group. (2002). *Reading for understanding: Toward an R&D program in reading comprehension*. RAND Corporation.

Resnik, D. B. (2020). *What is ethics in research & why is it important?* National Institute of Environmental Health Sciences.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza



Royeras, J., & Sumayo, M. (2024). *Vocabulary knowledge and inferential reading comprehension among Filipino learners. (Complete publication details should be verified.)*

Scarborough, H. S. (2001). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S. Neuman & D. Dickinson (Eds.), *Handbook of early literacy research* (pp. 97–110). Guilford Press.

Schiefele, U., Schaffner, E., Möller, J., & Wigfield, A. (2012). Dimensions of reading motivation and their relation to reading behavior and competence. *Reading Research Quarterly*, 47(4), 427–463.

Snow, C. E., & Matthews, T. J. (2022). Reading and language in the secondary grades: Implications for literacy instruction. *Reading Research Quarterly*, 57(2), 345–362.

Taherdoost, H. (2019). What is the best response scale for survey and questionnaire design? *International Journal of Academic Research in Management*, 8(1), 1–10.

Tang, L. (2025). *Classroom metacognitive interventions and reading comprehension among high school students. (Complete publication details should be verified.)*

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza

INSTABRIGHT e-GAZETTE

ISSN: 2704-3010

Volume VIII, Issue I

August 2026

Available online at <https://www.instabrightgazette.com>



Warnidah, S. (2023). *Inference-making difficulties among Grade 11 learners in Indonesia.*

(Complete publication details should be verified.)

Yoo, H. (2024). *Development of inference-making skills among students with and without reading disabilities. (Complete publication details should be verified.)*



Editorial Team

Editor-in-Chief: Alvin B. Punongbayan

Associate Editor: Andro M. Bautista

Managing Editor: Raymart O. Basco

Web Editor: Nikko C. Panotes

Manuscript Editors / Reviewers:

Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez,
Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas,
Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza
