

Development, Acceptability and Effectiveness of Instructional Module in English for Academic and Professional Purposes

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Publication history: Received: February 3, 2026; Revised: February 5, 2026; Accepted: February 12, 2026

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Abstract

This study aimed to develop, validate, and determine the effectiveness of an instructional module in English for Academic and Professional Purposes (EAPP) for Grade 12 learners using the 5E Instructional Model (Engage, Explore, Explain, Elaborate, and Evaluate) integrated with the ADDIE Model (Analysis, Design, Development, Implementation, and Evaluation). The integration of these frameworks ensured a systematic, learner-centered, and standards-based instructional design aligned with the Department of Education's Most Essential Learning Competencies (MELCs). The study employed a developmental research design with pretest-posttest measures to assess learner performance. Participants included Grade 12 students enrolled in the Printed Modular Learning Modality in a selected public senior high school in Cainta, Rizal during the School Year 2024–2025. Expert validators consisting of DepEd curriculum planners, master teachers, school administrators, subject coordinators, and experienced EAPP teachers evaluated the module in terms of objectives, content, format and language, presentation, and usefulness. Findings revealed that the module was rated "Much Acceptable" (composite mean = 4.05), with usefulness receiving the highest evaluation. Pretest and posttest results showed statistically significant improvements in students' performance in writing position papers and survey/field reports ($p = .000$), confirming the module's effectiveness. Expert feedback highlighted strengths in clarity, MELC alignment, and learner-centered design, while recommending improvements in presentation flow and cultural responsiveness. The study concludes that the developed module significantly enhances students' academic writing competencies and may serve as a replicable model for instructional material development in senior high school English education.

Keywords: Instructional Module, English for Academic and Professional Purposes, 5E Instructional Model, ADDIE Model, Academic Writing, MELCs, Pretest-Posttest Design, Senior High School

1. Introduction

Educational instruction in the Philippines necessitates a structured and standards-based approach to teaching English, particularly in higher-order language functions such as argumentation, exposition, academic writing, and technical communication. The inclusion of English for Academic and Professional Purposes (EAPP) as an applied subject in the Senior High School curriculum under the K–12 Program underscores its critical role in preparing learners for tertiary education and professional contexts. EAPP equips students with competencies in writing position papers, reports, critiques, and concept papers—skills essential in academic and workplace communication. The importance of quality education is firmly anchored in Article XIV, Section 1 of the 1987 Philippine Constitution, which mandates that the State shall protect and promote the right of all citizens to quality education at all levels and take appropriate steps to make such education accessible to all. This constitutional provision affirms that education is a fundamental right and must be inclusive, equitable, and responsive to learners' diverse needs.

Republic Act No. 10533, or the Enhanced Basic Education Act of 2013, institutionalized the K–12 curriculum and strengthened the integration of applied subjects such as EAPP. DepEd Order No. 21, s. 2019 and DepEd Order No. 12, s. 2020 further emphasize curriculum alignment, standards-based instruction, and the development of Self-Learning Modules (SLMs) to ensure continuity of learning across modalities. DepEd Memorandum DM-CI-2020-00162 likewise supports the use of structured instructional materials tailored to diverse learning contexts.

Despite these policy mandates, instructional delivery in EAPP presents persistent challenges. In many public Senior High Schools in Region IV-A (CALABARZON), teachers report during Learning Action Cell (LAC) sessions that existing modules lack contextual relevance, structured scaffolding, and higher-order thinking activities. Studies by Cruz and Reyes (2021) reveal that many instructional modules emphasize rote learning rather than analytical and evaluative skills. Similarly, Santos (2022) and Morales and Dela Peña (2023) observed that unclear sequencing of lessons contributes

to learner confusion and fragmented understanding. Cruz and Mendoza (2023) further identified inconsistencies in typography and formatting as factors affecting comprehension in modular instruction.

Foreign literature supports the need for structured, research-based module development. Alharbi (2020) found that the 5E Instructional Model significantly improved learners' academic writing organization and argumentative skills. Kim and Lee (2020) demonstrated that integrating ADDIE and 5E frameworks produced higher writing performance compared to traditional instruction. Ali and Robertson (2024) and Lawrence and Wu (2022) confirmed that scaffolded, purpose-driven modules enhance argumentative and report-writing competencies. Moreover, Nguyen and Carter (2024) emphasized the importance of coherent sequencing to reduce cognitive overload.

Local studies reinforce these findings. Dela Cruz (2020) and Garcia and Ramos (2020) highlighted the effectiveness of ADDIE-based module development aligned with MELCs. Lopez (2020) and Bato (2020) affirmed that 5E-based and scaffolded instruction improved learners' writing performance. Buenaventura and Ramos (2021), along with De Guzman and Santos (2023), demonstrated that authentic, task-based writing activities enhance learners' motivation and professional communication skills.

While numerous studies affirm the value of ADDIE and 5E frameworks independently, limited research has examined their integrated application in developing and validating an EAPP module specifically aligned with MELCs and evaluated through expert validation and statistical performance measures within the Printed Modular Learning Modality in Region IV-A. Furthermore, concerns regarding presentation flow, cultural responsiveness, and structured scaffolding in existing modules highlight a critical instructional gap.

Anchored on Constructivist Learning Theory and Self-Directed Learning principles (Perry et al., 2020; Bybee et al., 2021), this study addresses these gaps by developing, validating, and evaluating an instructional module in EAPP grounded in the ADDIE and 5E models. By systematically integrating needs analysis, standards alignment, expert validation, and pretest-posttest evaluation, this research seeks to contribute to evidence-based instructional design in Senior High School English education. Through the development of a structured, validated, and learner-centered module, this study aims to enhance students' academic writing competencies, promote critical thinking, and provide educators with a replicable model for instructional material development in EAPP and related disciplines.

2. Materials and methods

2.1 Research Design

This study used a developmental-descriptive-evaluative research design to guide the creation, validation, and assessment of an instructional module in English for Academic and Professional Purposes (EAPP) for Grade 12 students. This design was appropriate because it supported the step-by-step development of the module, allowed the researchers to describe its features, and evaluate its effectiveness in real classroom settings.

2.2 Research Setting

The study was conducted at Cainta Senior High School, a public secondary school in the Municipality of Cainta, Rizal. The school offers the complete Senior High School (SHS) program under the Department of Education (DepEd), catering to learners enrolled in the Academic Track, which includes the strands: Accountancy, Business, and Management (ABM); Science, Technology, Engineering, and Mathematics (STEM); Humanities and Social Sciences (HUMSS); and the General Academic Strand (GAS).

2.3 Respondents

This study involved two groups of participants: expert evaluators and Grade 12 learner respondents from a selected public senior high school implementing modular distance learning during the 2024–2025 school year. For the expert evaluation, 22 master teachers were invited, and 20 participated in the study. These experts were Filipino teachers with at least three years of senior high school teaching or curriculum development experience. They had taught EAPP, authored contextualized instructional materials, or served as English Coordinators or Master Teachers. All were knowledgeable about the Department of Education's Most Essential Learning Competencies (MELCs). They evaluated the instructional module based on objectives, content, format and language, presentation, and overall usefulness. The learner respondents initially included 47 eligible Grade 12 students enrolled in EAPP. Using the fishbowl technique (simple random sampling), 42 students were selected to participate in a one-group pretest-posttest quasi-experimental design. Their performance in writing position papers and reports was measured before and after exposure to the module. The inclusion of both experts and students ensured a comprehensive evaluation of the module's validity and effectiveness. Expert assessment established content quality and standards alignment, while student performance data provided empirical evidence of instructional impact, strengthening the overall reliability of the study.

2.4 Research Instruments

An adapted and modified research instrument was utilized to gather data. It was subjected to content and construct validation by qualified experts to ensure its relevance and accuracy. An experienced English professor from a state college, recognized for her expertise in English for Academic and Professional Purposes (EAPP), and a Senior High School Master Teacher with both college and SHS teaching experience reviewed the instrument. Their feedback helped refine the items to ensure alignment with the study's objectives and the MELCs. After validation, the instrument underwent pilot testing involving English teachers and Grade 12 learners who were not part of the actual respondents. The collected data were analyzed for reliability using Cronbach's Alpha, which yielded a coefficient of 0.958, indicating a very high level of internal consistency and reliability.

The study utilized an adapted Evaluation Checklist of Instructional Modules based on Crisanto (2022), employing a five-point Likert scale ranging from Very Much Acceptable (5) to Less Acceptable (1). Modifications were made to align the tool with the study's purpose, and revisions were approved by the thesis adviser and content validators. The checklist also included a comments section for qualitative feedback.

To measure module effectiveness, pretest and posttest scores were interpreted using a performance scale ranging from Outstanding to Did Not Meet Expectations. Further validation included face validation, item analysis (difficulty and discrimination indices), and reliability testing using Cronbach's Alpha and Kuder-Richardson formulas. After necessary revisions, the instrument was confirmed to be both valid and reliable for data collection.

2.5 Data Collection

The study followed a systematic process guided by an approved Gantt chart, beginning with the formulation of research problems, development and validation of instruments, title defense, colloquium participation, and manuscript revisions. After the successful proposal defense, formal approval to conduct the study was secured from the Office of the Schools Division Superintendent. The research instrument was validated by subject matter experts, and coordination with EAPP teachers handling modular classes was established to facilitate implementation. Informed consent was obtained from student participants and their parents or guardians. Learners were oriented about the study's purpose and procedures, and pretest and posttest assessments were administered through printed modules with the assistance of EAPP teachers. Confidentiality was strictly maintained in compliance with the Data Privacy Act of 2012, with respondents' identities anonymized through assigned codes and only aggregated data reported. After data collection, responses were encoded and analyzed using SPSS. Descriptive statistics (mean and standard deviation) and inferential statistics (paired sample t-test) were used to determine significant differences between pretest and posttest scores. Qualitative feedback from experts was thematically analyzed. The manuscript was checked using anti-plagiarism software to ensure academic integrity. Throughout the study, the researcher consulted regularly with the thesis adviser and complied with institutional protocols before submitting the final hardbound copy to the Dean of the Graduate Studies Program and other concerned offices.

2.6 Data Analysis

The data gathered in the study were analyzed using appropriate statistical and qualitative methods aligned with each research question. For Statement of the Problem 1, which examined the development and validation process of the EAPP instructional module, narrative and thematic analysis were employed. For Statement of the Problem 2, descriptive statistics—specifically the mean and standard deviation—were used to interpret the experts' evaluation of the module. Similarly, for Statement of the Problem 3, mean and standard deviation were computed to determine the learners' performance in the pretest and posttest assessments. To address Statement of the Problem 4, a paired sample t-test was applied to determine whether a statistically significant difference existed between the learners' pretest and posttest scores after exposure to the module. Finally, for Statement of the Problem 5, thematic analysis was conducted to examine and categorize the experts' comments and suggestions.

2.7 Ethical Considerations

The study ensured the protection of the rights and welfare of all respondents. Participation was voluntary, and respondents were informed about the purpose of the study. Confidentiality and anonymity of all information provided were strictly maintained, and data were used solely for research purposes. The researcher ensured that the respondents were treated with respect and that no harm, whether physical, emotional, or psychological, would result from their participation in the study..

3. Results and Discussion

3.1. How is the instructional module in teaching English for Academic and Professional Purposes developed

In particular, the researcher used the ADDIE (Analysis, Design, Development, Implement, Evaluate) Model in developing the instructional module in the said course.

In the planning stage, the researcher made use of the DepEd's MELCs as his guide in the formulation of the objectives, content and learning activities. He evaluated books and other sources to be utilized in the creation of the module considering the contents of the MELCs. He drafted the scope and sequence based on the suggested content and performance standards. Estimating the cost for the printing of the module will also be done in this phase.

In the designing and developing stage, the researcher structured the instructional module based on the MELCs. First, the researcher determined the components of the learning material such as the course description, the objectives, learning activities, etc., and the topics to be modularized were outlined in a scope and sequence. The course description provides the students the general information about the course, English for Academic and Professional Purposes. The objectives are the specified most essential learning competencies based on the MELCs list released by the DepEd. The learning activities are the tasks or performances to be done by the students in the 5E model. These activities are geared towards the acquisition of the desired learning competencies.

The next stage was the validation and the try-out phase in which the researcher gathered evidence that will support the sufficiency of the objectives, content, format and language, presentation and usefulness of the instructional module. He solicited comments and suggestions from master teachers before drafting the module. The comments and suggestions of other experts like the thesis writing professor was considered in drafting the module. After which, he presented the draft of the instructional module to the master teachers who evaluated the learning material based on five indicators such as the objectives, content, format and language, presentation and usefulness of the instructional module.

The final stage was the evaluation and finalization. The results of the evaluation checklist accomplished by the master teacher-respondents were utilized by the researcher in this last stage. After considering the comments and suggestions of the respondents, the researcher finalized the self-instructional module in EAPP.

3.2. Level of Acceptability on the Developed Instructional Module in Teaching English as Perceived by Master Teachers with Respect to the Different Aspects

Table 1 presents the composite results on the level of acceptability of the developed instructional module in Teaching English as perceived by Master Teachers across five aspects: objectives, contents, format and language, presentation, and usefulness. The overall composite weighted mean is 4.05, verbally interpreted as Much Acceptable. Among the aspects evaluated, usefulness ranked first with a weighted mean of 4.40, interpreted as Much Acceptable. This was followed by contents with a weighted mean of 4.38, also interpreted as Much Acceptable. Format and language obtained a weighted mean of 4.05 and ranked third, while objectives received a weighted mean of 4.03 and ranked fourth, both verbally interpreted as Much Acceptable. Presentation ranked last with a weighted mean of 3.41, interpreted as Acceptable. The findings indicate that the developed module is highly regarded for its usefulness and content quality, particularly in supporting self-paced and efficient learning. The high rating in usefulness suggests that the module effectively promotes independent learning and time management, which are essential competencies in English for Academic and Professional Purposes (EAPP). However, the relatively lower rating in presentation implies that improvements are needed in the organization and sequencing of content to enhance clarity and instructional flow. These results suggest that while the module demonstrates strong instructional value, refinement in its structural design is necessary to further strengthen comprehension and reduce potential cognitive overload. Improving the logical arrangement of topics and ensuring smoother transitions between sections may enhance learner engagement and overall effectiveness. The findings are consistent with previous studies. Villanueva (2021) reported that modular instruction enhances students' independence and time management skills, particularly in English-related subjects. Garcia and Flores (2023) found that well-structured modules improved retention and pacing among learners in Region IV-A. Robinson and Patel (2022) emphasized that flexible and learner-centered modules contribute positively to academic writing outcomes. Conversely, Nguyen and Carter (2024) observed that poorly organized instructional materials may lead to cognitive overload. Similarly, Morales and Dela Peña (2023) noted that unclear structure in modules can cause confusion despite having understandable content. These studies reinforce the need to refine the presentation and organization of the module to maximize its instructional effectiveness.

Table 1: *Level of Acceptability on the Developed Instructional Module in Teaching English as Perceived by Master Teachers*

Aspects	WX	VI	Rank
Objectives	4.03	Much Acceptable	4
Contents	4.38	Much Acceptable	2
Format and Language	4.05	Much Acceptable	3
Presentation	3.41	Acceptable	5
Usefulness	4.40	Much Acceptable	1
Composite WX	4.05	Much Acceptable	

3.3. Level of Performance of the Grade 12 Learners Before and After Exposure to the Developed Instructional Module in Teaching English with respect to the different competencies

Table 2.1. presents the level of performance of Grade 12 learners before and after exposure to the developed instructional module in English, specifically focusing on the principles of writing a position paper. The pretest results indicate that most learners (73.8%) were classified as Fairly Satisfactory, with a mean score of 4.48, and 23.8% did not meet expectations. In contrast, the posttest results reveal a marked improvement, with 57.1% achieving Very Satisfactory, 11.9% reaching Outstanding, and a substantial increase in the mean score to 12.64. These results demonstrate the significant impact of the instructional module on students' academic performance. The findings suggest that the module effectively enhances learners' ability to organize ideas, maintain coherence, and present well-reasoned arguments in position papers. Its structured design, scaffolded activities, and genre-specific tasks facilitate the development of higher-order writing skills and critical thinking. These results are consistent with previous studies. David and Corpuz (2021) found that contextualized and scaffolded English modules significantly improved senior high school students' writing and critical thinking skills. Santos and Alcaraz (2023) reported that curriculum-aligned modular instruction enhanced essay coherence and argument quality. Internationally, Brown and Kim (2022) emphasized that genre-based writing modules improve clarity and organization in position papers, while Ali and Robertson (2024) demonstrated that purpose-driven modules fostered measurable improvements in argumentative writing, including structure, language, and evidence support. Collectively, these studies validate the present module's effectiveness in developing students' academic writing competencies.

Table 2.1.: *Level of Performance of the Grade 12 Learners Before and After Exposure to the Developed Instructional Module in Teaching English with Respect to Principles in Writing a Position Paper*

Performance		Pretest		Posttest	
Scores	Level	Frequency	Percent	Frequency	Percent
15	Outstanding	-	-	5	11.9
12-14	Very Satisfactory	-	-	24	57.1
8-11	Satisfactory	1	2.4	13	31.0
4-7	Fairly Satisfactory	31	73.8	-	-
0-3	Did not meet expectations	10	23.8	-	-
Total		42	100	42	100
Mean		4.48		12.64	
Std. Deviation		1.671		1.885	

Table 2.2 illustrates the level of performance of Grade 12 learners before and after exposure to the developed instructional module in English, specifically focusing on the principles of writing a survey/field report. Pretest results indicate that the majority of students (69.0%) were classified as Fairly Satisfactory, with a mean score of 5.26, while 16.7% did not meet expectations. Following the implementation of the module, a substantial improvement was observed: 85.7% of learners achieved Satisfactory, 9.5% reached Very Satisfactory, and the mean score increased to 9.69. These findings provide empirical evidence of the module's effectiveness in enhancing learners' technical writing skills. The results suggest that the module successfully strengthened students' abilities in organizing, presenting, and interpreting data in survey and field reports. Its structured, task-based design facilitated comprehension of real-world academic tasks and improved clarity, coherence, and functional application in writing. This underscores the value of guided, authentic writing exercises in promoting applied literacy and preparing students for both academic and professional communication demands. These findings are consistent with prior studies. Locally, Buenaventura and Ramos (2021) highlighted the challenges Filipino senior high school students face in practical academic writing and the benefits of structured, real-world-oriented modules. De Guzman and Santos (2023) found that task-based modular instruction significantly improved learners' performance in report writing and research outputs in EAPP. Internationally, Lawrence and Wu (2022) emphasized that guided instruction enhances learners' ability to record and present data effectively, while Morris and Kwon (2024) demonstrated that scaffolded, authentic writing tasks improve students' technical and organizational skills. Collectively, these studies validate the observed posttest improvements in the current study and reinforce the importance of well-structured, task-oriented instructional modules in developing applied writing competencies.

Table 2.2.: *Level of Performance of the Grade 12 Learners Before and After Exposure to the Developed Instructional Module in Teaching English as Revealed in their Pretest and Posttest Results with Respect to Principles of Writing a Survey/ Field Report*

Performance		Pretest		Posttest	
Scores	Level	Frequency	Percent	Frequency	Percent
15	Outstanding	-	-	-	-
12-14	Very Satisfactory	-	-	4	9.5
8-11	Satisfactory	6	14.3	36	85.7
4-7	Fairly Satisfactory	29	69.0	2	4.8
0-3	Did not meet expectations	7	16.7	-	-
Total		42	100	42	100
Mean		5.26		9.69	
Std. Deviation		1.926		1.675	

3.4. Computed t-value on the Performance of the Grade 12 Learners Before and After Exposure to the Developed Instructional Module in Teaching English as Revealed in the Pretest and Posttest results

As shown in Table 3, the computed t-values for the performance of Grade 12 learners before and after exposure to the developed instructional module in teaching English—specifically in writing a position paper ($t = -23.507$, $p = .000$) and applying principles in writing a survey/field report ($t = -12.110$, $p = .000$)—indicate a significant difference, with both p-values less than 0.05, leading to the rejection of the null hypothesis. These results confirm that the instructional module had a statistically significant positive effect on students' performance. The results show that the developed module effectively enhanced students' academic writing skills, particularly in composing structured texts like position papers and field reports. Learners showed notable improvements in organization, argumentation, and clarity after using the module, supporting its relevance to EAPP instruction.

This implies that instructional modules aligned with the K to 12 curriculum and supported by scaffolded tasks and contextualized examples are effective tools for improving students' academic writing. Task-based and well-sequenced instruction helps learners engage with complex writing tasks more confidently and effectively. Continued refinement and integration of such approaches can further support writing proficiency among senior high school students. This finding is supported by both local and international studies. Alvarez and Ramos (2021) emphasized that well-designed materials aligned with curriculum standards significantly improve academic writing when paired with contextualized, scaffolded activities. Garcia and Cruz (2023) also reported improved EAPP performance among learners who used structured modules focused on argumentation and technical writing. Globally, Bennett and Liu (2022) found that task-based modular instruction enhanced writing proficiency in academic genres. Likewise, Sato and Nguyen (2024) showed significant gains in writing performance among senior high school students in Japan and Vietnam through modular instruction. These studies confirm the effectiveness of the developed module in strengthening Grade 12 learners' academic writing skills.

Table 3: *Computed t-value on the Performance of the Grade 12 Learners Before and After Exposure to the Developed Instructional Module in Teaching English as Revealed in the Pretest and Posttest results*

		Mean	Sd.	Mean Diff.	T	Df	Sig	Ho	VI
Writing a Position Paper	Pretest	4.48	1.671	-8.17	-23.507	41	.000	Rejected	Significant
	Posttest	12.64	1.885						
Writing a Survey/ Field Report/	Pretest	5.26	1.926	-4.43	-12.110	41	.000	Rejected	Significant
	Posttest	9.69	1.675						

3.5. Comments and Suggestions of the Master Teacher-Respondents as to Improve the Developed Instructional Materials in English for Academic and Professional Purposes

The thematic analysis of the Master Teachers' feedback revealed several key insights regarding the quality and effectiveness of the developed EAPP instructional module. First, respondents consistently acknowledged the clarity of the learning objectives and their strong alignment with the Department of Education's Most Essential Learning Competencies (MELCs). They noted that the lessons adhere to DepEd standards and are developmentally appropriate, which affirms the instructional design's compliance with national curricular requirements and enhances the module's credibility and applicability in classroom settings.

Despite the generally positive evaluation, respondents emphasized the need to strengthen cultural responsiveness and inclusivity within the module. Specifically, they recommended the inclusion of more localized examples that reflect Filipino contexts and the removal of Western-centric assumptions or potentially exclusionary language.

In terms of presentation, respondents identified minor inconsistencies in formatting, such as variations in font style and spacing, which may affect readability and learner engagement. The respondents highlighted the importance of a clear visual hierarchy, particularly in content-dense sections, to guide learners more effectively through the material. This implies the role of consistent layout and visual design in supporting comprehension and instructional flow.

Moreover, Master Teachers underscored the need to integrate more higher-order thinking tasks within the module. While the activities were viewed as useful, some were perceived as overly focused on recall, prompting recommendations for more performance-based tasks that require analysis, evaluation, and synthesis.

Finally, respondents recognized the module's flexibility and practicality, noting its suitability for both online and offline learning modalities. However, they strongly recommended the inclusion of answer keys, rubrics, and teacher guides to support assessment and instructional decision-making.

4. Conclusion & Recommendations

The study concludes that the developed instructional module in English for Academic and Professional Purposes (EAPP) significantly improved the performance of Grade 12 learners, as evidenced by the pretest and posttest results. The module effectively enhanced learners' academic writing skills, particularly in composing position papers and survey/field reports, demonstrating the value of structured, scaffolded, and curriculum-aligned instructional materials in promoting higher-order thinking and independent learning.

It is recommended that school heads, curriculum planners, and teachers continue to apply the ADDIE Model and 5E Instructional Framework in developing instructional materials to ensure a learner-centered and standards-aligned approach. Revisions to the module should focus on improving content flow, visual layout, and clarity, while integrating culturally responsive examples to increase relevance and inclusivity. Furthermore, policymakers and educational leaders are encouraged to adopt the module for regular classroom use and curriculum planning, with ongoing monitoring and support to maximize student learning outcomes. Future researchers may build on this work by further refining instructional design and exploring additional strategies to strengthen EAPP pedagogy.

Compliance with ethical standards

The authors declare no conflict of interest. This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors. This study was self-funded. The authors thank the participating university and the nursing students for their contributions

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