

Original Article

Utilization of a Contextualized English Reading Module to Enhance Higher-Order Thinking Skills among Grade 10 Students through Socially Relevant Topics

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Abstract

Philippine secondary education faces challenges in English literacy and higher-order thinking skills (HOTS), as evidenced by low PISA scores and declining EPI rankings. Philippine reading intervention strategies are based on lower-order fluency rather than on critical and analytical thinking. This study developed and tested a Contextualized English Reading Enhancement Module to improve the HOTS of Grade 10 learners through socially relevant issues. It employed a pre-experimental, single-group mixed-methods design at Fortune High School in Marikina City for the year 2025-2026. Forty-two Grade 10 pupils were tested. In order to determine the module structure consisting of 5 lessons, 10 local English teachers and 42 students were surveyed to find 5 relevant social topics: overcoming problems, family relationships, technology and social media, academic pressures, and culture; and 5 least demonstrated HOTS: problem-solving, evaluating, analytical thinking, critical thinking, and metacognition. The data for pretest-posttest comparisons using the Phil-IRI BOSY and MOSY were used to determine the effectiveness of the instruction. Ten teachers reviewed the module. The paired-samples t-test revealed a significantly higher posttest score ($M = 21.67$) than the pretest score ($M = 15.60$), $t(41) = 8.04$, $p < .001$. The Wilcoxon Signed-Rank Test showed that the Phil-IRI significantly improved ($W = 331.0$, $p = 0.034$). Overall weighted mean = 3.54; teacher-evaluators

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have strongly agreed on the quality of the module. The contextualized reading module, based on students' lived social experiences and Bloom's revised taxonomy, could help enhance HOTS performance among Grade 10 Filipino students in a single-school setting.

Keywords: Bloom's Taxonomy, contextualized reading module, English enhancement, higher-order thinking skills, Philippine education, reading intervention

1. Introduction

English literacy holds a special and critical position in the Philippine educational scene. As a nation that recognizes English as one of the two official languages of instruction in its constitution, the Philippines has long required its graduates to demonstrate a functional level of proficiency in academic, professional, and communicative spheres. But there is a constant and disturbing gap between this expectation and the measured reality. The Education First (EF) English Proficiency Index shows a steady fall in the Philippines' ranking from 13th out of 113 nations in 2016, to 14th in 2018, 20th in 2019, and 27th in 2020 (Tataro et al., 2025). More importantly, the 2022 Program for International Student Assessment (PISA) results ranked the Philippines sixth from the bottom among all participating nations in reading comprehension, with only about 24% of Filipino student-participants meeting the basic reading proficiency benchmark (Siren & Sulkunen, 2023). Such numbers are frightening indicators of the systemic inadequacy of education in reading and reveal that an overwhelming majority of Filipino secondary students are unable to identify the main idea of a moderately complex text or understand its intended meaning.

The importance of reading as a core skill reaches far beyond test results. Siren and Sulkunen (2023) pointed out that PISA conceives of reading as a functional ability in the real world that requires pupils to engage critically with different kinds of texts for practical goals, rather than simply decoding words or retrieving shallow information. This perspective on reading is closely connected to higher-order thinking skills (HOTS), which are the cognitive abilities found in the upper levels of Bloom's revised taxonomy, namely analyzing, evaluating, and creating (Silfani, 2025; Muhayimana, 2022). Research indicates that children who are taught to read with a HOTS orientation have stronger understanding, academic enthusiasm, and participation (Amali et al., 2022; Abejuela et al., 2022). However, classroom observations and curriculum analyses in the Philippine context show that English reading instruction still tends to focus on lower-order recall and fluency tasks, such as recalling character details, vocabulary matching, and text sequencing, rather than the analytical, evaluative, and creative engagement needed for true reading comprehension (Abejuela et al., 2022; Silfani et al., 2025).

A second, equally important gap in current reading education is the connection between instructional materials and learners' lived experiences. Tomlinson (2023) suggested that language learning materials provide the necessary context for language acquisition and that materials not connected to learners' actual life experiences and social realities will hinder authentic engagement and the development of communicative skills. Nur (2022) found that most commercially released English textbooks focus on grammatical accuracy and speech acts rather than on true, purposeful communication that develops when students engage with personally and socially significant themes. This idea of reading was expressed by Tymbay (2022) as follows, according to Sznajder: "a non-artificial, student-relevant reading atmosphere that connects the learners to the real world, promotes an authentic reflection, and naturally leads to the use of higher-order cognitive skills. Pham (2021) also argues that language learning materials should be based on familiar, timely, and culturally relevant topics to promote authentic interaction and reduce the psychological distance between the learner and the text, an important prerequisite for the kind of deep processing that HOTS development requires.

In light of the reported drop in student reading performance, the Department of Education (DepEd) of the Philippines has implemented as many as six large-scale literacy initiatives in the past decade. These are the Drop Everything and Read drive, the Catch-Up Friday effort (DepEd Memorandum No. 001, Series of 2024), the Matatag National Learning Camp (2023) and the latest Academic Recovery and Accessible Learning Program in Reading (ARAL-Reading) introduced in August 2025. While each program has resulted in tangible gains in specific contexts (Saro et al., 2024; Maguate et al., 2024; David et al., 2024), the evaluative studies all identify a common shortcoming: the lack of instructional materials that concurrently target students' HOTS deficiencies, are relevant to their social interests and realities, and offer teachers a structured, validated and pedagogically rigorous resource. LaBad (2024) observed that more advanced student readers grew bored with Catch-Up Friday exercises, suggesting that enhancement-level materials must challenge learners cognitively rather than merely replicate the remedial tasks intended for struggling readers. Similarly, Maguate et al. (2024) proposed that the National Learning Camp materials shift their focus from mostly exciting activities to critical thinking and comprehension.

The current study is the result of these converging needs. The success of national-level programs such as Catch-Up Friday and ARAL-Reading, which offer structural frameworks for reading intervention, ultimately depends on the availability of classroom-level materials that are both pedagogically sound and sensitive to the specific HOTS deficits and social realities of students, a gap the present study aimed to fill at the local level. It created and tested a Contextualized English Reading Enhancement Module for Grade 10 learners at Fortune High School, Marikina City, Philippines, for the school year 2025-2026. The module was developed experimentally, with student survey data used to identify the five social themes most relevant to Grade 10 learners, and English teacher survey data used to identify the five

HOTS most in need of growth in the locale's English lessons. The two bodies of evidence combined to create the thematic and pedagogical framework for the five-lesson module. The module's theoretical underpinnings are based on Walberg's (1981) Educational Productivity Theory, which states that the quality of instruction and student motivation are the most important predictors of learning outcomes; Vygotsky's sociocultural theory, which views collaborative, socially mediated interaction as the main engine for language and cognitive development (Lantolf & Poehner, 2023); and Bloom's revised taxonomy, which offers a hierarchical framework for developing instructional tasks that progressively build from lower-order to higher-order cognitive demands. The module's creation cycle was based on the ADDIE instructional design approach (Handrianto et al., 2021).

This study was conducted under the following research questions: (1) What are the five most significant social themes for an English reading module according to the viewpoint of Grade 10 students and what five HOTS most need development according to English instructor survey responses? (2) Is there any substantial variation of students' reading and HOTS performance between pretest and posttest after the deployment of the module? (3) Is there a significant improvement on the students' Phil-IRI scores from Beginning of the School Year (BOSY) to Middle of the School Year (MOSY) after intervention? (4) How do the English teachers and teacher-experts evaluate the module in terms of content and organization, usability/usefulness, structure, and sensitivity to cultural diversity and social norms? The study provides an empirically based, replicable model for the design and evaluation of contextualized language enhancement materials in the Philippine secondary school context by situating reading instruction within students' authentic social concerns and targeting empirically identified HOTS deficits.

2. Methodology

2.1 Research Design

This study adopted a pre-experimental, single-group pretest-posttest design within a larger mixed-methods design. The quantitative strand investigated the effectiveness of the reading module through paired inferential tests and comparisons of archival scores, while the qualitative strand collected thematic data from open-ended responses to teacher surveys and evaluator comments. The two strands were combined through a convergent triangulation approach (Leite et al., 2021) in which the qualitative evidence confirmed and explained the quantitative findings. The pre-experimental design was chosen because it was not possible to randomly assign students to experimental and control conditions within the institutional context but the pre- and post-measurement provided an initial assessment of change in student performance over the intervention period (Kim et al., 2025).

2.2 Setting and Participants

The study was conducted at Fortune High School in the Division of Marikina City, Metro Manila, Philippines, for the school year 2025 – 2026. The school was chosen through purposive institutional sampling because the researcher has access to the location and the school participates in DepEd's Catch-Up Friday and Phil-IRI programs. There were three groups of participants. The experimental group consisted of 42 Grade 10 students. These students were selected through convenience sampling from a school population of about 500 Grade 10 students. More specifically, the participants were the students in the Grade 10 section assigned to the researcher during the school year, with varying reading proficiency levels as indicated by the BOSY Phil-IRI scores. Students in this study were not selected based on performance level but rather on institutional access and class assignment, so the findings are about this specific class rather than Grade 10 students in general. A second group of 10 English instructors from the location answered to the HOTS survey questionnaire. The limited size of this group is noted as a drawback, as it may not fully represent the HOTS instructional patterns across all Grade 10 English courses in the division. A third group of 10 teacher-evaluators, consisting of five with less than five years of teaching experience and five with five or more years of experience, recruited from both public and private secondary schools, evaluated the finished module. Informed consent was obtained from all participants and from the parents/guardians of student participants.

2.3 Research Instruments

Three instruments produced by researchers were used. The student survey form listed 20 social issues from Feeney (2022) and wehavekids.com (2023) and asked students to choose all topics they felt were relevant or interesting to Grade 10 learners. In the English teacher survey, a four-point Likert scale (4 = Very Often, 1 = Never) was used to score the frequency of demonstrating each of the 10 HOTS, taken from Bloom's revised taxonomy, by students in the English classes. A module evaluation questionnaire examined the finished module on four categories (content and organization, usability/usefulness, structure, and sensitivity to cultural diversity and social norms) using a 4-point Likert scale. All instruments were validated by five competent English teachers before administration. The module and all the instruments were pilot tested with a sample of more than 42 Grade 10 students from a different section of the same school. The pilot participants were not part of the experimental group but are contextually relevant to the study locale. The pilot phase provided us with an opportunity to modify item wording and timing and to check for instructional clarity prior to full implementation. Cronbach's Alpha confirmed acceptable internal

consistency for all instruments, and for the pretest and posttest ($\alpha > 0.70$ in all measurements).

2.4 Module Development

This five-lesson module was built based unit the ADDIE instructional design paradigm (Handrianto et al., 2021). The Analysis step involved cross-referencing the student survey results with the instructor survey results and aligning them with the DepEd 2025 Grade 10 English E-module HOTS competency framework to pinpoint lesson themes and pedagogical focus. Each of the five lessons was paired with one target HOTS: lesson 1 (overcoming problems) targeted problem-solving; lesson 2 (family relationships) evaluating; lesson 3 (technology and social media) analytical thinking; lesson 4 (academic pressures) critical thinking; and lesson 5 (culture) metacognition. In the Design phase, literary works such as those by Maya Angelou and O. Henry—and expository texts — were aligned with each lesson theme to meet the designated HOTS and be age-appropriate and readable. Lesson activities were closely linked to the given HOTS. For example, problem-solving tasks asked students to propose and assess solutions to story conflicts, whereas metacognition tasks required students to reflect on and explain their own reading processes. Lesson plans were written that included objectives, an introduction, guided instruction, independent practice, discussion questions, and closing activities. Lesson plans were validated by experts and amended as needed during the Development phase. At this phase, a 30-item pretest and a matched posttest were also designed and validated. The test items were explicitly classified according to the five target HOTS (six items per HOTS), and expert validators confirmed that the item content measured the intended cognitive operation rather than surface-level reading recall. The five lectures were presented to the experimental group during the Implementation phase, in the August–October time frame, averaging 60–90 minutes per session. In the Evaluation phase, the finished module was formally assessed by 10 teacher-evaluators using the module evaluation questionnaire, and qualitative comments were studied thematically.

2.5 Data Gathering Procedure

Before data collection, the researcher obtained permission from the Schools Division Superintendent of Marikina City and the principal of Fortune High School. The National Teachers College Graduate School Ethics Review Committee evaluated and approved all instruments and informed consent forms. Prior to any survey or testing activity, teacher and student respondents were briefed, and informed consent forms were issued and collected. After the student and instructor surveys were completed, the data was handled statistically to identify the five most relevant themes

and the five most needed HOTS. The content and evaluation of the modules were then finalized. Then the module was implemented to the experimental group. The English instructor for the class provided the researchers with the pre- and post-intervention BOSY and MOSY scores for comparison over the intervention period. The school already gathers these scores as part of DepEd's routine reading assessment cycle.

2.6 Data Analysis

Quantitative data were evaluated utilizing five statistical processes, namely, (1) weighted mean and percentage ranking to determine the most relevant themes and the most needed HOTS. (Research Question 1); (2) paired-samples t-test at $\alpha = .05$ to compare pretest and posttest scores (Research Question 2); (3) Wilcoxon Signed-Rank Test to compare BOSY and MOSY Phil-IRI scores, chosen because Phil-IRI data are ordinal in nature (Research Question 3); (4) independent-samples t-test to compare module evaluation scores across the two teacher-evaluator groups (Research Question 4a); and (5) weighted mean to summarize module evaluation criterion scores (Research Question 4b). Qualitative data from open-ended responses to the teacher survey and module evaluation comments were analyzed using the six-phase thematic analysis process described by Braun and Clarke (2019): familiarization, initial coding, theme generation, theme review, theme naming, and report production. Convergent triangulation was used to integrate quantitative and qualitative data.

2.7 Ethical Considerations

This study followed accepted ethical guidelines for educational research. Institutional clearances were obtained before data collection activity. Participation was voluntary, and all respondents were told that they might withdraw at any time without penalty. All analyses and recordings were of deidentified student data. Completed instruments were stored in a location accessible only to the researcher and were shredded after the thesis was formally accepted. Participants were not required to engage in any procedures beyond normal classroom participation and survey completion. Potential hazards, recognized as a modest time annoyance and probable discomfort when dealing with sensitive social subjects, were addressed through teacher collaboration and post-lesson debriefs.

3. Results

3.1 Relevant Topics and HOTS for the Module

The full ranking of the 20 social themes, as judged by the 42 Grade 10 students' responses, is presented in Table 1. The most often selected five subjects were Overcoming Problems (n = 31, rank 1), Family Relationships (n = 29, rank 2), Technology and Social Media (n = 29, rank 2), Academic Concerns/Pressures (n = 28, rank 4), and Culture (n = 27, rank 5). The five subjects served as the core thematic anchors for the five module lessons. Each module lesson was aligned to a different HOTS and its corresponding literary or expository source.

Table 1. Student ranking of social topics for the English reading module (n = 42).

Topics	Students Interested (n=42)	Rank
Academic Concerns/Pressures	28	4
Actions and Consequences	23	11
Bullying	22	13
Career	21	16
Changes in Life	25	6
Culture *	27	5
Education	22	13
Family Relationships *	29	2
Filial Piety / Love for the Elders	20	19
Globalization and Concerns	21	16
Heroism	18	20
History	23	11
Mental Health	25	6
Overcoming Problems *	31	1
Self-image / Self-Esteem	24	9
Social Justice	25	6
Social Relationships / Connections	21	16
Talents and Skills	22	13
Technology and Social Media *	29	2
Values and Beliefs	24	9

Note. Asterisked (*) topics were selected as the five highest-ranked themes and incorporated into the module lessons.

Results of the English teacher survey about the use of HOTS The five skills with the lowest summed Likert values (i.e., the skills that were demonstrated least often by the students in English class) were Problem-Solving (total = 28, rank 1), Evaluating (29, rank 2), Analytical Thinking (30, rank 3), Critical Thinking (31, rank 4), and Metacognition (32, rank 5). Therefore, these five HOTS were chosen as the pedagogical focus for each relevant module lesson, so that every session was purposefully designed to elicit and enhance the most under-demonstrated cognitive competencies.

Table 2. English teacher rankings of HOTS demonstrated by students (n = 10).

Higher-Order Thinking Skill	Total (4-Point Likert)	Rank
Critical Thinking *	31	4
Connecting to Prior Knowledge	35	10
Creativity	34	9
Analytical Thinking *	30	3
Problem-Solving *	28	1
Synthesizing	33	6
Evaluating *	29	2
Strategic Thinking	33	6
Decision Making	33	6
Metacognition *	32	5

Note. Asterisked (*) skills received the lowest utilization scores and were selected as module pedagogical foci.

3.2 Pretest and Posttest Results

Table 3 shows descriptive statistics of the pretest and Table 4 shows the results of a paired-samples t-test for the pretest and posttest. The mean posttest score ($M = 21.67$, $SD = 5.69$) was substantially higher than the mean pretest score ($M = 15.60$, $SD = 3.41$), $t(41) = 8.04$, $p < .001$, with a mean difference of -6.07 and a 95% confidence range of $[-7.61, -4.53]$. The large t-value and the confidence interval that does not include zero provide good evidence that the gain in student scores was not due to chance. Thus, the null hypothesis H_{01} (there is no significant change between pretest and posttest scores) was rejected at the .001 level. This result suggests a statistically significant and practically substantial improvement in students' reading and HOTS performance after the five-session module intervention.

Table 3. Descriptive statistics for pretest and posttest scores (n = 42).

Test	Mean	N	SD	Std. Error
Pretest	15.60	42	3.41	0.53
Posttest	21.67	42	5.69	0.88

Table 4. Paired-samples t-test results: pretest vs. posttest.

Pair	Mean Diff	SD	Std. Error	95% CI	t	p
Pretest–Posttest	-6.07	4.89	0.76	$[-7.61, -4.53]$	8.04	< .001

Note. $df = 41$. Two-tailed significance.

3.3 Phil-IRI BOSY and MOSY Comparison

Table 5 shows the Wilcoxon signed-rank test findings for BOSY and MOSY Phil-IRI grade stamp test (GST) scores. The mean BOSY score was 23.89 and the mean MOSY score was 24.91 (mean difference 1.02). The Wilcoxon W-statistic was 331.0, and the p-value was 0.034, which was below the .05 significance level. Hence, the null hypothesis H_0 (There was no significant change in Phil-IRI after the intervention) was rejected. The findings suggest a statistically significant positive trend in students' standardized reading proficiency scores during the duration of module implementation. However, it should be noted that the improvement cannot be attributed solely to the module, as regular English classes, Catch-Up Friday sessions, and other school-based reading activities also took place during the same period. These findings are better understood as being consistent with the pretest–posttest gains, rather than as independent evidence of module effectiveness.

Table 5. Wilcoxon signed-rank test: Phil-IRI BOSY vs. MOSY (n = 42)

N	Mean BOSY	Mean MOSY	Mean Diff	SD Diff	W	p
42	23.89	24.91	1.02	3.05	331.0	0.034 *

Note. BOSY = Beginning of School Year; MOSY = Middle of School Year. * $p < .05$.

3.4 Teacher and Expert Evaluation of the Module

An independent-samples t-test was used to compare module evaluation scores between teachers with less than five years of experience ($M = 3.74$, $SD = 0.13$) and teachers with five or more years of experience ($M = 3.34$, $SD = 0.54$) and this showed no significant difference in scores between the two groups, $t(8) = 1.60$, $p = .147$. Table 6 summarizes average scores for each rating criterion. The overall weighted mean of 3.54 falls into the Strongly Agree range on the four-point scale interpretation (3.50–4.00). The highest criterion mean was for Content and Organization ($M = 3.63$, Strongly Agree), followed by Sensitivity to Cultural Diversity and Social Norms ($M = 3.60$, Strongly Agree), Structure ($M = 3.50$, Strongly Agree), and Usability/Usefulness ($M = 3.35$, Agree). The somewhat lower Usability score was due to evaluator comments regarding class duration and grade-level targeting, which are described in more detail in Section 4.

Table 6. Module evaluation criterion scores by teacher-evaluator groups combined (n = 10).

Evaluation Criterion	Mean	Interpretation
Content and Organization	3.63	Strongly Agree
Usability / Usefulness	3.35	Agree
Structure (Font, Layout, Design)	3.50	Strongly Agree
Sensitivity to Cultural Diversity and Social Norms	3.60	Strongly Agree
Overall Weighted Mean	3.54	Strongly Agree

Note. Scale: 3.50–4.00 = Strongly Agree; 2.50–3.49 = Agree; 1.50–2.49 = Disagree; 1.00–1.49 = Strongly Disagree.

Thematic analysis of evaluator qualitative comments revealed three major themes: (1) Visual Appeal – evaluators with less than five years of experience recommended replacing black and white illustrations with color photographs or clippings to increase student engagement with the module; (2) Lesson Duration – both evaluator groups noted that certain lessons, especially those involving longer literary pieces, may require more than the suggested 60 to 90 minutes, suggesting a need for session-time flexibility in practice; and (3) Grade-Level Appropriateness – while evaluators with shorter experience rated the module as appropriate for Grade 10, several evaluators with more extensive experience suggested the literary sophistication of the texts and the cognitive demand of the HOTS activities made the module equally or better suited to Senior High School audiences. Positive feedback includes frequent acclaim for the module’s thematic coherence, the quality of discussion questions, and the relevance and authenticity of the literary and explanatory works chosen.

4. Discussion

The main finding of this study was a statistically significant improvement in Grade 10 students’ reading and HOTS performance after five sessions of contextualized, HOTS-targeted reading instruction, providing preliminary evidence for the promise of purposeful, student-centered language-enhancement materials in Philippine secondary education. The size of the pretest-to-posttest increase (mean difference = –6.07 on a 30-item instrument) and the contemporaneous positive trend in Phil-IRI proficiency scores show that the module was associated with meaningful gains in students’ reading performance. However, in the absence of a control group, these findings should be considered promising indications of the module’s potential rather than definitive evidence of its unique usefulness.

The findings align with the educational framework proposed by Hasan et al. (2021), which demonstrates that well-designed English improvement classes, grounded in intentional task structuring, learning objectives, and active participation, lead to measurable improvements in language proficiency. The ADDIE design cycle formalized the current module’s compliance with these principles by ensuring that the objectives, literary selections, discussion questions, and assessment activities of each

lesson closely aligned with the HOTS intended for that session. This systematic alignment certainly contributed to the substantial posttest gains by providing explicit cognitive scaffolds that pointed students toward the specific analytical and evaluative procedures the intervention aimed to cultivate.

The five most salient social subjects for Grade 10 learners, namely overcoming problems, family connections, technology and social media, academic demands, and culture, are consistent with international adolescent research. Anderson et al. (2024) identified academic pressure, exposure to social media and family dynamics as major contributors to adolescent anxiety. Shinden et al. (2023) found that family relationships, peer relationships, and family financial security at home are important determinants of school performance and psychological well-being among school-aged youth. The concurrence between the topic rankings derived from the empirical study and international results indicates that Filipino Grade 10 students' social concerns reflect broader adolescent realities, a finding of practical importance to curriculum developers who might be tempted to assume that Filipino learners need locally parochial rather than globally resonant content.

The recognition of problem solving, evaluating, analytical thinking, critical thinking, and metacognition as the five least exhibited HOTS in the locale's English classes aligns with the discovery of Silfani et al. (2025) that despite teachers' conceptual knowledge of HOTS, structural, motivational, and linguistic barriers continue to impede their consistent integration into classroom instruction systematically. The thematic analysis of the teacher survey responses in the present study revealed two key issues: students' difficulty and anxiety in articulating complex ideas in English, and a perceived gap in students' ability to apply HOTS to real-life contexts. The first challenge is a manifestation of the well-known language-learning anxiety, in which students' self-consciousness about linguistic accuracy hampers the spontaneous communicative risk-taking that HOTS-oriented conversation requires (Dewi & Wilany, 2022). The second challenge—the real-life application gap—aligns with the theoretical concern that classroom-based HOTS education, if not integrated into authentic and personally relevant contexts, may yield improvements in academic performance without genuine cognitive transfer. The intentional inclusion of socially relevant issues in the program was meant to specifically tackle this transfer gap, i.e., to provide a bridge between interaction with academic texts and students' real-life experiences.

The theoretical architecture of the module, based on Walberg's (1981) Educational Productivity Theory, Vygotsky's sociocultural theory, and Bloom's updated taxonomy, simultaneously enabled a pedagogically multidimensional instructional design. Walberg's methodology focused on both the quality of instruction (the choice of interesting, culturally appropriate, and cognitively demanding literary texts) and student motivation (achieved by grounding content in issues students

themselves regarded as personally significant). Informed by Vygotsky's sociocultural theory, the lessons used collaborative discussion as their primary instructional activity: positioning the teacher as a more knowledgeable other who guides rather than simply transmits, and designing tasks that require students to collaborate in constructing meaning from complex texts relevant to social issues in the real world, the lessons built the mediated interactions through which Vygotsky argued language learning and cognitive development occurs most effectively (Lantolf & Poehmer, 2023). The demands of each session were scaffolded by Bloom's revised taxonomy so that they would build on the lower-order tasks of recall and comprehension, which, Abejuela et al. (2022) argued, now dominate Philippine English reading teaching.

Both new and experienced teacher-evaluators provided high and statistically similar assessment scores, which suggests widespread pedagogical credibility across evaluator profiles, as evidenced by the total weighted mean (3.54, Strongly Agree). The high ratings for Content and Organization ($M = 3.63$) and Cultural Sensitivity ($M = 3.60$) were especially noteworthy, indicating that the module's use of empirically selected, student-identified social topics achieved its intended goal of creating content that was academically substantive and culturally appropriate for the Filipino Grade 10 context. The rather low Usability score ($M = 3.35$, within the Agree range) warrants attention because it directly affects the program's feasibility for regular classroom application. The evaluators were concerned about two things: the length of the lessons and the grade they were aimed at. Some reviewers noted that sessions that include lengthy works of literature may exceed the recommended 60 to 90 minutes, posing issues for schools with set-period schedules. Future modifications to the module should include the option to split longer lessons into two shorter ones or explicitly guide teachers on how to split lesson activities across subsequent meetings. Regarding grade-level appropriateness, reviewers with fewer years of experience assessed the module as very appropriate for Grade 10, while those with more experience stated that the literary sophistication and HOTS demands of some of the exercises may be more appropriate for Senior High School learners. This concern further supports the proposal to execute the module with sufficient instructor scaffolding, particularly for students at the Frustration or Instructional Phil-IRI levels. The evaluators' suggestions about colorful visuals and potential use in Senior High School point to the module's potential for upward extension and align with the theoretical position that effectively planned HOTS instructional materials are naturally scalable in cognitive complexity.

There are a few constraints to keep in mind. The most important methodological limitation of this study is the absence of a control group. The pre-experimental, single-group design means that the gains observed from pretest to posttest cannot be definitively attributed to the module alone, as other factors occurring at the same time (e.g., regular English instruction, Catch-Up Friday sessions, student maturation, and

the Hawthorne effect) may have contributed to the improvement that was measured. This restriction has to be taken into account when interpreting all quantitative data in this study. Moreover, the single-school setting further restricts generalizability. The student demographics, institutional climate, and teacher characteristics of Fortune High School may not be representative of the full range of Grade 10 contexts across the Philippines. The findings should accordingly be treated as context-specific rather than broadly representative. The teacher HOTS survey received only 10 responses from the same area, so the credibility of the HOTS rankings as a basis for curriculum-level assertions is limited. More importantly, the module interventions were done during the regular English classes, Catch-Up Friday sessions, and other school activities during the Phil-IRI assessment periods of BOSY and MOSY, so the increase in the Phil-IRI score may not solely be attributed to the module but may be seen as a concurrent positive trend rather than as independent proof of the module's effectiveness. Future studies should include a randomized or matched-comparison group design, implementation across numerous schools and regional contexts, and follow-up with end-of-year evaluations to determine the sustainability of HOTS improvements over time.

5. Conclusion

The study offered preliminary evidence that the Contextualized English Reading Enhancement Module, empirically grounded in student-identified social topics and systematically aligned with Bloom's revised taxonomy of higher-order thinking, was associated with statistically significant improvements in Grade 10 students' reading and HOTS performance in a single-school, single-group context. The paired-samples t-test indicated a mean posttest gain over pretest score of 6.07 points ($t(41) = 8.04$, $p < .001$). The Wilcoxon Signed-Rank Test demonstrated a concurrent positive trend in Phil-IRI proficiency from the beginning to the middle of the school year ($W = 331.0$, $p = .034$), but the improvement cannot be attributed solely to the module since there were concurrent school-based reading activities during the same period. Teacher-evaluators at all levels of expertise rated the module positively with a total weighted mean of 3.54 (Strongly Agree). They notably appreciated the content consistency, cultural sensitivity and pedagogical organization.

These findings have substantial implications for educational practice at several levels of stakeholders. The study provides classroom English teachers with a validated, pilot-tested, and practically structured resource that may help bridge the gap between DepEd's reading enhancement goals and the cognitive depth those standards aim to achieve. Having been pilot-tested with a separate Grade 10 section in the same school and formally evaluated by ten teacher-evaluators, the module is ready for wider classroom implementation. To establish its effectiveness in more diverse contexts

prior to large-scale adoption, further testing or trial across multiple schools and divisions is recommended. The module is particularly promising for integration into Catch-Up Friday improvement tracks for instructional- and independent-level readers and is associated with the reading improvement and enrichment components of the ARAL-Reading framework launched in 2025. The module received a positive assessment from both novice and experienced teachers, suggesting it can be implemented with manageable professional development needs for school administrators, if a brief teacher orientation, preferably in several sessions to prevent cognitive overload, is provided before classroom delivery. The methodological approach of the study, which is the use of student and teacher survey data to co-construct the thematic and pedagogical content of the instructional materials, can serve as a potential model that DepEd curriculum designers can replicate in developing the localized English enhancement resources that are responsive to the needs of the students and teachers, subject to validation on a larger scale.

Researchers are encouraged to extend this study by using experimental or quasi-experimental designs with matched comparison groups, expanding the module to multiple schools in different socio-economic and geographic contexts, and investigating whether the HOTS gains seen at Grade 10 can be replicated or amplified for Senior High School students, as several evaluators in the present study suggested. Longitudinal studies tracking HOTS retention through end-of-year exams and transitions to post-secondary environments would provide important data on the durability of learning benefits from the modules. Additionally, research that compares the module's differential efficiency for students at distinct Phil-IRI proficiency levels (Frustration, Instructional, and Independent) would help optimize implementation guidelines for teachers serving heterogeneous classes. The current study provides a promising empirical basis, and the most meaningful contribution will be achieved when academics, teachers, and policymakers work together to test, refine, and scale the contextualized, HOTS-centered approach to English reading instruction it embodies.

Philippine secondary education faces challenges in English literacy and higher-order thinking skills (HOTS), as evidenced by low PISA scores and declining EPI rankings. Philippine reading intervention strategies are based on lower-order fluency rather than on critical and analytical thinking. This study developed and tested a Contextualized English Reading Enhancement Module to improve the HOTS of Grade 10 learners through socially relevant issues. It employed a pre-experimental, single-group mixed-methods design at Fortune High School, Marikina City, for the year 2025-2026. Forty-two Grade 10 pupils were tested. In order to determine the module structure consisting of 5 lessons, 10 local English teachers and 42 students were surveyed to find 5 relevant social topics: overcoming problems, family relationships,

technology and social media, academic pressures, and culture; and 5 least demonstrated HOTS: problem-solving, evaluating, analytical thinking, critical thinking, and metacognition. The data for pretest-posttest comparisons using the Phil-IRI BOSY and MOSY were used to determine the effectiveness of the instruction. Ten teachers reviewed the module.

The paired-samples t-test revealed a significantly higher posttest score ($M = 21.67$) than the pretest score ($M = 15.60$), $t(41) = 8.04$, $p < .001$. The Wilcoxon Signed-Rank Test showed that the Phil-IRI significantly improved ($W = 331.0$, $p = 0.034$). Overall weighted mean = 3.54, teacher-evaluators have strongly agreed on the quality of the module. The contextualized reading module, based on students' lived social experiences and Bloom's revised taxonomy, could assist in enhancing HOTS performance among Grade 10 Filipino students in a single-school setting.

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Conflict of Interest Statement

The authors declare no relevant financial or non-financial conflicts of interest with respect to this manuscript.

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