



Developing and Evaluating a Task-Based English E-Module for Digital Marketing to Enhance Students' Speaking Performance

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Abstract: This study aims to develop and evaluate an English for Digital Marketing e-module based on Task-Based Language Teaching (TBLT) to improve students' speaking performance in delivering digital marketing narratives in English. In an English for Specific Purposes (ESP) course, more than 40% of marketing management students failed to achieve the expected level of speaking competence. The study employed a Research and Development (R&D) approach using the ADDIE model. The e-module was evaluated through a limited trial involving 16 students using a one-group pretest–posttest design. Validation by subject-matter and multimedia experts indicated that the e-module was feasible and categorized as very good. The paired-samples *t*-test revealed a statistically significant increase in the mean score from 49.53 to 64.52 ($p = .0358$), with a moderate effect size (Cohen's $d = .577$), although the mean N-gain score was low (0.258). The mean score increased by 30.3%, although the magnitude of improvement varied across students. These findings suggest that the TBLT-based e-module has the potential to improve students' English-language performance in digital marketing storytelling. The findings further suggest that vocational ESP lecturers can use task-based e-modules to train students to transform visual marketing data into oral analyses and recommendations. However, longer interventions incorporating individualized mentoring may be needed to achieve more consistent learning gains across students. Program administrators may also consider adopting the e-module as supplementary instructional material within outcome-based curricula.

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Introduction

Rapid advances in digital technology have reshaped both education and the marketing industry, creating new demands for graduates equipped with both digital and communication skills. Consequently, marketing management students are expected not only to master digital marketing skills but also to communicate effectively in English (Puspa Sari et al., 2024). Mastery of English within the context of digital marketing is essential for graduates to compete in the labor market and to meet industry demands (Pankeaw & Satayaban, 2025). In addition to language proficiency, marketing management students are expected to communicate digital marketing concepts through clear and persuasive storytelling, a competency that has become increasingly important in professional practice (Muzammil et al., 2024).

The results of the previous semester's learning evaluation in the English Specific Purpose course confirmed that more than 40% of marketing management students at Politeknik LP3I Tasikmalaya had not yet achieved the targeted speaking proficiency. This condition calls for instructional methods that are appropriate and easily understood by students, as well as instructional media that are interactive and relevant to industry needs



(Daud et al., 2022). Conventional teaching materials are frequently unable to accommodate students' needs in developing practical skills, particularly within the context of digital marketing for delivering storytelling-based presentations (Rahmawati & Cintamulya, 2025), (Wahab, 2011), which in turn contributes to the suboptimal mastery of English-speaking ability among marketing management students (Che Lah et al., 2024). To address these challenges, an instructional approach that integrates authentic language tasks with interactive digital learning media is required. Task-Based Language Teaching (TBLT) is a language-learning approach that emphasizes task completion and collaboration to enhance contextual English-speaking skill (Lee & Song, 2024). Numerous studies have reported that TBLT is effective in improving students' communication skills, problem-solving abilities, and collaboration in English language learning, including in digital contexts, as it provides opportunities for students to practice storytelling through the completion of relevant tasks (Sukareni & Sukmana, 2021).

Integrating the TBLT method with e-module implementation is expected to provide a more meaningful, relevant learning experience that is tailored to students' needs (Adjei-Mensah, 2023). Developing a TBLT-based e-module requires a systematic and flexible instructional design model, one of which is ADDIE (Analysis, Design, Development, Implementation, Evaluation) (Spatioti et al., 2022), which enables the e-module development process to be carried out in a structured manner, from needs analysis, design, and development to implementation and evaluation of product effectiveness. The use of ADDIE for e-module development has been widely applied across various disciplines (Surindra & Irmayanti, 2025), and e-modules developed using TBLT combined with ADDIE have been reported to enhance students' motivation, autonomy, collaboration, and critical thinking skills (Safiah et al., 2023).

Interactive e-modules designed with careful attention to student needs and technology integration have been shown to improve learning comprehension (Villalba et al., 2024), consistent with the demands of outcome-based learning under the Outcome-Based Education (OBE) curriculum (Zhixuan, 2021). The central problem addressed in this study is how to develop an English e-module based on Task-Based Language Teaching (TBLT) using the ADDIE model for the English Specific Purpose (ESP1) course for marketing management students, and how effective the use of such an e-module is in improving students' ability in delivering digital marketing storytelling narratives in English. The problem-solving approach adopted in this current study is pedagogical in nature, in which students are positioned not merely as "data readers" but as "data storytellers" through the TBLT method. This strategy was chosen to address students' rigidity in communicating digital marketing material in English. To support this pedagogical strategy, the study employed a media development strategy through an Interactive E-Module developed systematically using the ADDIE model. This module was designed to facilitate the "visual-to-verbal" conversion process by providing supporting features such as audio presentation models and digital marketing terminology, enabling students to practice constructing narratives independently and in a structured manner. Previous TBLT-based e-module studies have mostly targeted general English, writing, or school-level learners (Adjei-Mensah, 2023; Muzammil et al., 2024; Puspa Sari et al., 2024), and far less attention has been paid to how vocational ESP students transform digital marketing data into spoken analysis.

The novelty of this study therefore lies in combining three elements: (1) digital marketing storytelling, in which students act as data storytellers rather than data readers (Knafllic, 2015); (2) an explicit visual-to-verbal transformation task sequence embedded in



the pre-task, task-cycle, and language-focus phases of TBLT; and (3) its application in the underexplored context of vocational ESP at a polytechnic. This study aims to develop teaching material in the form of an English for Digital Marketing E-Module that integrates the Task-Based Language Teaching (TBLT) method, specifically designed to improve students' speaking ability in delivering digital marketing narratives in English.

Research Method

An R&D approach was adopted using the ADDIE (Analysis, Design, Development, Implementation, Evaluation) instructional design model. This model was selected based on the characteristics of the study, which aimed to produce a digital teaching material product (e-module) whose validity and effectiveness in improving vocational students' specific performance had been tested.

Stage 1: Analysis (Needs Analysis)

In the initial stage, the researchers conducted two types of analysis. The first was a gap analysis, aimed at identifying discrepancies between students' current English proficiency and the required competency standard. The second was a content analysis, aimed at examining the digital marketing course curriculum to determine the topics requiring reinforcement in English. The needs analysis drew on three sources: (1) interviews with the ESP course lecturer, covering students' speaking difficulties, the teaching materials in use, and industry-related needs; (2) analysis of students' academic records, namely the previous semester's ESP learning evaluation, to determine the proportion of students who had not reached the targeted speaking competence; and (3) document analysis of the course curriculum and learning outcomes.

Stage 2: Design

The design stage involved preparing the e-module's Learning Program Outline integrated with the TBLT method (pre-task, task cycle, language focus), designing multimedia elements such as the module storyboard, selecting visual assets, and developing role-play scenarios, as well as preparing research instruments consisting of expert validation sheets and a rubric for assessing students' storytelling performance.

Stage 3: Development

During the development stage, the research team designed and developed the initial e-module prototype using canva before submitting it for expert validation. Two experts were involved in the validation process: a digital marketing expert, who evaluated the accuracy of the digital marketing content and the appropriateness of the Task-Based Language Teaching (TBLT) approach, and a multimedia expert, who assessed the module's visual design, interactivity, and usability. Based on the experts' feedback, the e-module was revised and refined until it met the established feasibility criteria for implementation. Experts rated the products on a 1–4 scale; the ratings were summarised as mean scores per aspect and converted into Aiken's V coefficients (Aiken, 1985).

Stage 4: Implementation (Limited Field Trial)

The product, once validated, was trialed on a limited scale (limited field testing) with students of the Marketing Management Study Program (n = 16 students) using a One-Group Pretest-Posttest Design, comprising a pre-test (students presented a task without the aid of the module), a treatment (learning using the TBLT-based e-module over 4–6 sessions), and a post-test (students performed a data-pitching simulation using the same rubric).



Stage 5: Evaluation

The evaluation stage was conducted summatively through the analysis of pre-test and post-test storytelling skills scores using the Paired Sample T-Test to determine the significance of the improvement, as well as the N-Gain test to measure the category of performance improvement. Before the t-test was performed, the normality of the pre-test, post-test, and difference (post-test minus pre-test) scores was examined with the Shapiro–Wilk test (Shapiro & Wilk, 1965), which is appropriate for small samples; the Paired Sample T-Test was applied only after the normality assumption was met ($p > 0.05$). Effect size was estimated with Cohen's d (Cohen, 1988).

Result and Discussion

Results of the Needs Analysis (Analysis)

The results of the previous semester's learning evaluation in the English Specific Purpose course showed that more than 40% of marketing management students at Politeknik LP3I Tasikmalaya had not yet achieved the targeted speaking ability. The needs analysis results showed that the instructional media in use were still limited to printed modules, presentation slides, and internet-based resources that had not been integrated with the course learning outcomes. Existing materials mainly focused on general English grammar and vocabulary. However, resources integrating English with digital marketing contexts were still scarce. Interactive instructional media supporting independent learning through a combination of text, audio, video, and task-based exercises were also unavailable. Interviews with the course lecturer revealed that students required teaching materials that were more contextual, interactive, and aligned with the demands of the digital marketing industry.

The findings at this stage also showed that most students experienced difficulty expressing ideas orally in English, tended to translate sentences directly from Indonesian into English before speaking, and were more accustomed to memorizing dialogues than developing ideas spontaneously. In addition, students exhibited difficulty converting visual information (charts, infographics, marketing dashboards, or survey results) into systematic verbal explanations in English (visual-to-verbal skills). Most students merely stated the numbers or information visible to them without providing interpretation, analysis, or recommendations based on the data, thereby tending to act as “data readers” rather than “data storytellers.”

Based on the results of the needs analysis, the material was organized into interconnected units, namely Unit 1: Market Research & Consumer Insights, which equips students with the ability to understand market research, analyze consumer behavior, interpret survey data, and present analytical findings in English; and Unit 2: Content Marketing & Copywriting, which develops students' ability to formulate digital marketing strategies, create promotional content, write persuasive messages, and convey marketing ideas through storytelling techniques. Both units were structured using the TBLT syntax comprising Pre-Task, Task Cycle, and Post-Task.

Results of the Design Stage

The research instruments produced included material and multimedia expert validation sheets, as well as a rubric for assessing students' storytelling performance.

Expert ratings were summarised as the mean score of each aspect (1–4 scale; 1 = very poor, 2 = poor, 3 = good, 4 = very good) and converted into Aiken's (1985) V coefficient, $V = \sum s / [n(c - 1)]$, where s is the rating minus the lowest possible rating (1), c is the highest possible



rating (4), and n is the number of raters. $V \geq 0.80$ was taken to indicate acceptable content validity. Tables 1 and 2 present the aggregated results.

Table 1. Summary of Material Expert Validation: Mean Scores and Aiken's V

No	Aspect	Mean score (1–4)	Aiken's V	Category
1	Content	3,00	0,67	Good
2	Presentation	4,00	1,00	Good
	Overall (Material)	3,5	0,83	Very good

Table 2. Multimedia Expert Validation Sheet

No	Aspect	Mean score (1–4)	Aiken's V	Category
1	Visual design	3,00	0,67	Good
2	Interactivity	4,00	1,00	Very good
3	Usability	4,00	1,00	Very good
	Overall (multimedia)	3,67	0,89	Very good

Rubric for Assessing Students' Storytelling Performance

The speaking assessment rubric covered the indicators of fluency, grammatical accuracy, mastery of marketing vocabulary, and the ability to construct a business data storytelling delivery. Each criterion was scored at four performance levels (excellent, good, fair, and poor).

Results of the Development Stage

The e-module product was developed as a website-based application with two user roles, namely lecturer and student. The main components of the website are shown in Figure 2.

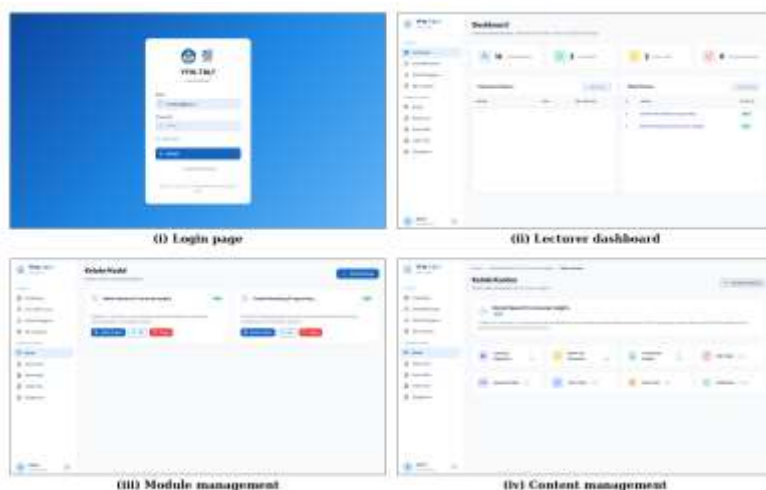


Figure 2a. Lecturer Interface (login page, dashboard, module management, and content management)



Figure 2b. Student Interactive Storytelling Module



Both validators declared the e-module product feasible for use, falling into the very good category in terms of both content and multimedia display, so that the product proceeded to the limited field trial stage without requiring major revision.

Results of Implementation and Evaluation

Pre-test and post-test data were obtained from 16 students who served as the research sample, following confirmation that the test instrument was valid and reliable at the try-out stage. The analysis comprised descriptive statistics, a normality test, hypothesis testing (Paired Sample T-Test), N-Gain analysis, and effect size estimation. The ideal maximum score of the instrument was 100 (30 items, each worth 3.33 points). Gain was calculated as the post-test score minus the pre-test score, while N-Gain was calculated using Hake's formula (Hake, 1998).

The mean student score increased from 49.53 (median = 53.28; SD = 26.75; range = 13.32–93.24) at the pre-test to 64.52 (median = 68.27; SD = 26.69; range = 16.65–99.90) at the post-test, an average increase of 14.99 points. The Shapiro–Wilk test yielded $p = 0.1239$ for the pre-test, 0.3438 for the post-test, and 0.1088 for the difference scores, all above 0.05, indicating that the pre-test, post-test, and difference data were normally distributed, thereby satisfying the assumption required for the Paired Sample T-Test (a parametric statistical test).

The hypotheses were H_0 (no significant difference between pre-test and post-test scores) and H_1 (a significant difference). The test results showed $|t\text{-count}| = 2.306 > t\text{-table} = 2.131$ and $\text{Sig. (2-tailed)} = 0.0358 < 0.05$, so H_0 was rejected and H_1 was accepted; there is a significant mean difference between the pre-test and post-test scores. The average N-Gain across all students was 0.258, which, according to Hake's (1998) criteria, falls into the low category (below 0.3). Three students (18.8%) reached the high category, four students (25.0%) the medium category, and nine students (56.3%) the low category, including one student whose post-test score decreased relative to the pre-test. Effect size was used to determine the practical magnitude of the treatment's (e-module's) influence, beyond statistical significance alone, using the formula $d = \bar{d} / SD_d$. The calculation yielded $d = 14.985 / 25.9939 = 0.577$. According to Cohen's (1988) criteria, where $d \approx 0.2$ (small), $d \approx 0.5$ (medium), and $d \approx 0.8$ (large), a value of $d = 0.577$ is classified as a moderate effect size.

Discussion

Competence Gap and the Need for Instructional Media

The finding that more than 40% of students had not yet achieved the target speaking competence confirms the gap reported in similar studies, in which conventional teaching materials and instructional media that are not integrated with industry contexts constitute one of the main causes of the low English-speaking ability of vocational students (Che Lah et al., 2024) (Daud et al., 2022). Within the ESP tradition, course content should be derived from learners' target-situation needs (Hutchinson & Waters, 1987), which is precisely what general grammar-oriented materials fail to provide. Students' need for contextual and interactive teaching materials is consistent with the argument advanced by (Rahmawati & Cintamulya, 2025) and (Wahab, 2011) that conventional instructional media tend to be unable to accommodate students' practical skills, particularly in contexts that demand authentic language use such as digital marketing.

Students' difficulty in transforming visual information into verbal narratives (visual-to-verbal communication) indicates that their speaking proficiency remains at a descriptive level and has not yet developed toward analytical communication. This finding reinforces the argument advanced by (Muzammil et al., 2024) and (Puspa Sari et al., 2024) that mastery of terminology and language structure alone is insufficient to build the storytelling skills



required in professional contexts. Students' tendency to act as “data readers” rather than “data storytellers” also points to a limitation in storytelling ability when it is not supported by authentic, task-based activities; storytelling that is disconnected from real data risks producing subjective narratives that poorly reflect professional workplace practice. This echoes the view that effective data communication goes beyond describing a chart to building a narrative around its key message (Knafllic, 2015). TBLT is therefore a relevant framework, because its authentic and collaborative tasks give students opportunities to practice analyzing data and delivering recommendations orally (Adjei-Mensah, 2023; Lee & Song, 2024; Sukareni & Sukmana, 2021).

Product Design and Feasibility

The three-phase structure (pre-task, task cycle, language focus) employed in designing the Learning Program Outline is consistent with the TBLT syntax developed in previous studies (Lee & Song, 2024) (Pankeaw & Satayaban, 2025), follows the pre-task, task-cycle, and language-focus framework of Willis (1996), and aligns with the demands of an outcome-based curriculum that emphasizes the mastery of measurable, applicable skills (Zhixuan, 2021). The use of the ADDIE model as the product development framework is likewise consistent with the findings of (Spatioti et al., 2022) and (Surindra & Irmayanti, 2025), who reported that ADDIE provides a systematic development structure, from needs analysis through to the evaluation of effectiveness, making it well suited to the development of digital teaching materials across a wide range of disciplines (see also Branch, 2009). The expert validation results, which demonstrated that the product was feasible and received an excellent rating in terms of both content and multimedia, demonstrate that the developed e-module met the feasibility standards required of teaching material prior to its use in the field trial. The Aiken's V coefficients in Tables 1 and 2 (Aiken, 1985) corroborate this judgment at the aspect level. This finding is consistent with other e-module development studies that likewise reported a high feasibility category following material and multimedia expert validation (Safiah et al., 2023) (Villalba et al., 2024).

Effectiveness of the E-Module in Enhancing Storytelling Competence

The significant Paired Sample T-Test result ($\text{Sig.} = 0.0358 < 0.05$) indicates that the use of the TBLT-based e-module had an effect on improving students' English storytelling skills in digital marketing. This finding reinforces prior empirical evidence that the TBLT approach is effective in improving contextual oral communication skills (Lee & Song, 2024) (Pankeaw & Satayaban, 2025), in line with syntheses of TBLT implementation (Bryfonski & McKay, 2019) and technology-mediated TBLT (Chong & Reinders, 2020), while also demonstrating that the integration of TBLT with an e-module developed through the ADDIE model can be replicated in the context of English for Specific Purposes (ESP) instruction within a vocational setting.

The moderate effect size ($d = 0.577$), interpreted according to Cohen's (1988) (Daud et al., 2022) criteria, indicates that the e-module's influence on performance improvement was practically meaningful and not merely statistically significant. The uneven achievement across students (average N-Gain = 0.258, low category) can be partly explained by considering affective factors and students' readiness to speak in a foreign language. (Bai, 2023) study found that foreign language anxiety and foreign language boredom are negatively correlated with willingness to communicate among struggling EFL learners, which in turn may hinder the achievement of learning outcomes even when adequate instructional media have been provided. Accordingly, the low N-Gain observed among some students is unlikely to be attributable solely to the quality of the e-module product, but may also reflect



individual factors such as self-confidence, prior speaking experience, the amount of time allocated for learning, and technical constraints encountered during the post-test. These findings underscore the importance of individualized mentoring and a more adequate allocation of treatment time for students with low N-Gain achievement, so that the benefits of the e-module can be experienced more evenly.

Reconciling Statistical Significance, Effect Size, and N-Gain

The combination of a significant t-test, a moderate effect size, and a low average N-Gain is not contradictory, because each statistic answers a different question. The Paired Sample T-Test asks whether the mean pre-post difference (14.99 points) can be distinguished from zero given its standard error ($SDd/\sqrt{n} = 25.99/4 = 6.50$); in a within-subject design this yields $t = 2.31$ and $p = 0.036$ even though individual gains varied widely. Cohen's d scales the same mean difference by the standard deviation of the differences, so it reflects that dispersion and places the improvement at a moderate size at best ($d = 0.577$). Against L2-specific benchmarks for pre-post contrasts, in which $d \approx 0.60$ is considered small and $d \approx 1.00$ medium (Plonsky & Oswald, 2014), the effect is better described as small to moderate, which is plausible for a short intervention (Norris & Ortega, 2000). N-Gain, in turn, expresses the gain relative to the room left for improvement (Hake, 1998): with a pre-test mean of 49.53, the 14.99-point increase closes only about 30% of the available gap ($14.99/50.47 = 0.297$), and the student-level mean (0.258) is pulled down by the nine students in the low category, including one whose score declined. Statistical significance therefore indicates a reliable average improvement, not a large or uniform one. Because the design had no control group, part of the improvement may also reflect practice or maturation effects, so the result is evidence of improvement rather than proof of causation.

Limited practice time, that is, the dosage of the treatment, is a further plausible explanation. The module was used for only 4–6 sessions, which gave each student a small number of speaking turns, few opportunities to repeat the task cycle, and limited feedback during the language-focus phase. Speaking is a productive skill that depends on repeated, feedback-supported practice (Ellis, 2003), and the number of task cycles has been identified as a moderator of TBLT outcomes (Bryfonski & McKay, 2019). In a short treatment, students who begin with low proficiency or high speaking anxiety (Bai, 2023; Horwitz et al., 1986) are the least likely to match the gains of their peers, which is consistent with the uneven distribution of N-Gain categories observed here (18.8% high, 25.0% medium, and 56.3% low). Extending the treatment and adding individual mentoring, as recommended below, should therefore increase both the size and the consistency of gains.

Conclusion

Based on the findings and discussion, it can be concluded that the TBLT-based English for Digital Marketing E-Module, developed through the ADDIE model, was successfully designed in a systematic manner, encompassing needs analysis, the preparation of the learning program outline and multimedia assets, website-based product development, and the implementation and evaluation stages. The module was declared feasible for use by both the material and multimedia experts, falling into the very good category, indicating that it met the feasibility standards for teaching material in terms of both content and presentation.

With regard to effectiveness, the results of the limited trial involving 16 students showed that the use of the TBLT-based e-module had a significant effect on improving English storytelling skills in digital marketing, as evidenced by the increase in the mean score from 49.53 to 64.52 and a significant Paired Sample T-Test result, with a moderate effect



magnitude. Nevertheless, the average N-Gain across all students remained in the low category, with variation in achievement indicating that the module's effectiveness was not yet evenly distributed among students; accordingly, factors such as learning readiness, the allocation of instructional time, and technical constraints during post-test administration warrant attention in future implementation.

Recommendation

Based on these findings, it is recommended that lecturers teaching the English Specific Purpose course extend the instructional treatment from the 4–6 sessions used in this study to 8–10 sessions, and add two weeks of clinic sessions or independent asynchronous mentoring for students with low N-Gain achievement ($N\text{-Gain} < 0.30$), so that the ability to convert visual data into verbal narratives can be mastered more evenly. This is because 56.3% of students remained in the low N-Gain category after only 4–6 sessions. Program administrators in Marketing Management and Vocational Higher Education are encouraged to formally adopt TBLT-integrated digital e-modules as supplementary teaching materials in outcome-based education (OBE) curricula. Meanwhile, future researchers are encouraged to conduct trials on a larger scale and to include a control group in order to strengthen the generalizability of the findings regarding the effectiveness of this e-module.

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